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Abstract

In the context of various policy initiatives made during the last two decades to reform the Indian economy in general and corporate sector in particular, the present paper attempts to assess how the firms have responded to these policy measures and the resultant changes in the business conditions in a long run perspective. The paper finds that although the rate of growth of the Indian industry sector has not accelerated following economic reforms probably due to slow growth in agriculture and industrial productivity, investment in general and FDI in particular have shown considerable increase. Increase in competitive pressures during this period has forced the firms to adopt a variety of strategies. While reliance on mergers and acquisitions (M&A) has increased to restructure business and grow, the role of embodied and disembodied technology purchase has declined with firms relying somewhat more on in-house R&D. On the other hand, although strategies of building marketing and distribution related complementary assets continue to dominate the strategy of product differentiation, their role in a relative sense seems to have declined as these expenses as a proportion of sales show a declining trend. However, the emerging competitive pressures have raised the importance of sub-contracting/ outsourcing manufacturing, reducing the degrees of vertical integration. Interestingly, while cost-efficiencies do not show improvements, export orientation has increased across the industries significantly signaling enhanced global competitiveness of Indian firms, although imports have risen faster than exports. Overall, the observed trends of corporate response to economic reforms are interesting, but one need to systematically explore how M&A led consolidation and flows of FDI are linked to the adoption of various non-price strategies relating to technology and product differentiation. As economic reform deepens and competitive pressures build up, an analysis of these interactions would provide useful insights for understanding corporate behaviour and for making policy choices.

Keywords: Economic reforms, corporate sector, strategies, performance, India

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Introduction:

Economic reforms initiated in 1991 comprising a variety of deregulatory measures have significantly altered the environment in which the Indian corporate sector operates. The pace of economic reform has faltered in recent years but the overall direction of policy change remains the same and seeks to strengthen market discipline and enhance competition. The success of the new policy regime was expected to and is likely to depend on the strategies adopted by firms in response to these policies and fine tuning of policies by taking cognizance of emerging trends in firm level choices.

The Indian corporate sector responded to this policy change in a variety of ways in the initial years of economic reforms.[3] For example, there was vigorous business consolidation and restructuring by the firms in a few chosen areas to correct the inefficiencies caused by over-diversification in the pre-reform era. This entailed a significant increase in the number of mergers and acquisitions (M&As) with majority of them being horizontal in nature (Khanna, 1997; Basant, 2000; Beena 2000; Mishra, 2005)[4]. Given the policy induced flexibilities, while the domestic firms (especially, the private sector enterprises) took the route of M&A to restructure their business and grow[5], the MNCs used the same to enter into and raise control in Indian industry[6]. However, research and development activities did not see an upturn and export orientation was limited (Basant, 2000). Although many of the industries recorded significant increase in in-house R&D efforts, the average R&D intensity as well as the foreign technology purchase intensity remained very low during the early years of liberalization (Mishra, 2005). Indeed, the firms in many of the technology intensive industries relied largely on equity linked foreign technology collaborations[7]. While firms spent less on product differentiation through

[3] Basant (2000) provides an initial analysis of these responses in the 1990s.
[4] The number of mergers more than doubled only during 1990-1994 as compared to that during 1985-89 (Beena, 1998).
[5] In the present era of enhanced competition and shorter product life cycles, many of the firms prefer to grow through M&A primarily because of the speed and access to proprietary assets such as R&D base, technical know-how, patents, brands, etc. Moreover, merging with or taking over a firm with established manufacturing, marketing and distribution system has obvious advantages over developing the same on one's own.
[6]Compared to the domestic firms, the MNCs were better placed in the acquisition game due to their deep pockets and relatively cheaper access to capital (Basant, 2000).
[7]In addition to technology collaborations, firms have also explored other types strategic alliances/tie-ups and joint ventures ranging from manufacturing to distribution, marketing, etc., widening the scope of strategic activities under the new business conditions.

investments in marketing and distribution related complementary assets, the emphasis on advertising based product differentiation increased at a faster rate (Basant, 2000; Mishra, 2005). However, enhanced competition in the market restricted the firms from increasing their profitability, but forced them to improve cost-efficiency, inventory management and export penetration (Mishra, 2005).

Insofar as firms take time to develop an appropriate strategy mix to changing economic and policy environment, the earlier analyses only reflected the 'initial' response to economic reforms. Over time the corporate strategies are expected to become more concrete and stable, especially in a situation where regulatory changes are an ongoing process. Further, as the economic reform processes have continued and also have deepened in many areas like FDI, competition policy, privatization and intellectual property regulation, changes in the nature and intensity of corporate responses are very likely. Therefore, an exploration of the corporate strategies after two decades of reform would help us gain better insights on the impact of economic deregulation. In this perspective, the present paper examines the trends and patterns of firms' responses to economic reforms in India in a long-run perspective using a wide range of strategic dimensions[8]. The responses of firms would be explored with reference to the following inter-related questions: How has the rate and composition of domestic and foreign investment changed during the post-reform period? What types of restructuring processes (e.g., M&A) have been dominant in the Indian industrial sector? Have these restructuring processes been different across sectors and/or type of firms (e.g., domestic and foreign)? What has been the firm strategies vis-à-vis product differentiation? Has building of marketing and distribution related complementary assets dominated over advertising? What changes have come about in the technology strategies of firms (e.g., R&D, embodied technology imports, technology licensing)? In other words, how the nature of non-price competition has changed in recent years? In what way the enhancement of 'internal' and 'external' competition changed the sourcing of inputs and in export orientation? Does one see signs of strategies of import substitution and/or export orientation being followed?

The paper uses data collected from secondary sources. While necessary data on industrial growth and investment are collected www.rbi.org.in and www.dipp.nic.in. Data on mergers and acquisitions and various aspects of corporate strategies and performance are collected

[8] Mishra and Behera (2007) have examined changes in market structure and some dimensions of firm behaviour in the post-reform era at a broad level of industrial classification.

from Business-Beacon and PROWESS database of the Centre for Monitoring Indian Economy (CMIE), Mumbai. The rest of the paper is divided into five sections. The key dimensions of policy changes are summarized in Section II. Section III discusses the major aspects of industrial growth and investment, and their implications for the Indian corporate sector. Strategies involving mergers and acquisitions, technology development, manufacturing and other aspects of non-price competition are discussed in the fourth section. Section V analyses the trends in efficiency, profitability, and inventory management. Section VI concludes the paper with a summary of major trends in the Indian corporate sector and their implications for competition and other policies.

II Key Dimensions of Economic Reforms:

The new policy measures are not only considered to be the most profound changes that have taken place since independence, they are also different from that of the earlier periods in their basic objectives and priorities[9]. The industrial policy framework prior to the reforms, by and large, was characterized by multiple controls over private investment. This not only limited the areas in which private investment were allowed, but also often determined the scale of operations, the location of new investment, and even the technology to be used. The trade policy, on the other hand, was characterized by high tariffs and pervasive import restrictions with complete ban on imports of manufactured consumer goods. Although some of the capital goods, raw materials and intermediate goods were freely importable, for most of the items where domestic substitutes were being produced, imports were only possible with import licenses. Similarly, foreign ownership was permitted in some Indian companies, but subjective licensing system, high regulation upon approval, and equity-holding caps made investment complicated and thereby discouraged potential investors.

[9]The industrial policy resolutions in Indian have gone through major changes in their objectives and priorities since independence. For example, the Industrial Policy Resolution, 1948 aimed at outlining the approach to industrial growth and development, whereas the Industrial Policy Resolution, 1956 emphasized more on role of State for speeding up the industrialization process as a means of achieving a socialist pattern of society. Similarly, the thrust of the Industrial Policy Statement, 1973 was identification of high-priority industries where investment from large industrial houses and foreign companies were permitted. On the other hand, while the Industrial Policy Statement, 1977 emphasized on decentralization and growth of small scale industries, the Industrial Policy Statement, 1980 aimed at promoting competition in domestic market, technology development, and modernization along with encouraging foreign investment in high-technology areas. See Handbook of Industrial Policy and Statistics, 2008-09, Department of Industrial Policy and Promotion, Government of India.

The rigidities in industrial, trade, public sector and foreign investment policies of the pre-reform had severe adverse impact on the economy. For example, the rigidities in the industrial policy constrained firm choices and also protected the domestic firms from internal and external competition that eventually led to inefficiency of firms. Bureaucratic determination of plant capacity, product mix and plant location resulted in ignoring the market processes, and possibly because of that trade in scarce materials became more lucrative than efficient manufacturing. Similarly, industrial licensing and other controls led to severe entry and exit barriers and encouraged rent-seeking and lobbying. Further, licensing and product reservation for small-scale sector inhibited firms from reaping economies of scale, while pronounced pro-labour stance restricted rationalization of the workforce.

The anti-export bias in the trade policy blunted export orientation of the economy, whereas the strategy of import substitution resulted in lesser competitive pressure and high input costs due to sub-optimal use of inputs. Reservation of industries in public sector policy along with soft budget constraints and resulting inefficiencies particularly in heavy industry and infrastructure also contributed to higher input costs for the private corporate sector. On the other hand, restrictions on portfolio and direct investment in foreign investment policy caused serious infrastructural bottlenecks, and restricted technology transfer, licensing and consultancy adding to constraints on international marketing (brand) and strategic alliances[10]. In addition, controlling the use of scarce foreign exchange resources through Foreign Exchange Regulation Act (FERA) significantly limited the freedom of foreign investors, whereas ignoring market forces and imposing administered interest rates in financial sector policy led to 'crowding out' of private sector and diminished bank profits.

Against this backdrop, initiation of economic reforms since July 1991 has made significant changes in the policies relating to industry, investment, trade and competition. The basic objectives of the new policy resolutions include maintaining a sustained growth in productivity and employment, attaining international competitiveness, developing indigenous capacity in technology and manufacturing, developing the capital markets, encouraging foreign investment and technology collaboration, abolishing monopoly of any sector or any individual enterprise in any field of manufacture except on strategic and military considerations, and ensuring rightful role of public sector in strategic areas of national

[10] Restrictions on FDI inflows combined with anti-export bias restricted firms from achieving internationally efficient scales of production (Basant, 2000).

importance. Accordingly, a number of deregulatory measures such as wide-scale reduction in the scope of industrial licensing, simplification of procedural rules and regulations, reduction of areas reserved exclusively for the public sector as well as for the small-scale enterprises, divestment of equity in public sector undertakings, etc., have been introduced in the New Industrial Policy of 1991. Besides, in the new policy regime, while the restrictions on mergers, acquisitions and entry of large firms under the Monopolies and Restrictive Trade Practices Act (MRTPA) have been removed completely, the entry restrictions on private sector enterprises under the Industries Development and Regulation Act (IDRA) and the shareholding and business restrictions on multinational corporations (MNCs) under the Foreign Exchange Regulation Act (FERA) have been relaxed substantially.

The changes in the industrial and competition policies have been accompanied by a number of investment and trade related liberal measures. The reforms in trade policies has been directed towards phasing out import licensing, reducing import duties and removing quantitative restrictions on imports, particularly of capital goods and intermediates, and shifting to a regime of flexible exchange rate to induce greater competition in the markets. Liberalizing foreign direct investment was another important aspect of economic reforms. The new policy regime enhanced foreign equity participation is allowed in domestic industrial undertakings in a large number of sectors. Other major policy changes in respect of FDI include simplification of procedures, provision for automatic approval up to specified levels of foreign equity participation, allowing foreign institutional investors to purchase shares of listed Indian companies, and removal restrictions on foreign technology participation.

Thus, the policy reforms of since 1991 has set the stage for new entry and greater competition (both domestic and foreign) to bring in greater efficiency in production and distribution of goods and services. In other words, introduction of deregulatory policies can be seen as remedies to policy induced distortions that restricted firms from making rational choices and thereby constrained growth in independent India (Basant, 2000). While widespread industrial de-licensing has brought in greater competition in the domestic marketplace, and more flexibility for the firms in their investment decisions as well as in choosing plant capacities, removal of restrictions on mergers, acquisitions and entry of large firms under the MRTP Act

has enhanced corporate investments and growth[11]. Similarly, lower tariffs and removal of physical barriers on imports like quotas have resulted in enhanced import competition for tradable commodities and rational input purchase decisions by the firms. In addition, opening up new sectors for FDI and allowing higher equity participation by the foreign investors in others have allowed the MNCs to have better control over their ventures in India. Further, permitting domestic firms to access international capital markets along with inflows of foreign portfolio investments have resulted in considerable increase in availability of foreign exchange, whereas liberal approach in foreign technology purchase has given the firms greater access and thereby has helped them in making more rational choices about 'making and buying' of technology. Policy changes on foreign technology front have also made technology based entry possible raising the competitive threats to the incumbents.

However, initial response of the corporate sector to economic reforms coupled with crisis in the South East Asian economies during the late 1990s forced the government to redesign the policies. In addition to de-licensing more items, removing more goods from the list reserved exclusively for the SSEs, moving more commodities from restricted list to OGL, removing quantitative restrictions on more items, or allowing 100 percent FDI in infrastructure, and abolition of SICA, the major changes on the policy front since the late 1990s also include greater emphasis on knowledge based industry and export of services, setting up of special economic zones (SEZ) to encourage exports, and enactment of the Foreign Exchange Management Act (FEMA) that replaces the FREA. The changes in the policy framework have given more emphasis FDI through automatic approval system of the RBI except for a small negative list. The new policy resolutions also allow FDI under automatic route up to 100 percent in all manufacturing in the SEZs. Besides, the new telecom policy has been introduced that allows multiple fixed service operators and opens up domestic long distance call service to private operators, and the Insurance Regulation and Development Act (IRDA) has been enacted to facilitate private sector participation in insurance.

In addition, there have been many important changes in the regulatory structure as well that are expected to have significant impact on conducts of the firms. For example India's obligation to sign the TRIPS agreement in 1994 to become a member of WTO in 1995 has

[11] Dilution of the MRTP Act is also expected to raise competitive pressures as the dominant incumbents earlier did not face competition from less dominant firms because the latter were also covered by the MRTP Act.

been followed by three important amendments to the Indian Patent Act (1970), viz., *Patent First Amendment Act* in 1999, *Patent (Second Amendment) Bill* in 2002 and *Patent (Amendment) Bill* in 2005. These amendments to the Indian Patent Act have made a marked shift from the process patent regime towards an era of product patent. While the first amendment in 1999 has introduced the mailbox provisions to receive product patent applications, the second amendment in 2002 has extended the term of patent to 20 years. The amendment in 2005, on the other hand, has recognized the WTO mandated product patent[12] provision. The new patent laws along with sector specific policies are expected to provide greater market power to the firms as an incentive to innovate[13].

Similarly, corporate response to economic reforms in the 1990s and the emergence of WTO regime led to the common consensus that India must have a comprehensive competition policy to ensure that wave of M&A and other restrictive business strategies of the firms during the post-reform period do not pose any threat to competition. Accordingly, The Competition Act, 2002 has been enacted in January, 2003 and its subsequent amendments in 2007 have led to establishment of the Competition Commission. The basic objective of this Act is to regulate M&A, especially, the large ones, and to prosecute restrictive trade practices by the foreign firms more vigorously so that monopoly power is not created in the market place. The Act also aims at promoting and sustaining competition in markets. The major areas of functioning of the commission include prohibition of anti-competitive agreements and abuse of dominant position, regulations of combinations, and competition advocacy. As compared to the MRTP Act, the Competition Act focuses more on the behavior of enterprises and not on the structure. For example, the new Act makes pre-notification mandatory if threshold value of assets of merging/acquiring firms or of respective business groups is beyond the fixed limit. The new Act also provides a list of criteria to determine whether a merger or an acquisition would have a negative effect on competition. Further, the Act does not discriminate between public and private enterprises as far as enforcement of the competition law is concerned

Hence, the process of economic reforms initiated in 1991 aims mainly at bringing in greater competition to facilitate efficient functioning of the market forces in the Indian industry sector,

[12]This introduction of product patent regime is expected to have a significant impact on market concentration, prices of drugs and performance of the industry.
[13] For example, the *Pharmaceutical Policy (2006)* also aims at promoting R&D in the industry by creating an appropriate incentive structure.

initial strategic response of the firms has resulted in redesigning of the policies and development of regulatory institutions. Given this policy-market-institution interface in Indian corporate sector during the post-reform period, what follows next is an attempt to explore response of the firms in terms of business restructuring M&As and other alliances, technology strategies, non-price competition, efficiency and financial performance.

III Industrial Growth and Investment

The patterns of industrial growth and investment have undergone some change in the post-reform period. We provide an aggregate overview of these patterns before we explore the firm level responses in some detail.

Nature and Pattern of Industrial Growth

In independent India, the experience prior to initiation of economic reforms in 1991 shows three distinct phases of growth of the industrial sector - the phase of rapid growth from the early fifties to the mid-sixties, the phase of deceleration or relative stagnation from the mid-sixties to the late seventies, and the phase of revival from the late seventies to the early nineties. During the last phase, the sector not only recovered from the lost momentum, the rate of growth during this period was also comparable to what was achieved during 1950-65 and that of the star performers of the 1980s like Korea, Indonesia, Malaysia, Thailand, and Turkey. The manufacturing output grew at 7.4 percent per year during 1981-91 (Nagraj, 2003b). This high rate of growth of the manufacturing sector in the 1980s can be contributed to the surge in productivity (Unel, 2003; RBI, 2004).

Although the acceleration phase of the 1980s continued in the first few years of the post liberalization era (except in the crisis years of 1990-91 and 1991-92) and reached a high of 12.8 per cent in 1995-96 (Basant, 2000; Mishra, 2005), there was a declining tendency with fluctuations in the growth path since the mid 1990s possibly be due to the South-East Asian crisis in 1997 and political instabilities of the central government. Although the rate of growth of the industry sector in general and manufacturing sector in particular was somewhat higher during the last decade, when the entire post-reform period is taken together, the rate of growth of the industry sector has been marginally lower and the increase in case manufacturing sector has not been substantial in comparison with that in the 1980s (Table 1). In other words, the rate of growth of the Indian industry sector did not *accelerate* following

economic reforms. In addition, employment in the manufacturing sector also remained constant at around 12 percent of the workforce in the 1990s as it was in the 1980s and (Nagaraj, 2003b)[14].

Table 1 Growth of Indian Industry Sector in the Post-Reform Era					
Aspects		1980-81 to 1991-92	1993-94 to 1999-2000	2000-01 to 2008-09	1993-94 to 2008-09
Industry	Share in GDP %)	18.8	20.2	19.4	19.8
	Growth (%)	6.1	6.3	7.0	6.0
Manufacturing	Share in GDP (%)	14.5	15.3	15.1	15.2
	Growth (%)	5.6	6.5	7.5	6.3

Source: www.rbi.org.in

Broadly, two major factors seem to have constrained growth of the manufacturing/industrial sector during the post-reform period, viz., slow-down in growth of factor productivity and slow growth of the agriculture sector. While more recent estimates are not available, earlier estimates suggest that the growth of total factor productivity (TFP) has not improved in the post-reform period and, in fact, may have deteriorated ((Balakrishnan and Pushpangadan, 1998; Balakrishnan et. al, 2000; Srivastava, 2001; Unni et. al., 2001)[15]. Hence, the growth of manufacturing sector during this period might have been contributed by investment, more specifically by FDI. On the other hand, despite having favourable terms of trade for the agricultural sector and normal south-west monsoon, the annual compound rate of growth of the sector in terms of area, production and productivity declined in the post-reform era (Dev, 2003; Landes and Gulati, 2004, Sharma and Gulati, 2005).The GDP from agriculture grew at the rate of 3 per cent per annum during 1992-2007 against the average annual rate of growth of 3.7 percent during 1981-91 (Mishra and Behera, 2008). Slow growth of agriculture has limited supply of wage goods and raw materials for the agro-based industries, and demand for the manufacturing products and hence growth of the sector.

[14]However, the growth performance is mixed when it is seen across major industries. For example, while the industries like beverages and tobacco, textile products, chemicals, machinery, basic metals and alloys, transport equipments, have grown at reasonably high rate following economic reforms, the growth performance of food products, jute and other vegetable fibres, wood and wood products, etc. have been dismal during this period. Such inter-industry variations in growth performance may largely be due to industry-specific factors and policies, and any conclusion in this regard requires further exploration.

[15]This decline in factor productivity was largely due to creation of excess capacity as the new entrants forced the existing firms to reduce their output without proportionate reduction in fixed stock of capital and labour (Balakrishnan and Pushpangadan, 1998; Unni et al., 2001).

Growth in Industrial Investment Intentions

However, policy reforms did have a significant positive impact on the investment situation in the economy. As many as 91510 investment proposals have been received during August 1991 to August 2011 with proposed investment of Rs. 8883027crores and proposed employment of 21337764 persons. Further, the quantum of investment intentions has increased over the years from around 10 percent of GDP in 1992-93 to around 34 percent GDP in 2008-09 and the increase has been quite sharp during the last decade as compared to that in the 1990s (Table 2). Nevertheless, a large portion of the investment proposals (in terms of both number and proposed amount of investment) are concentrated in a few industries like metallurgy, chemicals (excluding fertilizers), and textiles. The sectors like fuels, prime movers, and cement and gypsum also have considerable share in proposed investment, but the number of proposals is relatively less. On the other hand, the industries like food processing and fermentation have considerable share in the number of proposals, but the share of these industries in proposed investment is not that high[16].

Table 2 Trends in Industrial Investment Intensions, 1992-2009

Year	IEM		LOI/DIL		Total	
	Amount (Rs. Crore)	Share in GDP (%)	Amount (Rs. Crore)	Share in GDP (%)	Amount (Rs. Crore)	Share in GDP (%)
1992-93	96225	8.31	14917	1.29	111142	9.60
1993-94	66479	5.43	13735	1.12	80214	6.55
1994-95	101853	7.82	20492	1.57	122345	9.40
1995-96	116425	8.33	12556	0.90	128981	9.23
1996-97	62951	4.17	26789	1.78	89740	5.95
1997-98	54823	3.48	8448	0.54	63271	4.02
1998-99	78318	4.67	2327	0.14	80645	4.80
1999-00	116478	6.52	807	0.05	117285	6.56
2000-01	93957	5.04	1081	0.06	95038	5.10
2001-02	71017	3.60	1361	0.07	72378	3.67
2002-03	80847	3.95	334	0.02	81181	3.96
2003-04	154931	6.97	3454	0.16	158385	7.13
2004-05	289782	12.13	4312	0.18	294094	12.31
2005-06	382743	14.63	3638	0.14	386381	14.77
2006-07	692643	24.12	4002	0.14	696645	24.26
2007-08	1225761	39.17	6696	0.21	1232457	39.38
2008-09	1147600	34.37	420	0.01	1148020	34.38

Source: www.dipp.nic.in

[16] See SIA Statistics (Department of Industrial Policy and Promotion, Government of India), August, 2011 for the details in this regard.

It is important to note that while the policy reforms aims at encouraging private investment, low rate of implementation of investment proposals remains a matter of serious concern during the post-reform period. As the January 2012 issue of SIA Statistics (published by the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India) reports as many as 88,102 Industrial Entrepreneurs memorandum (IEMs) have been filed with a proposed investment of Rs. 90,24,775 crore and projected employment for 2,06,30,891 persons during the post liberalisation period. Compared to this, a total of 9578 IEMs with an investment of Rs. 3,29,250 crore and employment for 17,05,993 persons only have reported implementation. This accounts for only around 11 percent of proposed projects, 3.6 percent of proposed investment and 8.3 percent of proposed employment.

Foreign Investment

The liberal policy measures introduced since July, 1991 have resulted in a significant increase in foreign direct investment (FDI) inflows in the post-reform era (Rao et al., 1997; Kumar, 1998; Nagraj, 2003a; Rao and Murthy, 2006; Rozas and Vadlamannati, 2009)[17]. Inflows of both FDI and foreign portfolio investment (FPI) have increased over the years (Table 3) making India's growth strategy increasingly dependent on foreign capital. The country ranked eighth in global FDI inflows in 2009[18]. The cumulative amount of FDI equity inflows from April 2000 to August 2010 amounts to US$ 147,088 million. However, the inflows of FPI fluctuated more as compared to that of FDI. More importantly, FPI inflows declined sharply and became negative following the global slowdown in 2008-09, whereas FDI inflows continued to increase.

However, though increased considerably over the years, inflows of FDI or FPI have fluctuated over the years and are not so high when considered as a proportion of gross domestic product (GDP). As Table 3 shows, FDI and FPI inflows were only 3.20 percent and 2.54 percent of GDP respectively in 2007-08. Further, as regards the actual FDI inflows, India is far behind not only of China but also of even some smaller economies in Asia like Hong Kong and Singapore. In other words, the investment potential of India is not fully realized, especially in comparison with the peer group and there is a gap between the

[17] In addition to policy reforms in the form of granting automatic approval for equity investment and foreign technology agreements in identified high-priority industries, several incentives like, tax holidays, etc. have also encouraged FDI inflows particularly in manufacturing sector considerably.
[18] See World Investment Report, 2011, UNCTAD.

potential to attract foreign investment and actual FDI inflows due to incorrect perception of foreign investors on potential of Indian market, domestic policies and regulations, time lags in processes and procedures, quality of infrastructure, obstacles at the centre and state level (Rozas and Vadlamannati, 2009).

Table 3 Trends in Foreign Investment Inflows, 1991-2009

Year	FDI		FPI		Total		Share of FPI in Foreign Investment
	Amount (Rs. Crore)	Share in GDP (%)	Amount (Rs. Crore)	Share in GDP (%)	Amount (Rs. Crore)	Share in GDP (%)	
1991-92	316	0.05	10	Neg.	326	0.05	3.07
1992-93	965	0.14	748	0.11	1713	0.25	43.67
1993-94	1838	0.23	11188	1.41	13026	1.64	85.89
1994-95	4126	0.45	12007	1.30	16133	1.74	74.43
1995-96	7172	0.66	9192	0.85	16364	1.51	56.17
1996-97	10015	0.79	11758	0.93	21773	1.73	54.00
1997-98	13220	0.94	6794	0.48	20014	1.43	33.95
1998-99	10358	0.64	-257	-0.02	10101	0.63	-2.54
1999-00	9338	0.52	13112	0.73	22450	1.26	58.41
2000-01	18406	0.96	12609	0.66	31015	1.61	40.65
2001-02	29235	1.39	9639	0.46	38874	1.85	24.80
2002-03	24367	1.08	4738	0.21	29105	1.29	16.28
2003-04	19860	0.78	52279	2.06	72139	2.84	72.47
2004-05	27188	0.94	41854	1.45	69042	2.40	60.62
2005-06	39674	1.21	55307	1.68	94981	2.89	58.23
2006-07	103367	2.74	31713	0.84	135080	3.57	23.48
2007-08	138276	3.20	109741	2.54	248017	5.74	44.25
2008-09	161481	3.27	-63618	-1.29	97863	1.98	-65.01

Note: Neg. – negligible (<0.005)
Source: www.rbi.org.in

Given that policy reforms have created scope for MNC participation in Indian corporate sector, we use the ratio of spending of foreign exchange as dividend to various measures of profit as a proxy to examine the extent of such participation. It is assumed that higher the ratio, greater is the extent of MNC participation. It is observed that there was increasing participation of the MNCs in the 1990s, but the extent has shown declining tendency subsequently though with fluctuations (Table 4). Spending of foreign exchange as dividend standardized with profit before tax as well profit after tax show negative rate of growth during the post-reform period indicating declining participation of MNCs in Indian corporate sector. However, the extent of MNC participation as well as its trends and variations differ when considered across major industries (Table 5). The industries like food and beverages, chemicals, petroleum products, paper and paper products, and leather products show increasing MNC participation over the years.

However, the there are two important concerns relating to FDI inflows in the post-reform era. First, M&As have a become predominant channel of foreign investment inflows. Nearly 39 per cent of FDI inflows into India during 1997-1999 had taken the form of M&As, whereas in the pre-reform era FDI entry was invariably in the nature of Greenfield investments (Kumar, 2000). Using data on 2,748 large FDI projects, Rao and Dhar (2011) find that the share of acquisitions in total FDI inflows in manufacturing and services were 23.85 percent and 19.32 percent respectively during September 2004 to December 2009, and it was as high as 45.83 percent in IT and ITES. Such a significant share of M&As in FDI have important implications on the developmental front as FDI in the form of M&As have limited potential to add to the stock of productive capital, generate favourable knowledge spillover and competitive effects as compared to Greenfield entry (Kumar, 2000).

Table 4 Trends in MNC Participation in Indian Corporate Sector, 1993-2011

Year	FOREX Spending as Dividend/PBIT	FOREX Spending as Dividend /PBT	FOREX Spending as Dividend /PAT	Share of MNCs/in Total Dividends[19]
1993-94	0.86	1.86	2.37	23.2
1994-95	0.94	1.66	1.97	22.9
1995-96	1.08	1.99	2.43	25.5
1996-97	1.60	3.74	5.13	42.6
1997-98	1.97	5.77	8.57	51.2
1998-99	2.15	9.03	22.18	49.6
1999-00	2.24	8.57	17.41	49.0
2000-01	2.54	8.88	18.40	59.1
2001-02	2.98	9.47	25.76	56.6
2002-03	2.36	4.67	8.35	51.2
2003-04	2.60	3.90	5.63	50.0
2004-05	2.11	2.90	3.95	49.3
2005-06	2.45	3.31	4.37	50.7
2006-07	2.24	2.94	3.73	51.2
2007-08	1.84	2.46	3.10	46.2
2008-09	2.55	3.84	4.93	46.0
2009-10	1.76	2.39	3.12	47.5
2010-11	2.05	2.69	3.45	51.5
AV	2.0	4.4	8.0	45.7
CV	0.3	0.6	0.9	0.2
GR	3.0	-1.8	-3.1	2.6

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.

[19] Here, share of the MNCs in total dividend is defined as the ratio of FOREX spending as dividend to the sum of FOREX spending as dividend and dividends paid to the domestic firms. The explanatory notes in the PROWESS database do not clearly define dividends paid in foreign exchange and, therefore, the interpretation of these estimates can only be tentative.

Source: Prowess (CMIE)

Second, the distribution of FDI inflows in the post-reform era, particularly during the last decade has been highly skewed towards a few sectors. For example, the service sector (both financial and non-financial services) has alone accounted for 23 percent of total FDI equity inflows during April 2000 to August 2011. The other major sectors accounting for reasonably high share include telecommunications (8%), computer hardware and software (7%), housing and real estate (7%), and construction activities (6%). The sector like power, automobiles, metallurgical, and drugs and pharmaceuticals also had reasonable share in total FDI equity inflows during this period[20]. Such a skewed distribution of FDI inflows may be caused by a set of industry specific factors along with policies of the government. But, it has important implications, as the spillovers from foreign technology and skills to the local industry are not an automatic consequence of foreign investment (Blomstorm and Kokko, 2003), rather depend largely on industry specific characteristics (Kokko, 1994).

Table 5: MNC Participation by Major Industries, 1993-2011

Industry	FOREX Spending as Dividend/PBIT			FOREX Spending as Dividend /PBT			FOREX Spending as Dividend /PAT			Share of MNCs/in Total Dividends		
	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	3.7	0.4	5.6	6.3	0.3	2.9	9.9	0.4	2.2	54.4	0.2	1.6
Textiles	1.1	0.6	0.8	0.7	5.8	40.5	-0.1	-86.0	-269.5	28.7	0.6	3.9
Chemicals	4.0	0.4	4.5	6.5	0.5	1.7	9.2	0.6	1.3	50.7	0.2	1.6
Plastic products	1.2	0.7	5.7	2.2	2.5	10.0	0.2	82.1	-205.7	30.5	0.4	0.7
Petroleum products	1.1	0.4	1.9	1.4	0.4	0.8	1.8	0.4	1.3	38.2	0.6	-1.6
Rubber products	1.0	0.6	3.5	2.0	3.1	-6.0	-0.4	-16.8	-46.0			
Non-metallic minerals	0.8	0.6	9.7	4.0	1.8	-4.4	-0.4	-15.7	-82.3	33.9	0.5	8.5
Metals & metal products	0.8	0.7	-0.3	1.5	3.1	-9.5	-19.4	-4.6	-17.7	27.8	0.4	1.4
Machinery	2.3	0.5	3.5	9.7	1.1	-1.2	13.9	2.6	-2.6	48.8	0.3	5.1
Transport equipment	2.9	0.4	3.7	6.5	1.4	-1.8	5.2	1.9	0.8	45.2	0.2	2.0
Paper, newsprints & paper products	0.3	1.1	0.3	0.2	14.8	59.1	0.1	38.1	32.3	22.3	0.9	8.5
Leather products	4.3	1.4	5.3	2.7	2.2	8.8	8.0	2.2	1.5	49.0	0.7	2.3
Miscellaneous manufacturing	0.4	1.0	-0.4	-5.5	-5.0	-22.9	0.2	30.7	-67.0	35.3	0.8	-1.4
Diversified	2.4	0.9	-2.4	-0.9	-32.4	-24.3	-4.5	-7.0	-4.0	42.4	0.3	3.6
Manufacturing	2.0	0.3	3.0	4.4	0.6	-1.8	8.0	0.9	-3.1	45.7	0.2	2.6

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

[20]See FDI Statistics, Department of Industrial Policy and Promotion, Government of India for the details.

IV Economic Reforms and Corporate Strategies

Mergers and Acquisitions

Initiation of economic reforms has forced Indian firms to build new competencies and capabilities to become competitive and grow profitably. Many of the domestic firms have taken the route of M&A to restructure their business and grow (Basant, 2000). As a result, there has been a significant increase in the number of M&As in Indian corporate sector in the post-liberalization era (Table 6)[21], especially after the mid-1990s. This increase is quite substantial, particularly when compared with the number of deals during entire period of 1975-90, though the pace slackened during 2005-2009. Interestingly, share of mergers in total deals has declined in the post-reform era and the decline has been considerably sharp after the mid-1990s. This means that unlike what was observed during the initial years of economic reforms mergers no longer necessarily follow acquisitions. It is possible that, during the initial years, firms used mergers primarily to consolidate their business, and subsequent increase in efficiency and competitiveness seems to have motivated them to use the route of acquisitions to strengthen their position in the market and grow.

Table 6 Trends in M&As in the Indian Corporate Sector, 1975-2009

Year	Mergers		Acquisitions		Total Deals	
	Number	Share (%)*	Number	Share (%)*	Number	Share (%)*
1975-90	425	78.4	117	21.6	542	100.0
1990-00	661	61.9	407	38.1	1068	100.0
1990-95	236	72.2	91	27.8	327	100.0
1995-00	425	57.4	316	42.6	741	100.0
2000-05	993	29.9	2332	70.1	3325	100.0
2005-09	774	26.0	2199	74.0	2973	100.0

Note: *share in total deals.
Source: Beena (2008) and Business-Beacon (CMIE)

Table 7 shows some interesting trends of the number of deals announced and value of the deals of acquisitions during 1999-2011. It is observed that the number of deals for mergers have fluctuated, whereas that of acquisitions have three distinct phases, a declining phase till 2004-05, followed by an increasing tendency until the global economic slowdown started, and again a declining phase during the recession. Accordingly, share of acquisitions in total deals also declines initially, followed by an increasing trend reaching its peak in 2007-08, and

[21] A number of studies support this significant increase in number of M&As in Indian corporate sector following economic reforms (Venkiteswaran, 1997; Chandrasekhar, 1999; Roy, 1999; Basant, 2000; Beena, 2000, 2004 and 2008, Kumar, 2000; Agarwal, 2002; Dasgupta, 2004; Mishra, 2005; Agarwal and Bhattacharya, 2006; Mantravadi and Reddy, 2008).

declining thereafter. Contrary to this, the average value of acquisition had an increasing trend with a sharp dip in 2007-08 possibly due to economic slowdown, and again an increasing tendency thereafter. Such diverse trends of mergers vis-à-vis acquisitions possibly suggest that a merger does not necessarily follow acquisition for synergy, a tendency generally observed in the 1990s. Does this mean that the firms are using M&A not only to consolidate operations but also to raise control in the market?

Table 7 Trends in M&As Announced 1999-2000 to 2010-11

Year	Mergers	Acquisitions			
	Number of Deals	Number of Deals	Value (Rs. Crore)	Share in total Deals (%)	Average Value (Rs. Crore)
1999-2000	199	870	32012.6	81.4	36.8
2000-01	350	865	29218.3	71.2	33.8
2001-02	330	825	26218.1	71.4	31.8
2002-03	384	690	20950.8	64.2	30.4
2003-04	316	660	31127.8	67.6	47.2
2004-05	267	665	54883.3	71.4	82.5
2005-06	415	812	87644.9	66.2	107.9
2006-07	401	1081	238238.5	72.9	220.4
2007-08	279	1100	93956.4	79.8	85.4
2008-09	188	680	71627.1	78.3	105.3
2009-10	240	599	140281.5	71.4	234.2
2010-11	249	645	154786.2	72.1	240.0

Source: Business-Beacon, CMIE

The wave of mergers has been largely dominated by the private domestic firms (Table 8). The private foreign firms have not consolidated their Indian operations through mergers, instead, they have used the route of acquisition to enter into the Indian market and strengthen their presence therein. Interestingly, quite a large number of private foreign firms have been acquired by the private domestic firms. Whether such acquisitions are due to improvement in market position of the private domestic firms or due to failure of the foreign private firms in their Indian operations need further scrutiny. However, the state-owned enterprises have not restructured their business/organization through M&As possibly due to lack of necessary flexibility in this regard. This may change in the years to come as the privatization initiatives take concrete shape and the enterprises are given more autonomy.

Table 8 Distribution of Mergers and Acquisitions by Nature of Ownership, 1992-2004						
Nature of Ownership	Merging	Merged	Acquiring	Acquired	Merging & Acquiring	Merged & Acquired
Private Indian	87.0	88.0	54.4	75.4	65.9	79.8
Private Foreign	10.0	9.0	41.3	19.6	30.3	15.9
State-Owned	2.5	2.2	3.9	3.7	3.4	3.2
Others	0.5	0.7	0.4	1.3	0.4	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Prowess (CMIE)

Many of the country's leading business groups were actively involved in M&As, particularly in the 1990s and a majority of these business houses preferred the path of mergers among the group companies to restructure their businesses to correct inefficiencies caused by over-diversification during the regime of regulation and control (Basant, 2000). Such efforts towards business consolidation were also motivated by the need for increasing controlling block to guard against a takeover or a dilution of control (Beena, 2000). Some of them also acquired firms from outside the group, either to enter into a new product/market segment, or to strengthen their presence in the existing market. As a result, while around 71 per cent of mergers were among the companies of the same business group, in around 68 per cent of the acquisitions, the firms involved were from different groups (Table 9)[22].

Table 9 Distribution of Mergers and Acquisitions by Nature of Integration, 1992-2004			
Type of Deal	Nature of Integration		Total
	Among Group Companies	Outside Group Companies	
Mergers	71.4	28.6	100.0
Acquisitions	31.7	68.3	100.0
Total	45.6	54.4	100.0

Source: PROWESS (CMIE)

The efforts by the domestic firms towards business consolidation are also reflected in increasing share of the group companies in equity holding (Table 10). However, the experience is mixed when considered across major industries (Table 11). The industries that have experienced significant increase in equity holding by the group companies include chemicals, plastics products, non-metallic minerals, metal and metal products, transport equipment, paper, newsprints, etc. However, equity holding of the group companies declined in some of the industries like petroleum products, rubber products, and leather products. It is difficult to ascertain reasons for these sectoral patterns. However, since in many of these

[22] It is also possible that in terms of tax laws, implementation issues or administrative needs, mergers make more sense as compared to acquisitions, if they are to be undertaken within the business group. This needs to be explored further.

industries like chemicals, non-metallic minerals, metal and metal products, transport equipment have also recorded considerable share in the wave of M&A, it is possible that the firms in these industries have used the route of M&A to consolidate their business.

Although a large part of the deals were concentrated in manufacturing sector[23], the number of M&A varied significantly across different industry groups depending on the nature and scope for M&A therein and the distribution is highly skewed towards a few industry groups (Basant, 2000; Das, 2000; Agarwal, 2002; Dasgupta, 2004; Mishra, 2005). As it is shown in Table 11, majority of deals were concentrated in the industries like food products, textiles, chemicals (especially, in drugs and pharmaceuticals), metals, and machinery. In addition, non-metallic minerals and electronics also had a reasonable share in the M&A activity. On the other hand, the industries like beverages and tobacco, automobiles, petroleum and rubber had negligible share in the total number of deals of M&As.

Table 10 Trends in Business Consolidation in Indian Corporate Sector, 1993-2011

Year	Equity of Group Companies/ Assets	Equity of Group Companies/ Capital Employed	Equity of Group Companies/Total Equity
1993-94	6.22	2.94	0.84
1994-95	7.44	3.45	0.80
1995-96	8.82	4.13	0.84
1996-97	8.46	4.05	0.84
1997-98	7.88	3.90	0.84
1998-99	7.96	4.15	0.80
1999-00	7.41	4.02	0.70
2000-01	9.21	5.12	0.80
2001-02	8.54	5.16	0.79
2002-03	10.06	6.01	0.82
2003-04	11.03	6.41	0.85
2004-05	11.08	5.96	0.85
2005-06	10.64	5.54	0.86
2006-07	13.23	6.32	0.88
2007-08	16.44	6.92	0.87
2008-09	21.73	9.19	0.92
2009-10	22.73	10.14	0.92
2010-11	25.24	10.84	0.92
AV	11.9	5.8	0.8
CV	0.5	0.4	0.1
GR	7.8	6.7	0.8

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

[23] While three-fourth of the deals were concentrated in the manufacturing sector, the remaining one-fourth were in services and other related areas (Basant, 2000; Das, 2000).

In the service sector also the distribution of M&A is skewed towards a few areas like financial services, wholesale and retail trading, information technology, and construction (Table 12a). These four services together have accounted for more than 70 percent of M&As during the post reform period. Besides in majority of the services, acquisitions related deals have dominated. However, change in share of acquisition in total deals is mixed across the services. While the inter-industry variations in M&A in the 1990s were caused by size of the market, growth of sales, existence of non-price competition as reflected in selling and technology efforts by the firms, exports intensity, and the minimum efficient scale of operation (Mishra, 2011)[24], factors affecting variations in the number of deals across services remains largely unexplored

Table 11 Business Consolidation by Major Industries

Industry	Equity of Group Companies/ Assets			Equity of Group Companies/ Capital Employed			Equity of Group Companies/Total Equity		
	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	13.6	0.2	2.5	7.0	0.1	1.4	0.8	0.1	-0.3
Textiles	9.8	0.2	1.4	5.0	0.1	1.4	0.8	0.1	0.4
Chemicals	13.9	0.8	12.7	6.3	0.6	10.8	0.8	0.1	1.5
Plastic products	15.4	0.7	12.1	8.0	0.6	10.4	0.9	0.1	1.5
Petroleum products	9.3	0.2	-0.4	4.5	0.3	2.2	0.8	0.1	-0.7
Rubber products	13.9	0.6	-10.1	7.9	0.5	-7.5	0.9	0.1	-0.6
Non-metallic mineral products	7.4	0.2	3.3	4.2	0.3	2.8	0.8	0.1	1.2
Metals & metal products	12.3	1.2	16.0	5.4	0.9	12.2	0.9	0.1	1.5
Machinery	18.2	0.6	8.8	6.6	0.4	6.7	0.9	0.1	1.0
Transport equipment	14.5	0.6	8.9	7.2	0.6	8.9	0.8	0.2	1.6
Paper, newsprints, etc	6.7	0.5	-2.3	4.2	0.4	-0.6	0.8	0.1	1.8
Leather products	17.0	0.4	-0.7	7.8	0.4	-0.1	0.9	0.1	-0.9
Miscellaneous manufacturing	13.9	0.6	8.7	5.5	0.3	3.9	0.6	0.2	-1.7
Diversified	28.1	0.6	10.4	12.9	0.5	9.1	0.9	0.1	0.7
Manufacturing	11.9	0.5	7.8	5.8	0.4	6.7	0.8	0.1	0.8

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

[24]**T**he extent of M&A was more in industries with larger market, higher rate of growth of sales, greater selling and technology efforts of the firms, and higher exports intensity. On the other hand, it was low in the industries with higher minimum efficient scale of operation (Mishra, 2011).

As mentioned earlier, a large number of MNCs have used the route of M&As to enter into Indian market and strengthen their presence therein, and as a result, around 40 percent of the FDI during the early phase of economic reforms came into the country through cross-border M&As (Kumar, 2000; Saha, 2001). Dominance of M&As in FDI inflows continued in the recent past also with a significant portion of total FDI equity inflows taking the route of M&As. However, the MNC related deals were concentrated mainly in consumer goods industries such as foods, beverages, household appliances, pharmaceuticals, personal care products, automobiles, etc. primarily to explore countrywide established marketing, distribution and service network of these industries (Beena, 2008).

Table 12 Distribution of Mergers and Acquisitions by Major Industries, 1992-2009

Industry	Distribution of Deals (%)			Share of Acquisitions in Total Deals		
	Mergers	Acquisitions	Total	1992-2000	2000-2009	1992-2009
Food Products	11.8	8.7	9.6	53.3	65.4	63.6
Beverages & tobacco	4.7	2.4	3.1	36.4	59.7	55.2
Textiles	10.6	8.8	9.4	53.3	68.0	66.4
Drugs & pharmaceuticals	8.5	9.1	8.9	61.2	73.4	71.8
Chemicals	21.4	18.8	19.6	58.0	69.3	67.8
Plastic products	3.2	3.8	3.6	58.1	75.9	73.9
Petroleum and Poly	2.9	3.2	3.1	70.3	72.6	72.2
Rubber & Tyre	1.2	1.7	1.5	75.0	76.6	76.3
Non-metallic mineral products	4.7	6.9	6.2	79.2	77.4	77.7
Metals	10.1	9.1	9.4	50.6	70.6	68.3
Machinery	11.5	12.0	11.8	60.5	73.4	71.3
Electronics	5.3	6.5	6.1	75.5	73.9	74.3
Automobile	0.9	2.7	2.2	90.5	87.7	88.1
Automobile ancillaries	3.6	5.3	4.8	62.5	79.5	77.6
Miscellaneous manufacturing	4.8	7.4	6.7	73.5	79.0	78.6
Diversified	3.1	2.7	2.8	63.0	69.3	67.9
Total	100.0	100.0	100.0	61.6	71.9	70.5

Source: PROWESS (CMIE)

Table 12a Distribution of Mergers and Acquisitions by Major Services, 1992-2009						
Service	Distribution of Deals (%)			Share of Acquisitions in Total Deals		
	Mergers	Acquisitions	Total	1992-2000	2000-2009	1992-2009
Financial services	28.5	20.0	22.7	57.0	60.7	60.3
Hotels and tourism	3.4	3.6	3.5	65.5	69.8	69.2
Recreational services	3.7	6.9	5.9	88.0	79.6	80.2
Health services	0.9	1.2	1.1	57.1	77.8	75.7
Wholesale and retail trading	20.0	11.3	14.1	61.0	54.1	55.1
Transport services	3.0	3.8	3.5	80.0	72.8	73.4
Communication services	4.4	6.0	5.5	100.0	72.0	74.7
Information technology	14.6	25.6	22.1	88.8	78.0	79.2
Misc. services	8.8	10.7	10.1	88.0	71.2	72.5
Construction	12.8	10.9	11.5	55.6	65.2	65.0

Source: PROWESS (CMIE)

Outward Foreign Direct Investment

An interesting dimension of the corporate response to economic reforms is increasing investment by Indian corporations abroad through either cross-border M&A or Greenfield FDI projects. Rapid economic growth in the home country, abundant financial resources and strong motivations to acquire resources and strategic assets abroad have made the TNCs, especially the Indian large state-owned enterprises and of other BRIC countries as important investors in recent years (UNCTAD, 2011). Although India's share in FDI outflows from developing economies was the lowest as compared to the emerging economies like Brazil, People's Republic of China, Mexico, and South Africa in the early 1990s, it has grown over the years and has subsequently surpassed that of South Africa and Mexico (Athukorala, 2009). The share of FDI outflows in gross domestic capital formation has also increased over the years. The number of projects approved has increased from 220 in 1990-1991 to 395 in 1999-2000 and to 1,595 in 2007-2008 (Kumar 2008). Total FDI outflow from India increased from about $25 million in the early 1990s to nearly $14 billion in 2007 (Athukorala, 2009). Such increasing internationalization of Indian firms may largely be due to liberalization of restrictions on foreign exchange on capital transfers for overseas acquisitions in (Nagaraj 2006). Introduction of liberal policy measures in the form of allowing domestic firms to invest in wholly own subsidiaries or joint ventures abroad seems to have helped Indian firms to strengthen their presence in the international market. As a result, many of the Indian firms have taken the route of acquisition to invest in abroad. The country ranks 21 in global FDI

outflows in 2009. It is important to ascertain the extent to which these outward capital flows are a result of inflexibilities and constraints faced by firms in the domestic market.

The number of foreign acquisition by Indian firms have increased significantly in recent years, particularly in the sectors like pharmaceuticals, information technology and telecommunications (Mishra, 2005 Gopinath, 2007; Nayyar, 2007) indicating enhanced competitive strength of the domestic firms in the global market. However, the distribution of the investments is largely skewed towards information technology, and pharmaceuticals and healthcare (FICCI, 2006). Using a sample of 173 foreign acquisition deals announced during January 2001 to August 2004, Mishra (2005) finds that in around 59 per cent cases the target firms were from either USA or UK. This means that acquisition of firms from the developed countries is no longer a difficult proposition for the Indian companies. However, majority of the participating firms belonged to computer software and IT services followed by drugs and pharmaceuticals, and telecommunications. In addition, some of the fuel companies also aimed at acquiring their counterparts in the international market. Besides, a large number of these acquisitions were horizontal in nature implying that the Indian companies are using the route of foreign acquisitions to enter into the international market and/or to strengthen presence therein.

Technology Strategies

Innovation is considered as one of the most significant drivers of market competition in the context of rapid changes in the pattern of production, and nature and extent of competition. With production becoming more and more knowledge-oriented across a wide range of industries and the process of liberalization and globalization leading to increase in market competition, emergence of innovation-based competition is imperative. While the developed country firms make significant in-house R&D efforts, technological progress in the developing countries takes place mainly through spillovers from trade, foreign direct investment, technology licensing, joint ventures, mergers, acquisitions and various other alliances.

Policy induced entry barriers reduced competitive pressures in India and retarded innovative efforts of the firms in the pre-liberalization era (Kumar, 1987). Further, during the pre-reform period licensing or purchase of technology from foreign firms was difficult, and there were

several restrictions on the royalty rates to be charged, period of the contract, etc. that raised the 'price' of acquiring technology (including transaction costs). With the process of economic reforms exposing the firms to greater market competition, both domestically as well as internationally, it is expected that increasing competitive pressure will force the firms to become more innovative. In addition, the amendments to the Indian Patent Act since the late 1990s have made a marked shift from the process patent regime towards an era of product patent. It is expected that changes in the patent laws would provide greater market power for innovative firms enhancing incentives for innovation. Besides, reduction in 'relative price' of foreign technology purchase vis-à-vis making one's own technology have made more options available to the firms in the make/buy decisions on technology. The new policy regime also aims at removing unnecessary governmental interference that leads to endemic delays and uncertainty, provides automatic approval to technology agreements in high priority industries within specified parameters, and allows the domestic firms to negotiate with their foreign counterparts according to their own commercial judgements.

The policy initiatives seem to have made firms in India invest more in R&D; the in-house R&D intensity shows an increasing trend in the post-reform era and has increased from less than 1 per cent in 1993-94 to about 4 per cent of sales in 2010-11.(Table 12). Although the Indian firms still rely largely on foreign technology, more specifically on imports of capital goods, increase in R&D expenditure at an average rate of 4 percent per annum seems to be encouraging for a developing country like India. However, the foreign technology purchase intensity has fluctuated during the pos-reform period. It had an increasing trend in the initial years of reforms followed by a declining trend after the mid-1990s. The reliance on foreign technology again increased during the phase of high economic growth till the beginning of the slowdown phase. Overall, disembodied technology purchase (royalty, technical fees etc.) has declined and in-house R&D has shown an increasing trend.

Table 12 Trends of Technological strategies in Indian Corporate Sector, 1993-94 to 2010-11					
Year	In-house R& D Intensity (R&D/Sales)	Domestic Technology Purchase Intensity (DTP/Sales)	Foreign Technology Purchase Intensity (FTP/Sales)		
			Royalty	Capital Imports	Total
1993-94	0.05	0.02	0.30	1.46	1.76
1994-95	0.03	0.02	0.40	2.21	2.61
1995-96	0.03	0.04	0.53	3.00	3.53
1996-97	0.03	0.04	0.42	2.59	3.02
1997-98	0.06	0.06	0.27	2.45	2.71
1998-99	0.06	0.08	0.32	2.35	2.67
1999-00	0.08	0.22	0.32	1.12	1.44
2000-01	0.08	0.23	0.20	0.75	0.95
2001-02	0.06	0.24	0.19	0.68	0.88
2002-03	0.12	0.30	0.17	0.94	1.11
2003-04	0.14	0.30	0.18	0.97	1.15
2004-05	0.19	0.29	0.20	1.11	1.31
2005-06	0.20	0.28	0.21	1.44	1.65
2006-07	0.21	0.30	0.31	1.53	1.85
2007-08	0.31	0.28	0.26	2.08	2.34
2008-09	0.32	0.27	0.29	2.33	2.62
2009-10	0.35	0.32	0.24	1.73	1.97
2010-11	0.37	0.34	0.20	1.56	1.76
AV	0.1	0.2	0.3	1.7	2.0
CV	0.8	0.6	0.3	0.4	0.4
GR	13.8	0.6	-3.7	-2.1	-2.3

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

All the major industries show an increasing trend in in-house R&D intensity and the rate of growth has been quite sharp in most of the industries barring a few like non-metallic minerals, and paper and paper products (Table 13). While the in-house R&D intensity varies across industries, most of the industries have reduced their reliance on foreign technology. However, as it is observed at the aggregate level, reliance on foreign technology, particularly on capital imports is still high.

Table 13 Some Aspects of Technology Strategies by Major Industries, 1993-94 to 2010-11

	In-House R&D Intensity			Domestic Tech. Purchase Intensity			Foreign Technology Purchase Intensity								
							Royalty			Capital Imports			Total		
Industries	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	0.1	0.8	11.3	0.3	0.5	5.5	0.1	0.8	-13.3	0.5	0.4	-0.8	0.6	0.4	-2.1
Textiles	Neg.	0.8	9.9	Neg.	0.7	9.3	0.1	0.7	-11.3	3.1	0.5	-1.7	3.2	0.5	-1.9
Chemicals	0.7	1.0	17.3	0.1	0.9	15.3	0.3	0.6	-6.9	1.2	0.5	-4.1	1.5	0.5	-4.7
Plastic products	0.1	0.7	10.7	0.1	1.0	16.4	0.1	0.6	-8.9	3.7	0.7	-4.9	3.8	0.7	-5.0
Petroleum products	Neg.	1.3	18.3	Neg.	0.9	9.4	0.3	1.1	-10.5	1.3	0.9	-4.9	1.6	0.8	-6.1
Rubber products	0.1	0.8	12.8	0.1	0.8	7.8	0.1	0.4	-5.2	1.1	0.5	7.5	1.3	0.5	6.2
Non-metallic minerals	Neg.	0.8	3.3	0.5	0.6	8.6	0.1	0.3	-3.7	1.6	0.5	-2.7	1.8	0.5	-2.8
Metals & metal products	Neg.	0.8	12.0	0.3	0.5	7.0	0.3	0.7	-11.7	2.4	0.6	4.0	2.6	0.6	2.5
Machinery	0.3	1.0	15.0	0.3	0.7	10.3	0.3	0.1	0.7	1.5	0.2	-1.0	1.8	0.2	-0.7
Transport equipment	0.3	0.7	10.3	0.6	0.8	12.5	0.7	0.4	6.7	2.5	0.6	-3.0	3.2	0.4	-0.8
Paper, newsprints, etc.	0.1	0.5	1.4	Neg.	1.3	2.9	0.0	1.7	-17.8	2.4	0.6	2.6	2.5	0.6	2.3
Leather products	0.1	1.1	11.6	0.4	1.0	14.8	0.2	1.0	7.2	2.3	1.1	-10.8	2.4	1.0	-9.4
Misc. Manufacturing	0.1	0.7	7.3	0.2	0.8	11.5	0.1	0.5	-3.7	3.3	0.5	-1.1	3.4	0.5	-1.2
Diversified	0.1	0.7	8.2	0.2	0.9	13.5	0.2	0.5	3.4	1.3	0.7	-0.4	1.5	0.6	0.1
Manufacturing	0.1	0.8	13.8	0.2	0.6	0.6	0.3	0.3	-3.7	1.7	0.4	-2.1	2.0	0.4	-2.3

Note: Neg. – Negligible (<0.05); AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

Overall, economic reform including the new patent regime seems to have had a positive impact on in-house innovative efforts along with an increase in purchase of technology domestically. While the foreign technology purchases intensity as declined, the reliance on foreign embodied technology remains high. It is possible that foreign technology flows are linked with equity flows now as FDI policies have been liberalized.

Non-Price Competition

Under imperfect competition, non-price competitive strategies like advertising play a significant role in differentiating products/services from the rivals, and creating entry barriers. On the one hand, advertising enhances image of the products/services of the concerned firm in terms of both quality and price and, thereby, pursuade the consumers to favour these products/services over the alternatives. This makes demand for these differentiated brands less elastic that results in increased control over price and hence higher profitability. On the other hand, advertising also creates barriers to entry to new firms as well as to the upward mobility of the less favoured firms. While advertising by the entrants helps them to become recognized, intensive counter

advertising by the incumbents drowns out entrants' images and, thereby, lessens the volume of sale they can capture. All these limit competition in the market place. However, advertising can also facilitate entry by helping the newcomers to make their product known quickly so that its concentration- increasing effect can be dissipated or even reversed. In addition, investment on building up marketing and distribution related complementary assets also helps a firm in two ways. First, it raises competitiveness of the firms by developing strong marketing and distribution network and, thereby, facilitating appropriability and enhancing efficiency. This results in greater market penetration by the firm. Secondly, such assets increase bargaining power of the firm in equity based foreign collaborations as they help the firms to have greater access to distribution channels which may be useful for the MNCs.

Table 14 Trends in Non-Price Competition Strategies in Indian Manufacturing Sector 1993-94 to 2010-11

Year	Advertising Intensity	Marketing Intensity	Distribution Intensity	Selling Intensity
1993-94	0.60	4.58	2.84	8.02
1994-95	0.58	4.09	2.47	7.14
1995-96	0.62	3.33	2.50	6.45
1996-97	0.64	2.98	2.56	6.18
1997-98	0.78	1.47	2.67	4.91
1998-99	0.81	2.63	3.32	6.76
1999-00	0.78	1.59	2.99	5.36
2000-01	0.81	1.68	3.08	5.57
2001-02	0.78	1.78	3.05	5.61
2002-03	0.81	1.88	2.94	5.62
2003-04	0.76	1.77	2.68	5.21
2004-05	0.66	1.65	2.55	4.86
2005-06	0.65	1.57	2.57	4.78
2006-07	0.60	1.56	2.49	4.65
2007-08	0.61	1.54	2.43	4.58
2008-09	0.60	1.56	2.40	4.56
2009-10	0.69	1.56	2.44	4.69
2010-11	0.71	1.52	2.49	4.71
AV	0.7	2.2	2.7	5.5
CV	0.1	0.4	0.1	0.2
GR	-0.1	-6.5	-0.7	-2.9

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

The role of product differentiation as a strategy does not appear to be prominent vis-à-vis developing marketing and distribution related complementary assets in the post-reform era

(Table 14). While during the initial years of reforms the firms relied largely on marketing, the focus shifted towards creating distribution networks after the mid 1990s. Total selling expenses as proportion of sales show a declining trend in the post-reform period and this declining trend of selling intensity has been essentially due to declining importance of marketing. Marketing intensity[25] shows a sharp decline in the 1990s. On the other hand, both advertising intensity[26] and distribution intensity[27] show increasing tendency during the initial years of economic reforms but a declining trend thereafter.

Table 15 Some Aspects of Non-Price Competition by Major Industries, 1993-94 to 2010-11

Industry	Advertising Intensity			Marketing Intensity			Distribution Intensity			Selling Intensity		
	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	1.8	0.1	-1.3	1.7	0.2	2.2	2.7	0.1	-0.6	6.2	0.1	Neg.
Textiles	0.5	0.2	2.8	1.9	0.1	-0.2	2.2	0.2	1.1	4.7	0.1	0.8
Chemicals	1.8	0.3	4.5	3.0	0.1	1.1	3.6	0.0	0.1	8.5	0.1	1.4
Plastic products	0.4	0.3	-5.9	1.6	0.2	-1.7	2.2	0.1	1.7	4.2	0.1	-0.3
Petroleum products	0.1	0.4	-6.4	3.4	1.6	-21.3	2.4	0.3	-1.8	5.9	0.9	-13.2
Rubber products	1.0	0.2	-1.4	2.9	0.1	-0.1	2.6	0.1	0.8	6.4	0.1	0.1
Non-metallic minerals	0.7	0.2	3.7	1.9	0.1	0.0	8.1	0.1	1.7	10.7	0.1	1.5
Metals & metal products	0.1	0.2	-1.2	0.8	0.1	-0.7	2.8	0.2	-3.2	3.7	0.2	-2.6
Machinery	0.9	0.2	-1.5	2.5	0.3	3.6	1.3	0.2	2.8	4.7	0.2	2.4
Transport equipment	0.8	0.3	3.6	1.7	0.2	2.8	1.3	0.1	0.7	3.7	0.2	2.2
Paper, newsprints, etc.	0.0	0.4	-3.8	2.9	0.2	-0.1	1.4	0.1	-1.3	4.3	0.2	-0.5
Leather products	1.4	0.2	2.2	2.3	0.4	6.8	3.3	0.1	-1.8	7.0	0.1	1.9
Misc. Manufacturing	2.8	0.3	0.7	4.7	0.2	-0.4	3.4	0.3	-4.4	10.9	0.2	-1.4
Diversified	0.9	0.2	-0.2	2.5	0.2	2.9	3.8	0.1	0.3	7.2	0.1	1.2
Manufacturing	0.7	0.1	-0.1	2.2	0.4	-6.5	2.7	0.1	-0.7	5.5	0.2	-2.9

Note: Neg. – Negiligible (<0.05); AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

Table 15 shows the relative importance of advertising, marketing and distribution across industries and their changes over the years. It is observed that selling expenses as a proportion of sales differ significantly across industries depending on the requirements of advertising, marketing and distribution. For example, advertising seems to be an important strategy in

[25]By marketing intensity we refer to percentage share of marketing related expenditure in total sales of the industry. Marketing expenses include commissions, rebates, discounts, sales promotional, expenses on direct selling agents and entertainment expenses.
[26] Advertising intensity is defined as the percentage share of advertising expenditure in total sales of the industry.
[27] Here, we define distribution intensity as percentage share of distribution related expenditure (i.e., expenses for delivering the products to the different agents of distribution network along with outward freight) in total sales of the industry.

industries like food and beverages, and chemicals, leather products, etc. whereas importance of marketing expenses is higher for chemicals, petroleum products, rubber products, paper, newsprint, etc. Similarly, creating distribution network appears to be a crucial strategy in chemicals, non-metallic minerals, leather products, etc.

The rates of growth of selling expenses by industry groups show some interesting patterns. All types of selling expenses have seen a positive growth in chemicals, non-metallic mineral products, and transport equipment, whereas all of them have declined in petroleum products, metal and metal products, and paper, newsprint, etc. Advertising expenditures have increased in chemicals, non-metallic mineral products, and transport equipment at a pace much faster than the marketing and distribution related expenses. While the sectors like chemicals and transport equipment have seen significant multinational entry in the post-reform era inducing the firms to spend more on advertising for reaching the customers, rapid growth in advertising expenditures in non-metallic mineral products signifies emergence of product differentiation strategies in the sector which was hitherto known for its homogeneous product. However, decline in advertising expenditures in food and beverages, and rubber products is surprising as competitive pressures in these industries have also increased. Lower investments for marketing and distribution related complementary assets in majority of the industries can result in two types of problems, viz., decline in relative competitiveness of Indian firms due to inadequate appropriability and efficiency, and their lesser bargaining power in future equity based foreign collaborations. Interestingly, the changes in selling expenses have significantly affected market concentration and patterns of M&A activity across industries. While the industries with higher expenditure towards advertising and distribution have experienced increase in market concentration, market has become less concentrated in industries where marketing related expenditure has increased (Mishra and Behera, 2007). Similarly, the industries with greater selling efforts by the firms have recorded more number of M&A (Mishra, 2011).

Other Corporate Strategies

Competitive pressures unleashed by economic reform processes seem to have resulted in an increase in importance of business strategies like outsourcing manufacturing, establishing goodwill[28], etc., though emphasis on these strategies is still very low as compared to other

[28] As it is defined in the Prowess database of CMIE, goodwill is an intangible asset that is created when the company pays a goodwill amount to a target entity whose assets are being taken over or amalgamated by the

business strategies of the firms (Table 16). Establishing goodwill through takeover or amalgamation is expected to help the firms in building up brand loyalty which often means that the firm is able to sell products to consumers regardless of changes in price or alterations in operations. Strong goodwill and hence established brand royalty can also make it difficult for a new firm to enter the market. On the other hand, manufacturing outsourcing can allow rationalization of production wherein the firms can exploit economies of scale and scope in specific segments while outsourcing activities where they are not cost-competitive. In this sense outsourcing is a very important strategic role in situations where the firms compete with one another on production costs. There is a gradual movement towards higher outsourcing and lower vertical integration. The expenditure on building goodwill is also on the rise while import intensity has fluctuated during the post reform period.

Table 16 Trends in other Corporate Strategies, 1997-2011

Year	Outsourced Manu./ Sales	Expenditure for Goodwill/ Net fixed Assets	Imports Intensity	Vertical Integration
1997-98	0.28	0.08	3.38	49.90
1998-99	0.30	0.08	2.87	51.80
1999-00	0.77	0.13	2.76	46.50
2000-01	0.78	0.16	1.52	41.28
2001-02	0.77	0.27	0.92	41.15
2002-03	0.80	0.30	0.92	40.21
2003-04	0.78	0.37	1.30	43.26
2004-05	0.80	0.49	1.80	41.18
2005-06	0.81	0.61	1.96	38.24
2006-07	0.85	0.68	2.17	37.68
2007-08	0.97	0.71	2.64	37.28
2008-09	0.95	0.62	3.80	34.31
2009-10	1.07	0.45	3.31	34.52
2010-11	1.05	0.44	3.30	34.04
AV	0.8	0.4	2.3	40.8
CV	0.3	0.6	0.4	0.1
GR	6.1	11.5	2.9	-3.0

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

company. This is the gross value at the beginning of the accounting period and any addition or deduction during the year by way of purchases, sale, revaluation, impairment, acquisition, demerger, etc.

However, importance of these strategies varies by major industries (Table 17). While outsourcing manufacturing activity and good-will related investments have increased in almost all industries, the importance of the former strategy is relatively higher in textiles, metals and metal products, metal and metal products, transport equipment, leather products, etc., whereas firms in chemicals, non-metallic minerals, and machinery give relatively more emphasis to creating goodwill in the market. Interestingly, vertical integration related strategic options, on the other hand, seem to be less relevant now. As noted above, the extent of vertical integration shows a consistently declining trend over the years (Table 16). In fact, all the major industries have experienced steady decline in the extent of vertical integration, though the extent differs across the industries (Table 17). The decline in the extent of vertical integration may largely be due to increasing reliance of the firms on sub-contractual production arrangements in many of these industries to reduce the risks and costs of production.

Table 17 Trends in other Corporate Strategies, 1997-2011

Industry	Outsourced Manu./ Sales			Expenditure for Goodwill/ Net fixed Assets			Imports Intensity			Vertical Integration		
	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	0.8	0.3	4.8	0.5	0.7	13.9	2.4	0.4	3.0	40.3	0.1	-1.7
Textiles	2.1	0.4	7.8	0.3	1.3	12.3	0.3	0.5	-2.1	30.5	0.2	-3.3
Chemicals	0.6	0.4	7.4	0.6	0.7	14.2	2.9	0.8	8.2	35.5	0.2	-3.4
Plastic products	1.0	0.1	-0.5	0.1	0.4	3.0	0.3	0.5	10.6	34.9	0.2	-3.6
Petroleum products	0.1	0.5	5.6	-	-	-	3.0	1.0	-13.7	52.3	0.2	-4.2
Rubber products	0.9	0.5	9.4	-	-	-	0.2	0.8	18.3	36.2	0.2	-4.1
Non-metallic minerals	0.9	0.2	2.6	0.6	0.7	9.3	11.2	0.8	18.8	47.6	0.1	-0.4
Metals & metal products	1.2	0.2	4.1	0.1	0.8	11.2	0.4	0.4	6.2	36.4	0.1	-2.9
Machinery	1.5	0.6	11.2	0.7	0.5	11.4	2.9	0.4	7.9	33.1	0.2	-3.1
Transport equipment	1.6	0.4	6.9	0.3	0.5	4.6	0.4	0.6	12.2	32.2	0.2	-4.3
Paper, newsprints & paper products	0.3	0.2	-0.9	0.2	0.7	6.3	0.4	1.1	-0.7	39.2	0.1	-1.1
Leather products	3.0	0.5	10.3	-	-	-	1.1	0.6	11.0	38.3	0.2	-2.1
Misc. Manufacturing	1.2	0.4	4.3	0.3	0.5	-9.7	0.8	0.5	2.5	25.0	0.5	-2.9
Diversified	0.8	0.4	8.3	0.3	0.6	3.5	1.8	0.6	14.4	34.2	0.2	-4.4
Manufacturing	0.8	0.3	6.1	0.4	0.6	11.5	2.3	0.4	2.9	40.8	0.1	-3.0

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

Removal of restrictions on imports has increased the degree of import-based competition in the market as well as import reliance. As it is observed in Table 16, though it had a declining tendency till 2002-03, import intensity has increased in recent years resulting in a positive rate of growth during the entire period under consideration. While the extent of import intensity differs across major industries, the rate of growth has been substantially high in chemicals, plastic products, rubber products, non-metallic minerals, transport equipment, machinery, etc. However, competition from imports and/or import reliance has declined in textiles, petroleum products, paper and paper products and the rate of decline has been very high in petroleum products possibly due to regulation of price and imports by the government. Further, in many of the industries import competition has varied widely over the years (Table 17).

Interestingly, vertical integration does not appear to an important business strategy to reduce production and other transaction costs and/or uncertainties in the output and input markets under the new business conditions.

V Corporate Performance

What has been the impact of corporate responses to economic reform? Has corporate performance improved? This section explores these questions. There are two broad ways of examining corporate performance, viz., the stock market approach which applies stock market valuations to determine the performance, and firms' profitability. The stock market approach is based on the assumption that the stock market is efficient and assesses corporates in terms of changes in share prices, controlling for movements in the market in general and the systematic risk of the company. However, the stock price approach may suffer from the problem of undervaluation or overvaluation if the share prices incorporate random valuation errors. This means that changes in share prices do not necessarily reflect efficiency gains or losses rather may be due to merely a market correction. Given this, assessing corporate performance on the basis of profitability may be considered as a better approach. But, since the profitability approach itself may have the problems as the companies can use creative accounting techniques especially in respect of sales, assets, and profits and, therefore, the published accounts may not be a true or fair reflection of their financial performance. Therefore, examining corporate performance related implications only on the basis of profitability may be misleading.

Considering these problems, we examine corporate performance in terms of both financial performance and operational efficiency. While three indices, viz., ratio of profit before interest and taxes (PBIT) to sales, return on capital employed (ROCE), and return on assets are used to examine financial performance, operational efficiency is assessed in terms of cost-efficiency, and inventory management.

Efficiency and Competitiveness

Economic reforms have failed to improve cost-efficiency of the firms in Indian manufacturing sector. Share of total cost of production in sales shows a consistently increasing trend in the post-reform period largely on account of increasing expenses for raw materials that constitute around 50 percent of sales, whereas expenses for energy, and wages and salaries together account for less than 10 percent of sales. As a result, although expenses for power and fuel, and wages and salaries show declining trend at a moderate rate during 1999-2011, share of product costs in sales has continued increasing. Increase in expenses for raw materials or decline in that for energy, wages and salaries have been consistent during the period under consideration (Table 18).

Table 18: Cost Efficiency in Indian Manufacturing, 1999-2000 to 2010-11

Year	Raw Material/ Sales (%)	Energy/ Sales (%)	Wages & Salaries/ Sales (%)	Total Production Cost/Sales
1999-00	42.5	5.5	5.2	53.2
2000-01	47.0	5.5	5.9	58.4
2001-02	47.2	5.2	5.9	58.3
2002-03	47.9	5.3	5.7	58.9
2003-04	45.6	5.0	5.1	55.6
2004-05	48.8	4.3	4.5	57.6
2005-06	52.1	4.2	4.3	60.5
2006-07	52.9	3.9	3.9	60.8
2007-08	53.2	3.8	4.3	61.2
2008-09	56.3	4.0	4.5	64.7
2009-10	55.7	3.8	4.5	64.0
2010-11	56.4	3.8	4.4	64.5
AV	50.4	4.5	4.8	59.8
CV	0.1	0.2	0.1	0.1
GR (%)	2.4	-4.2	-3.0	1.5

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

However, the level as well as the change in cost efficiency varies across the industries (Table

19). Except for petroleum products, non-metallic minerals, metals and metal products, paper and paper products, and leather products, the share of raw materials in sales has been higher than that for the manufacturing sector as a whole in rest of the industries. Further, barring leather products and miscellaneous manufacturing, all the industries have experienced increase in this ratio over the years. Even in case of leather products and miscellaneous manufacturing the rate of decline has been only marginal. On other hand, the ratio of expenses for power and fuel to sales has been significantly high in non-metallic minerals, and paper and paper products. The industries like textiles, chemicals, metals and metal products have recorded considerably high share of power and fuel in sales as compared to that for the sector as a whole. However, the share of expenses for power and fuel in sales has declined in all the industries with leather products being the only exception. Similarly, share of wages and salaries in sales has been higher than that for the sector as a whole in most of the industries barring a few like food and beverages, plastics and petroleum products, and the ratio has increased in all the industries except metal and metal products[29]. As a result, all the industries excluding petroleum products and non-metallic minerals have recorded higher production cost intensity as compared to that for the manufacturing sector as whole. Further, the production cost intensity has increased over the years in all the industries, though at a marginal rate in some of the industries like non-metallic minerals, paper and paper products, and miscellaneous manufacturing.

Table 19: Some Aspects of Cost Efficiency by Major Industries 1997-98 to 2010-11

	Raw Materials/Sales			Power & Fuel/Sales			Wages & Salaries/ Sales			Total Production Costs/Sales		
	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	51.1	0.1	1.3	2.9	0.1	-2.9	4.4	0.3	2.0	58.4	0.1	1.1
Textiles	53.0	0.1	1.3	8.9	0.1	-0.7	6.7	0.4	3.9	68.6	0.1	1.3
Chemicals	49.4	0.1	1.9	7.9	0.1	-3.0	5.8	0.4	6.5	63.1	0.1	1.7
Plastic products	55.1	0.1	1.8	4.9	0.1	-1.8	4.0	0.4	4.9	64.1	0.1	1.7
Petroleum products	45.4	0.2	4.8	0.7	0.4	-7.2	1.0	0.3	1.4	47.1	0.2	4.6
Rubber products	53.0	0.1	2.4	4.7	0.1	-1.9	5.3	0.4	3.7	63.0	0.1	2.2
Non-metallic minerals	30.7	0.1	0.8	16.1	0.1	-2.1	4.5	0.4	2.7	51.3	0.1	0.1
Metals & metal products	47.2	0.1	2.6	9.0	0.2	-3.8	5.5	0.4	-1.5	61.8	0.1	1.3
Machinery	57.8	0.1	1.3	1.8	0.2	-4.4	8.1	0.4	3.3	67.7	0.1	1.4
Transport equipment	58.9	0.1	1.9	2.0	0.1	-3.2	5.4	0.4	4.3	66.3	0.1	1.9
Paper, newsprints, etc.	37.2	0.1	2.3	16.7	0.2	-3.6	6.1	0.3	2.2	60.0	0.0	0.6
Leather products	48.2	0.0	-0.3	2.7	0.1	2.3	9.9	0.5	7.5	60.8	0.1	1.1
Misc. manufacturing	55.1	0.2	-0.7	3.4	0.2	-0.4	12.9	0.4	7.0	71.4	0.2	0.7
Diversified	48.2	0.1	1.8	7.5	0.1	-1.2	8.8	0.4	6.2	64.5	0.1	2.1
Manufacturing	49.2	0.1	2.4	4.7	0.2	-4.0	4.3	0.4	2.6	58.2	0.1	1.9

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

[29] Further, in all the industries, the ratio has fluctuated considerably during the period under consideration.

The scale of operations of most the Indian manufacturing firms is below their global competitors due to higher capital costs, restrictive labour laws, small size of the domestic market, and inadequate systems to manage large work forces (Chandra, 2009). What is more important perhaps is that while quality continues to remain as the highest priority for most of the firms, innovation and R&D has the least priority (Chandra, 2009). In particular, Indian firms do not perceive themselves as having strengths to compete on low prices globally. Although, most of the firms claim to be focusing on developing new production processes that would help in reducing costs or developing higher value added product, efforts towards technology development appear to be inadequate. In addition, to low expenditure on in-house R&D which seem to have picked up a bit in recent years, failure of the firms in hiring employees with advanced degrees seems to have limited their ability to develop innovative products and processes. However, business strategies of firms and their performance vary by size. For example, it is observed that the tiny and small firms spend a higher percentage of their sales in R&D as compared to the large and medium sized firms, and wherever, a small firm has started to serve a global customer through customized service[30] the firm has been able to create a niche market for itself (Chandra, 2009).

While cost intensity does not show any improvement, policy reforms seem to have helped Indian corporate sector to enhance competitiveness in the international market. Export intensity has increased consistently over the years during the post–reform period (Table 20). In contrast to the pre-reform period, India's exports have grown at a faster rate than the rate of growth of world exports during the post reform period possibly due to devaluation of rupee particularly in the 1990s and increase in competitiveness of the firms following enhanced competition in the market. But, this increase is not high enough when compared with imports as the ratio of exports to imports has declined. In addition, the ratio of exports to imports has fluctuated a great deal over the years.

The observation is by and large the same when considered across major industries. Export intensity has increased in all the industries except food and beverages, and miscellaneous manufacturing. Further, although the export intensity shows a declining trend in these two segments, the rate of decline has been only marginal. Increase in export intensity in a large

[30] Here, customized service refers to small batch production or producing in variable production lot sizes or dispatching at short lead times etc.

number of industries suggests an improvement in export orientation of Indian firms. The firms in these industries prefer international market to domestic market possibly due to the impetus given by devaluation of the rupee and to reap the benefits of various incentives in export policies. High competition in the domestic market might have also forced the firms to find out new market opportunities through exports. On the other hand, barring metal and metal products, the ratio of exports to imports has declined is in all the industries with high fluctuations. This means that even if export competitiveness has increased, reliance on imports has also increased. A variety of factors like import intensity of exports, price elasticity of Indian exports, etc. may have contributed to the changes in the ratio of exports to imports.

Table 20: Trends of Export performance by Major Industries 1993-94 to 2010-11

Year	Export Intensity (%)	Export/Import (%)
1993-94	8.53	44.11
1994-95	8.48	26.15
1995-96	8.90	19.37
1996-97	8.97	2.31
1997-98	9.47	2.96
1998-99	8.87	3.26
1999-00	8.60	3.29
2000-01	10.55	7.30
2001-02	11.11	12.91
2002-03	11.91	13.84
2003-04	12.63	10.35
2004-05	13.93	8.19
2005-06	14.56	7.89
2006-07	17.07	8.36
2007-08	18.07	7.26
2008-09	18.20	5.06
2009-10	17.67	5.66
2010-11	18.93	6.10
AV	12.58	10.80
CV	0.31	0.95
GR	5.56	-9.27

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

All the measures of profitability and rate of return show by and large four phases, viz., a declining trend since the mid-1990s owing to crisis in the South-East Asian countries and political instabilities, then an increasing trend during the phase of hyper growth, followed by a fall during economic slowdown, and finally an increasing tendency in the most recent years

(Table 22). When the entire post-reform period is taken together, all indicators show increasing trend, though the rate of growth of PBIT to sales ratio has been marginal.. More importantly, the fluctuations in profitability or rate of return are quite low indicating reasonably consistent performance over the years. In other words, economic reforms have been accompanied by better financial performance of the firms. However, there is no sign of any significant improvement in inventory management following economic reforms. Instead, the ratio of inventory to sales has fluctuated a great deal over the years.

Table 21 Some Aspects of on performance by Major Industries 1993 - 2010

	Export Intensity			Export/Import		
	AV	CV	GR	AV	CV	GR
Food & Beverage	11.1	0.1	-0.1	14.8	1.7	-15.9
Textiles	22.0	0.2	2.4	152.8	0.8	-5.4
Chemicals	16.4	0.4	6.9	9.2	0.5	-1.1
Plastic products	14.2	0.2	2.9	81.3	1.0	-7.6
Petroleum products	8.7	0.8	13.3	15.6	1.5	-15.0
Rubber products	11.7	0.2	4.1	355.5	1.5	-15.1
Non-metallic mineral products	27.0	0.3	6.1	129.0	3.9	-30.4
Metals & metal products	13.5	0.3	4.5	43.9	0.4	1.3
Machinery	8.9	0.3	5.4	7.3	1.0	-12.2
Transport equipment	8.1	0.3	4.4	46.6	0.7	-9.8
Paper, newsprints & paper products	4.6	0.4	2.4	161.9	1.7	-17.7
Leather products	49.6	0.1	0.7	175.6	1.4	-17.7
Miscellaneous manufacturing	9.5	0.2	-0.7	17.7	0.7	-8.2
Diversified	10.6	0.2	2.0	11.9	0.6	-10.5
Manufacturing	12.6	0.3	5.6	10.8	1.0	-9.3

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

As one would expect, the level and trends in performance indicators vary across the industries reflecting the variations in the intensity and level of competitive pressures and/or efficiency changes. While the level of profitability or rate of return appears to be high for most of the industries during the post-reform period, a number of industries like food and beverages, plastics, petroleum products, and paper and paper products have recorded decline in the ratio of PBIT to sales. Similarly, the rate of return on capital employed shows a declining trend in food and beverage, and return on assets for petroleum products and paper and paper products. Further, all the indicators show high fluctuations in many of the industries possibility due to growing instability in the product market. Although profitability or rate of return has increased in majority of the industries, the rate of growth has not been

high in most of the industries except non-metallic mineral products, and metal and metal products.

Table 22: Trends in Corporate Performance in Indian Manufacturing Sector, 1993-2011

Year	PBIT/Sales	ROCE	ROA	Inventory Management
1993-94	11.43	12.64	26.76	0.25
1994-95	12.31	13.53	29.19	0.94
1995-96	12.19	13.14	28.06	1.69
1996-97	10.94	11.15	23.28	0.91
1997-98	9.72	9.44	19.07	0.71
1998-99	8.43	8.41	16.11	0.46
1999-00	7.89	8.78	16.18	1.56
2000-01	7.77	9.08	16.33	0.33
2001-02	7.78	9.38	15.54	-0.39
2002-03	9.05	11.71	19.61	0.93
2003-04	10.14	14.88	25.59	0.14
2004-05	10.41	16.55	30.78	0.67
2005-06	10.15	15.35	29.48	1.03
2006-07	12.04	17.77	37.17	0.86
2007-08	12.35	16.48	39.14	0.88
2008-09	9.56	11.81	27.94	0.11
2009-10	11.71	13.78	30.88	0.99
2010-11	12.08	14.72	34.29	1.29
AV	10.3	12.7	25.9	0.7
CV	0.2	0.2	0.3	0.7
GR	0.4	2.1	2.7	-0.1

Note: ROCE - Return on Capital Employed; ROA – Return on Assets; AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

As regards performance in terms of inventory management it is observed that the ratio of inventory to sales has declined in many of the industries and the decline has been significant particularly for plastic products, paper and paper products, leather products and miscellaneous manufacturing possibly due to high rate of growth of these industries and increase in competitive pressure therein (Table 23). It is, however, difficult to assess the extent to which the declining trend in the inventory to sales ratio in these industries can be seen as a reflection of improvements in manufacturing capabilities of the firms. It is also observed that the ratio of inventory to sales has increased at a high rate in the industries like rubber products, metal and metal products, transport equipment, etc. possibly due to organization of larger part of production through sub-contractual arrangements.

Table 23 Some Aspects of Corporate Performance by Major Industries, 1993-94 to 2010-11

Year / Industry	PBIT/Sales			Return on Capital Employed (ROCE)			Return on Assets (ROA)			Inventory		
	AV	CV	GR	AV	CV	GR	AV	CV	GR	AV	CV	GR
Food & Beverage	9.6	0.1	-0.2	14.1	0.1	-0.4	27.4	0.1	0.8	1.7	0.7	-0.7
Textiles	9.1	0.4	2.0	7.9	0.4	1.2	15.8	0.4	1.1	0.7	1.2	-0.2
Chemicals	15.4	0.2	0.9	14.8	0.2	1.3	31.4	0.3	2.8	0.7	1.2	-0.9
Plastic products	9.8	0.3	-0.4	9.4	0.4	1.3	18.0	0.5	2.9	0.6	1.4	-4.8
Petroleum products	7.0	0.2	-1.6	14.0	0.2	0.2	29.7	0.3	-3.0	0.9	1.4	-0.5
Rubber products	7.2	0.3	2.0	13.4	0.4	3.8	22.0	0.3	1.0	0.5	2.0	6.7
Non-metallic mineral products	12.2	0.3	2.7	11.6	0.4	4.3	21.6	0.5	4.8	0.8	0.8	1.0
Metals & metal products	12.8	0.4	3.9	11.2	0.6	6.3	22.8	0.6	8.8	0.4	3.1	5.0
Machinery	11.1	0.2	1.5	14.4	0.3	2.2	39.3	0.4	3.9	0.5	0.9	-1.2
Transport equipment	9.7	0.2	0.1	16.8	0.3	1.1	33.8	0.4	0.5	0.3	2.3	11.2
Paper, newsprints & paper products	10.0	0.3	-1.4	8.9	0.3	-1.0	14.3	0.4	-2.7	0.1	5.7	-9.3
Leather products	7.8	0.6	1.2	9.4	0.5	1.2	23.0	0.7	0.0	1.4	1.0	-5.6
Misc. Manufacturing	19.2	0.4	-0.6	11.0	0.4	-3.6	25.9	0.4	0.4	0.7	1.1	-13.4
Diversified	11.1	0.3	0.4	11.5	0.3	1.4	24.5	0.3	2.7	1.0	1.0	6.9
Manufacturing	10.3	0.2	0.4	12.7	0.2	2.1	25.9	0.3	2.7	0.7	0.7	-0.1

Note: AV – Average; CV – Coefficient of variations; GR – Growth rate.
Source: Prowess (CMIE)

VI Concluding Remarks

In the context of various policy initiatives made during the last two decades to reform the Indian economy in general and corporate sector in particular, the present paper attempts to assess how the firms have responded to these policy measures and the resultant changes in the business conditions in a long run perspective. During the post-reform as a whole the industry sector in general and the manufacturing sector in particular have grown at a consistent rate. However, the rate of growth of the Indian industry sector has not accelerated following economic reforms probably due to slow growth in agriculture and industrial productivity. On the positive side investment in general and FDI in particular showed considerable increase in the decade of 2000 vis-à-vis that in the 1990s. Increase in competitive pressures during this period resulted in the Indian corporate sector adopting a variety of strategies. Earlier sections of the paper have discussed various trends in detail. Table 24 provides a summary to highlight a few major findings of the paper with respect to the trends in corporate response.

Firms have largely relied on mergers and acquisitions to restructure their business and grow. However, these strategies were largely concentrated in a few industries like food products, textiles, chemicals (more specifically in drugs and pharmaceuticals), metals and machinery. Moreover, merger as a strategic option was largely used by the private domestic firms of the same business group to consolidate their businesses and presumably enhance competitiveness. Foreign private firms, on the other hand, have been more active in using the route of acquisition to enter specific industry groups. State-owned enterprises did not restructure their business through merger and acquisitions possibly due to stiff resistance on the part of the employees. One of the outcomes of the M&A activity was that group firms consolidated their ownership and enhanced their share in equity; this share of equity increased dramatically from about 7.5 per cent to 23 per cent. M&A activity that corrected over-diversification of the pre-reform period can potentially provide efficiency benefits.

Technology strategies seem to have undergone a major change in recent years. While in-house R&D intensity (although still low) has seen significant growth, the role of embodied and disembodied technology purchase, both from foreign and domestic sources, has declined. This shift towards higher reliance on indigenous technology effort is welcome but this effort will need to be enhanced. Given the fact that FDI flows have increased in recent years, it is likely that equity linked transfer of foreign technologies have replaced disembodied technology purchase from foreign sources. From the available data it is difficult to understand the dynamics of the linkages between equity linked technology flows and indigenous technology efforts. But this remains an area which needs to be explored. .

The strategies of building marketing and distribution related complementary assets continue to dominate the strategy of product differentiation in terms of relative investments in marketing, distribution and advertising. However, selling expenses as a share of sales declined from about 7 per cent in early 1990s to less than 5 per cent towards the end of the last decade. This was essentially due to the relative reduction in marketing expenditures; the relative role of advertising and distribution expenses. But all types of selling expenses have not grown as rapidly as sales. . It is possible that efficiency of these investments has improved partly due to the efficiencies derived from M&A driven consolidation. However, it is difficult to assess that possibility.

Competitive pressures unleashed by the introduction of deregulatory policy measures and stagnancy in growth of the industry sector in particular seems to have resulted in growing

importance of business strategies of sub-contracting and outsourcing manufacturing. Consequently, the degrees of vertical integration have declined. Besides, removal of restrictions on imports has increased reliance on imports and the degree of import-based competition in the market.

Table 24: Corporate Response to Economic Reforms – A Summary

Variable	Period Considered	Average I	Average II	Coefficient of Variation	Trend Growth (%)
Business Consolidation					
Equity of Group Companies/ Assets	1993-94 to 2010-11	7.5	23.2	0.5	7.8
Equity of Group Companies/ Capital Employed	1993-94 to 2010-11	3.5	10.1	0.4	6.7
Equity of Group Companies/Total Equity	1993-94 to 2010-11	0.8	0.9	0.1	0.8
Technology Strategy					
In-house R&D Intensity	1993-94 to 2010-11	0.04	0.35	0.8	13.8
Domestic Technology Purchase Intensity	1993-94 to 2010-11	0.03	0.31	0.6	0.6
Foreign Technology Purchase					
Disembodied (FOREX spending as royalty)	1993-94 to 2010-11	0.41	0.24	0.3	-3.7
Embodied (Capital Imports)	1993-94 to 2010-11	2.22	1.87	0.4	-2.1
Total	1993-94 to 2010-11	2.63	2.12	0.4	-2.3
Non-Price Competition					
Advertising Intensity	1993-94 to 2010-11	0.6	0.7	0.1	-0.1
Marketing Intensity	1993-94 to 2010-11	4.0	1.5	0.4	-6.5
Distribution Intensity	1993-94 to 2010-11	2.6	2.4	0.1	-0.7
Total Selling Intensity	1993-94 to 2010-11	7.2	4.7	0.2	-2.9
Other Corporate Strategies					
Outsourced Manufacturing/ Sales	1997-98 to 2010-11	0.5	1.0	0.3	6.1
Expenditure for Goodwill/ Net Fixed Assets	1997-98 to 2010-11	0.1	0.5	0.6	11.5
Imports Intensity	1997-98 to 2010-11	3.0	3.5	0.4	2.9
Vertical Integration	1997-98 to 2010-11	49.4	34.3	0.1	-3
Cost Efficiency					
Expenditure for Raw Materials/Sales	1999-00 to 2010-11	45.6	56.1	0.1	2.4
Expenditure for Energy/Sales	1999-00 to 2010-11	5.4	3.9	0.2	-4.2
Expenditure for Wages and Salaries/Sales	1999-00 to 2010-11	5.7	4.5	0.1	-3.0
Total Production Costs/Sales	1999-00 to 2010-11	56.6	64.4	0.1	1.5
Export Competitiveness					
Export Intensity	1993-94 to 2010-11	8.6	18.3	0.31	5.56
Export/Import	1993-94 to 2010-11	29.9	5.6	0.95	-9.27
Financial Performance including Inventory Management					
Profitability (PBIT/Sales)	1993-94 to 2010-11	12.0	11.1	0.2	0.4
Return on Capital Employed (ROCE)	1993-94 to 2010-11	13.1	13.4	0.2	2.1
Return on Assets (ROA)	1993-94 to 2010-11	28.0	31.0	0.3	2.7
Inventory Management	1993-94 to 2010-11	1.0	0.8	0.7	-0.1

Despite all these strategies, cost-efficiencies in the Indian manufacturing sector do not show improvements; the share of production costs as a proportion of sales have increased largely on account of increasing expenses for raw materials. Wages and energy costs have actually declined as a proportion of sales. Insofar as this ratio also depends on the price of output, which has seen some downward pressures during the post reform period, the cost of production to sales ratio needs to be interpreted cautiously. In this context, it is useful know that inventory management has seen marginal improvements during the post-reform period.

Export orientation of the firms has increased significantly in the current decade vis-à-vis that in the 1990s and this increase in exports intensity is spread across the industries. The significantly high exports intensity and its increase across the major industries signals enhanced global competitiveness of Indian firms following economic reforms, though this increase is not high enough when compared with imports, which have grown faster.

Profitability of the firms measured as the ratio of PBIT to sales, rate of return on capital employed, and rate of return on assets showed a declining tendency till the initial years of the last decade and an increasing tendency thereafter. When the entire post-reform period is taken together, all indicators show increasing trend, though the rate of growth has been only marginal for PBIT to sales ratio. This means that reforms have forced the firms towards more efficient use of capital or assets.

Overall, the observed trends in the post-reform period seem to provide are interesting which need to be analysed more closely. More specifically, one need to systematically explore how in the liberalized scenario M&A led consolidation and flows of FDI are linked to the adoption of various non-price strategies relating to technology and product differentiation. As economic reform deepens and competitive pressures build up, an analysis of these interactions would provide useful insights for understanding corporate behaviour and for making policy choices.

References:

Agarwal, M., (2002): "Analyses of Mergers in India", M. Phil Dissertation, University of Delhi, Delhi.

Agarwal, M. and A. Bhattacharya (2006): "Mergers in India: A Response to Regulatory Shocks, *Emerging Markets Finance and Trade"*, 42(3), pp. 46-65.

Athukorala, P. C. (2009): "Outward Foreign Direct Investment from India", *Asian Development Review*, 26(2), pp. 131-159.

Balakrishnan, P and K Pushpangada (1998): "What Do we Know about Productivity Growth in Indian Industry?", *Economic and Political Weekly*, 33, pp. 2241-46.

Balakrishnan, P, K Pushpangadan and M Suresh Babu (2000): "Trade Liberalisation and Productivity Growth in Manufacturing: Evidence From Firm-Level Panel Data", *Economic and Political Weekly*, 35(41), pp. 3679-82.

Basant, R., (2000): "Corporate Response to Economic Reforms", *Economic and Political Weekly*, 35(10), pp. 813-822.

Beena, P. L. (1998), "Merger and Amalgamations: An Analysis of the Changing Structure of Indian Oligopoly", Dissertation, Centre for Economic Studies and Planning, JNU, New Delhi.

Beena, P. L., (2000): "An Analysis of Mergers in the Private Corporate Sector", *Working Paper No. 301*, Centre for Development Studies, Kerala.

Beena, P. L. (2004): "Towards Understanding the Merger Wave in the Indian Corporate Sector – A Comparative Perspective", Working Paper 355, Centre for Development Studies, Kerala.

Beena, P. L. (2008):"Trends and Perspectives on Corporate Mergers in Contemporary India", *Economic and Political Weekly*, 43(39), pp. 48-56.

Blomstrom, M. and Kokko, A. (2003): "The Economics of Foreign Direct Investment Incentives" NBER Working Paper Series, Working Paper No. 9489

Chandra, P. (2009): "Competitiveness of Indian Manufacturing: Findings of the Third National Manufacturing Survey", Report Submitted to the National Manufacturing Competitiveness Council

Chandrasekhar, C. P. (1999): "Firms, Markets and the State: An Analysis of Indian Oligopoly", in A. K. Bagchi (Eds.), Economy and Organization- Indian Institutions under Neo Liberalized Regime, Sage Publications, New Delhi.

Das, N. (2000): "A Study of the Corporate Restructuring of Indian Industries in the Post-New Industrial Policy Regime – The Issue of Amalgamations/Mergers", unpublished Ph.D. thesis Submitted to University of Calcutta, Calcutta.

Dasgupta, P., (2004): "Establishing an Effective Competition Policy System: the Challenges

Facing India in Implementing its New Competition Law", presentation made at the WTO/UNESCO/ASCI Regional Seminar for Asia and Pacific Economies on Competition Policy, Development and the Multilateral Trading System, Hyderabad, India, 6-8 October.

Dev, S. M. (2003): "Agriculture, Employment and Social Sector Neglected", *Economic and Political Weekly*, 38(14), pp. .

Gopinath, S (2007): "Overseas Investment by Indian Companies – Evolution of Policy and Trends", RBI Bulletin, 54(2).

Habib M, Zurawicki L. (2001): "Country-level investments and the effect of corruption—some empirical evidence", *International Business Review*, 10(6), pp. 687–700.

Khanna, S. (1997): "Industrial Deregulation and Corporate Restructuring: Understanding India's First Merger Wave", Mimeo, Indian Institute of Management, Calcutta.

Kokko, A. (1994): Technology, Market Characteristics, and Spillovers", Journal of Development Economics, 43(2), pp.279-293.

Kumar, N. (1987): 'Technology Imports and Local Research and Development in Indian Manufacturing', *The Developing Economies*, 25(3), pp. 220-33.

Kumar, N. (1998): "Liberalisation and Changing Patterns of Foreign Direct Investments: Has India's Relative Attractiveness as a Host of FDI Improved?", *Economic and Political Weekly*, 33(22), pp. 1321-1329.

Kumar, N. (2000): "Mergers and Acquisitions by MNEs: Patterns and Implications", *Economic and Political Weekly*, 35(32), pp. 5-11.

Kumar, N. (2008): "Internationalization of Indian Enterprises: Patterns, Strategies, Ownership Advantages, and Implications." *Asian Economic Policy Review*, 3(2), pp. 242–61.

Landes, R. and Gulati, A. (2004): "Farm Sector Performance and Reform Agenda", *Economic and Political Weekly*, 39(32), pp. 3611-19.

Mantravadi, P. and Reddy A. V. (2008): "Post-Merger Performance of Acquiring Firms from Different Industries in India", *International Research Journal of Finance and Economics*, 22, 193-204.

Mishra, P., (2005): "Mergers and Acquisitions in the Indian Corporate Sector in the Post-Liberalization Era: An Analysis", Ph.D. Thesis, Vidyasagar University, India.

Mishra P. and Behera B., (2007): "Instabilities in Market Concentration: An Empirical Investigation in Indian Manufacturing Sector", *Journal of Indian School of Political Economy*, 19(3), pp. 419-449.

Mishra, P. and Behera, B. (2008): "Economic Transition and Employment Generation in India: Role of Market, Policy and Institutions", paper presented in the *International Conference on Employment Opportunities and Public Employment Policy in Globalizing India* at Centre for Development Studies, Thiruvananthapuram during April 3-5, 2008

Mishra, P., (2011): "Determinants of Inter-Industry Variations in Mergers and Acquisitions: Empirical Evidence from Indian Manufacturing Sector", *Artha Vijnana*, 53(1), pp. 1-22.

Nagraj, R. (2003a): "Foreign Direct Investment in India in the 1990s: Trends and Issues," *Economic and Political Weekly*, 38(17), pp. 1701-1712.

Nagraj, R. (2003b): "Industrial Policy and Performance Since 1980: Which Way Now?" *Economic and Political Weekly*, 38(35), pp. 3707-3715.

Nagaraj, R. (2006): "Indian Investment Abroad: What Explains the Boom?" *Economic and Political Weekly*, 41(46), pp. 4716–8.

Nayyar, D. (2007): "The Internationalization of Firms from India: Investments, Mergers and Acquisitions", SLPTMD WP No. 004, Department of International Development, QEH, University of Oxford.

Rao, K. S. C., Murthy, M. R. and Dhar, B. (1997): "Foreign Direct Investments in India since Liberalisation: An Overview", Working Paper WP1997/05, Institute for Studies in Industrial Development (ISID).

Rao, K. S. C. and Murthy. M. R. (2006): "Towards Understanding the State-wise Distribution of Foreign Direct Investments in the Post-Liberalisation period", ISID Working paper 2006/01.

RBI (2004): *Report on Currency and Finance*, Mumbai.

Roy, M. (1999): "Mergers and Takeovers: The Indian Scene during the Nineties", in A. K. Bagchi (Ed.), *Economy and Organization- Indian Institutions under Neo Liberalized Regime*, Sage Publications, New Delhi.

Rozas. V. E. and Vadlamannati, C. K. (2009): "Direct Foreign Investments in India: Potential and Performance of FDI Inflows from United States as strategic Major Investor", Applied Econometrics and International Development, 9(2), 209-224.

Sharma, P and A Gulati (2005): "Can the Budget Boost Agricultural Performance?", *Economic and Political Weekly*, 40(21), pp. 2136- 2140.

Saha, B. (2001): "Investment Policy in India", Paper Presented in a Seminar Organized by CUTS Centre for International Trade, Economics and Environment, Jaipur, India.

Srivastava, V. (2001): "The Impact of Economic Reforms on Industrial Productivity, Efficiency and Competitiveness: A Panel Study of Indian Companies", IDBI, New Delhi.

Unel B. (2003): "Productivity Trends in India's Manufacturing Sectors in the Last Two Decades" IMF Working Papers 03/22, International Monetary Fund.

Unni, J., Lalitha, N., and Rani U. (2001): "Economic Reforms and Productivity Trends in India Manufacturing," *Economic and Political Weekly*, 36(41), 3914-22.

Venkiteswaran, N. (1997), "Restructuring of Corporate India: The Emerging Scenario", *Vikalpa*, 22(3), 3-13.