Growth of Manufacturing Sector in Post-Reforms India Some Disquieting Features

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INTRODUCTION

Extensive economic reforms have been carried out in India since 1991. In industry and trade, among the important steps taken are: abolition of import licensing except for few products, reduction in tariff rates, abolition of industrial licensing, liberalization of restrictions on foreign capital. It has been claimed that economic performance has improved after reforms and that it has been so because of reforms.

We will focus on the manufacturing sector. We will examine not only the manufacturing growth rates at aggregated and disaggregated levels. We will also analyse some aspects of the performance of the organized corporate sector in India to throw some light on the quality of the growth process.

ANNUAL RATES OF GROWTH OF MANUFACTURING

As Table 1 (col 2) shows, manufacturing growth rate has fluctuated in the post-reforms period – after registering a decline in early years, growth rate picked up but decelerated in the late 1990s. Growth has recovered since 2001-02. In fact the compound annual rate of growth (CARG) has been 8.8 % between 2001-02 and 2007-08.

The un-registered manufacturing sector has performed worse than its registered counterpart. But growth behaviour has been similar in the last few years (Table 1, cols 3 and 4).

In Table 2 we have taken a longer term perspective. In terms of the level of rate of growth attained, the entire period between 1951-52 and 2007-08 can be classified into periods of high and low growth. The pattern of manufacturing growth observed before 1991 was that periods of high growth were invariably followed by periods of low growth. The experience after 1991 has made no difference to this trend.

One of the targets of reforms has been to accelerate the growth rate compared to the past. Taking the manufacturing sector as a whole, the (compound annual) rate of growth between 1991-92 and 2007-08 (7.18 %) is only marginally higher than that attained during the first three plans periods (6.45%) (Table 3). The gap is even less for the registered manufacturing sector (7.58% compared to 7.48%). In fact the growth rate during 1952-53 to 1964-65 (8.87%) and during 1980-81 to 1990-91 (8.29%) was higher than that in the post-reforms period (between 1991-92 or 1992-93 and 2006-07) (Table 3).

As Table 4 shows, the manufacturing sector growth has been decelerating since the early 2007. The drop is sharp particularly in the second half of 2008. From 5.76% in June 2008, growth has declined to 4.91% in September 2008 and -0.68% in December 2008. This may be because of the impact of the US financial crisis. The reforms process has deliberately tried to make India more outward-oriented. Hence such downturns are only to be expected. Home market in India's planning strategy was emphasized precisely to minimize the negative influences due to economic (and political) problems in the rest of the world

EMPLOYMENT IN ASI FACTORY SECTOR

The White Paper issued by the Government of India in 1993 (*Economic Reforms: Two Years after and the Tasks Ahead*) contended that the pattern of industrialization will be "sufficiently labour intensive" to absorb labour and reduce poverty. However the expectation has not materialized. The employment situation in fact is quite dismal. As Table 5 shows, employment in the Annual Survey of Industries factory sector did increase from 5.46 million in 1991-92 to 6.54 million in 1995-96. But since then there has been a sharp decline to 5.91 million in 2003-04. The employment figure in 2003-04 is in fact about 10% lower than what it was in 1995-96. Employment in the factory sector has been declining despite the acceleration of the growth rate of output since 2000-01 (col 4 of Table 1).

EXPORTS AND IMPORTS OF MANUFACTURED GOODS

Merchandise exports have been increasing quite rapidly in recent years (Table 6). Between 2001-02 and 2007-08 manufactured exports have increased at the compound annual rate of growth (CARG) of 20%. But the share of manufactured goods in total exports has declined from 73.6% in 1991-92 to 63.6% in 2007-08.

The growth in exports has been interpreted as a success of the reforms process since 1991.

But as Table 7 shows, more than 50% of the growth of exports during 1991-92 to 2007-08 has been accounted for by engineering goods (39.1%) and chemicals and related products (15.2%). Again within these two sectors, the products for which exports have been expanding rapidly are primary & semi-finished iron & steel (CARG 26.88% between 1991-92 and 2007-08), Iron & steel bar/rods (20.85%), Machinery & instruments (18.39%), Drugs, pharmaceuticals & fine chemicals (16.45%) etc (Table 8).

These are precisely the industries which were created and developed in the pre-reforms period through active state intervention. Consider, for example drugs & pharmaceuticals. This industry is considered to be one of the success stories of independent India. A conscious industrial policy worked behind the development of the pharmaceutical industry in India. Among the instruments used were regulation of foreign capital, promotion of indigenous enterprises, patent reforms, public investments in manufacturing and R&D.

When discussing the impact of import liberalization and the withdrawal of the state from industrial policy, it is important to make a distinction between existing developed industries and the new ones which can be potentially developed.

Import liberalization may help existing exporters, as for example in pharmaceuticals. Access to cheaper Chinese active ingredients and intermediates does make India more competitive. But macro-economically, the negative influence of import liberalization must be compared with export expansion to find out the net effect. As we will see in the next section, net export intensity has been positive for pharmaceuticals (and few other well developed industries in India). But for most of the other products as well as for the corporate sector as a whole, net export intensity has been negative. This suggests that while the rise in exports has provided a stimulus to growth, the net expansionary impact has been negative.

But is import liberalization the proper policy for the development of new industries? India's exports have been rising as we have noted above. But India's exports of high-technology products have been minimal as pointed out by the September 2008 report of a Group constituted by the Prime Minister (*Measures for Ensuring Sustained Growth of the Indian Manufacturing Sector*, p. 69) (accessed from the website of the National Manufacturing Competitiveness Council, www.nmcc.nic.in). India is ranked quite low in the production of Advanced Technology Products (ATPs). Can such industries be developed by passively relying on markets forces? Those aware of how new industries have been developed in different countries will agree with the recommendations of the Group that state intervention with appropriate industrial policies are necessary (p. 72). According to the Group, currently about 50% of the capital goods requirements are imported (p. 123). DGCI&S export figures show that India imported capital goods worth US$ 37294 million in 2007-08 (23.5% of the India's total imports excluding petroleum, oil and lubricants) and the compound annual rate of growth between 1993-94 and 2007-08 has been 15%. Capital goods imported include high technology equipments such as telecommunications and upper-end IT and electronic hardware. Another sector with significant imports is electronic goods (12.8% share in 2006-07). The imports of these goods increased at CARG of 25% between 1993-94 and 2007-08.

CORPORATE SECTOR – EXPORT, IMPORT AND NET EXPORT INTENSITY

The main data source used is the Prowess corporate sector database (version 2.6) of the Centre for Monitoring Indian Economy (CMIE). Prowess covers mainly organized large and medium companies in India in industries, financial and other services and banking. The more than 20,000 companies covered in Prowess account for about 75 per cent of all corporate taxes and over 95 per cent of excise duty collected by the Government of India (www.cmie.com). The company-wise data are provided on diverse subjects including the background of the company and financial variables.

Prowess lists more than 5100 companies in the manufacturing sector. But information are not available/provided for all the variables for all the companies for all the years. On the basis of the information available (for example for 3400 companies for 2006-07), we have prepared Table 9 relating to different ratios on exports, imports and R&D as defined below:

- Export intensity: Exports as a percentage of Sales
- Import intensity: Expenditure on raw materials in foreign exchange as a percentage of value of production. (Value of production is calculated as Sales +/- Change in stocks).

- Net export intensity: (Total earnings in foreign exchange – total expenditure in foreign exchange) as a percentage of Sales.
- R&D intensity: Total R&D expenditure as a percentage of Sales.

Table 9 shows that import intensity has increased from 9.13% in 1991-92 to 22.29% in 2006-0 for the CMIE manufacturing corporate sector. The logic of the policy of import liberalization is that it will provide access to capital goods and raw materials at internationally competitive prices and also improve efficiency due to international competition leading to more exports. Did export intensity rise for the corporate sector? More important, did net export intensity grow?

Table 9 shows that export intensity did increase. But the growth from 5.24% in 1991-92 to 14.98% in 2006-07 was not significant enough to counter the rise in import intensity. The net export intensity has not only remained negative: it has increased from -7.37% to -12.59%. This shows as we have noted earlier that the net impact of the opening up of the economy has not been positive. (It may be noted from Table 9 that, even if we exclude the high import intensive sectors of refineries and gems & jewellery, the net export intensity remains negative but steady at around -3.5%).

Tables 10 to 12 provide a more disaggregated picture. Table 10 shows that growth of output has been more in the capital and consumer goods than in the intermediate goods particularly since 2001-02. We focus on some of the capital goods and consumer durables in Table 11 for import intensity and in Table 12 for net export intensity.

Import intensity has declined in two-three wheelers from 2.29% in 1991-92 to 1.35% in 2006-07 and in domestic electrical appliances from 4.535 to 3.19%. The ratio is reasonably low and steady in products such as commercial vehicles (2.71% in 2006-07), and miscellaneous electrical machinery (3.71%). But import intensity has increased sharply and is quite high in ACs and refrigerators (11.39% in 2006-07), communications equipment (17.01%), computer hardware (28.01%), consumer electronics (11.23%), electronic components (19.66%), electronic equipments (15.87%), industrial machinery (10.45%), passenger cars (10.91%), steel tubes & pipes (22.5%) etc (Table 11).

Import intensity has increased for pharmaceuticals. But the rise in exports has been sharper leading to a positive net export intensity of 14.76% for this sector in 2006-07. The other major sectors with positive net export intensity are industrial machinery (7.39%), miscellaneous electrical machinery (16.08%) and commercial vehicles ((1.38%) (Table 12).

All the other sectors listed in Table 12 have net export intensity, some of them with a ratio as high as -22.08% (communications equipment) and -21.8% (computer hardware).

A major problem with India's Balance of Payments has been the sharp rise in trade deficit. It has increased from -1% of GDP in 1991-92 to -6.9% in 2006-07. Corporate manufacturing sector's net exports of Rs -234592 crores in 2006-07 constitutes about 97.5% of India's total trade deficit (Table 13). In other words if only corporate sector's leakage could be controlled by increasing exports or by reducing imports, an important economic problem could have been tackled.

India's initial planners stressed import substitution to control imports. Manufacturing corporate sector's negative exports raise doubts about the efficacy and sustainability of the policy of import liberalization.

FOREIGN CAPITAL

Liberalizing inflows of foreign capital has been one of the most important aspects of the reforms process. The rationale has been that greater freedom to foreign capital will provide access to:

- Foreign finance
- International markets and
- Technological

By historical standards, substantial capital has flowed in from abroad after reforms. Foreign direct investment (FDI) alone added US $ 72.9 million to India's foreign exchange reserves between April 1991 and September 2008. This has been roughly the amount of India's total current account deficit of US $ 74.1 million during the same period (Table 14).

But international experience suggests that the more important role that FDI can play is by providing access to international markets and by contributing to technological development. As Table 14 shows, there have been substantial capital inflows other than through FDI (or foreign institutional investment). In fact capital inflows have been much more than the current account deficits, resulting in huge foreign exchange reserves from which India has not been able to benefit much.

Let us now see what have been the export, net export and R&D intensity of the foreign companies in India.

We have considered as Foreign companies all those identified by CMIE as belonging to Foreign groups, such as Unilever or those which are "Private (Foreign)" companies. (Matrix Laboratories, Ambuja Cement, ACC and Shree Digvijay Cements which have recently been taken over by foreign companies have been treated by us as Indian companies for the purpose if this analysis).

Out of the 3400 companies for which sales, export, imports etc are available from the CMIE Prowess data base for 2006-07, 193 companies are foreign companies.

The export intensity of the foreign companies has increased but not significantly from 7.44% in 1991-92 to 10.69% in 2006-07. Indian companies (except refineries and gems & jewellery) have performed much better. Starting with an export intensity lower than that of foreign companies (5.39% in 1991-92), Indian companies have now an export intensity which is higher (16.2% in 2006-07).

Not only because of the inferior export performance but also because of greater outflows due to dividends etc, the net export intensity of foreign companies is higher (-7.45% in 2006-07) than that of Indian companies (-2.51%).

Perhaps it is important to make a distinction between the foreign companies which have been operating in India at the time of reforms and those which entered India in response to reforms in 1991. Did the more congenial environment make any difference to the performance of the foreign companies which entered India after reforms?

Out of the 193 foreign companies, 145 companies were set up before 1991 and 48 companies in 1991 and later. The export intensity of the post 1991 foreign companies is significantly higher (20%) than that of that of the older foreign companies (9% in 2007-07) (Table 9). But the import intensity has also been significantly higher. The net export intensity of the newer foreign companies, as a result is also higher (-13%) compared to older companies (-6.42% in 2006-07).

Thus foreign companies have failed to provide the stimulus expected of it.

Table 1 Annual Rate of Growth of Manufacturing, 1991-92 to 2007-08 (per cent)

	Industry	Manufacturing	Manufacturing-registered	Manufacturing unregistered	Index of Industrial Production (Manufacturing)
1991-92	0.26	-2.4	-1.26	-4.31	-0.84
1992-93	3.31	3.09	2.06	4.87	2.43
1993-94	5.81	8.59	11.24	4.13	5.86
1994-95	9.28	10.82	13.04	6.83	9.08
1995-96	11.58	15.46	15.93	14.56	14.14
1996-97	6.68	9.5	10.74	7.12	7.34
1997-98	3.71	0.05	-2.61	5.35	6.61
1998-99	4.14	3.13	3.47	2.51	4.40
1999-2000	4.57	3.22	4.01	1.76	7.16
2000-01	6.35	7.75	7.84	7.56	5.35
2001-02	2.72	2.54	4.58	-1.33	2.85
2002-03	7.06	6.81	7.59	5.25	6.02
2003-04	7.38	6.63	7.15	5.57	7.38
2004-05	10.34	8.65	9.08	7.75	9.13
2005-06	10.15	8.98	9.16	8.61	9.15
2006-07	10.99	12	11.99	12.01	12.52
2007-08	8.55	8.78			8.98

Sources: CSO, National Accounts Statistics (for cols 2 to 5); RBI, Handbook of Statistics on Indian Economy (for col 6).

Table 2 Annual Rate of Growth of Manufacturing, 1951-52 to 2007-08 (per cent)

Year	Manufacturing	Manufacturing registered
1951-52	3.16	2.63
1952-53	3.48	0.46
1953-54	7.74	4.4
1954-55	7.01	11.14
1955-56	7.83	12.25
1956-57	7.51	11.15
1957-58	3.85	4.67
1958-59	4.95	2.88
1959-60	6.79	10.09
1960-61	8.3	12.73
1961-62	8.54	8.33
1962-63	7.28	9.74
1963-64	9.46	11.31
1964-65	6.91	8.25
1965-66	0.93	3.28
1966-67	0.79	0.09

1967-68	0.39	-3.26
1968-69	5.54	6.76
1969-70	10.73	17.37
1970-71	2.35	2.38
1971-72	3.27	1.81
1972-73	3.92	3.18
1973-74	4.45	4.93
1974-75	2.92	1
1975-76	2.11	1.01
1976-77	8.77	12.49
1977-78	6.22	6.71
1978-79	12.35	10.91
1979-80	-3.22	-2.1
1980-81	0.19	-1.61
1981-82	8.17	8.62
1982-83	3.29	8.1
1983-84	10.23	15.25
1984-85	4.21	7.63
1985-86	3.19	2.76
1986-87	5.49	4.91
1987-88	5.6	6.68
1988-89	8.5	11.7
1989-90	8.84	12.15
1990-91	4.77	5.63
1991-92	-2.4	-1.26
1992-93	3.09	2.06
1993-94	8.59	11.24
1994-95	10.82	13.04
1995-96	15.46	15.93
1996-97	9.5	10.74
1997-98	0.05	-2.61
1998-99	3.13	3.47
1999-2000	3.22	4.01
2000-01	7.75	7.84
2001-02	2.54	4.58
2002-03	6.81	7.59
2003-04	6.63	7.15
2004-05	8.65	9.08
2005-06	8.98	9.16
2006-07	12	11.99
2007-08	8.78	

Source: CSO, National Accounts Statistics

Table 3 Compound Annual Rate of Growth of Manufacturing (per cent)

Period	Manufacturing	Manufacturing – registered
1951-52 to 1965-66	6.45	7.48
1952-53 to 1964-65	7.17	8.87
1980-81 to 1990-91	6.2	8.29
1991-92 to 2007-08	7.18	7.58
1992-93 to 2007-08	7.46	7.99

Source: CSO, National Accounts Statistics.
Note: For the registered manufacturing sector the period for the last two rows are 1991-92 to 2006-07

Table 4 Annual Rate of Growth of Manufacturing, March 2007 to December 2008 (per cent)

Quarter	Index of Industrial Production (Manufacturing)
Mar-07	13.52
Jun-07	11.11
Sep-07	8.94
Dec-07	8.90
Mar-08	7.26
Jun-08	5.76
Sep-08	4.91
Dec-08	-0.68

Source: Business Beacon database of CMIE
Note: Growth rate for March 2007 is the growth rate over the index a year back (March 2006) and so on.

Table 5 ASI Registered Manufacturing Sector Employment

	Workers		Persons engaged	
	Total nos	Growth rate of col 2 (%)	Total nos	Growth rate of col 4 (%)
1991-92	5469244		7124677	
1992-93	5768038	5.46	7568065	6.22
1993-94	5740659	-0.47	7548975	-0.25
1994-95	5996593	4.46	7844172	3.91
1995-96	6543577	9.12	8648914	10.26
1996-97	6466705	-1.17	8434393	-2.48
1997-98	6466304	-0.01	8393780	-0.48
1998-99	6188081	-4.30	8352444	-0.49
1999-2000	6073337	-1.85	7903435	-5.38
2000-01	5958403	-1.89	7753248	-1.90
2001-02	5783089	-2.94	7512735	-3.10
2002-03	5983970	3.47	7699819	2.49
2003-04	5912030	-1.20	7631696	-0.88

Source: Annual Survey of Industries, 1973-74 to 2003-04: A Data Base on the Industrial Sector in India (Vol II), EPW Research Foundation

Table 6 Exports of Manufactured Goods (US $ million and %)

Year	All commodities	Mfrg goods	Mfrg goods Growth rate of col 3	Mfrg goods Share of col 2
1991-92	17998.3	13245.3		73.59
1992-93	17436.9	13166.8	-0.59	75.51
1993-94	22213	16636.9	26.36	74.90
1994-95	26337.5	20410	22.68	77.49
1995-96	31841.9	23782.4	16.52	74.69
1996-97	33498	24634.2	3.58	73.54
1997-98	35048.7	26578.6	7.89	75.83
1998-99	33211	25785.7	-2.98	77.64
1999-2000	36759.5	29750.6	15.38	80.93
2000-01	44147.4	34391.2	15.60	77.90
2001-02	43957.5	33469.3	-2.68	76.14
2002-03	52823.5	40323.9	20.48	76.34
2003-04	63886.5	48525.4	20.34	75.96
2004-05	83501.6	60705.7	25.10	72.70
2005-06	103075	72552.1	19.51	70.39
2006-07	126276	84863.4	16.97	67.20
2007-08	159089	101151	19.19	63.58

Source: DGCI&S from "India Trades" database of CMIE.

Table 7 Sectoral Sources of Growth of Exports of Manufactured Goods

Sector	Exports 1991-92 US $ million	Exports 2007-08 US $ million	Contribution (1991-92 to 2007-08)* %
Leather & leather manufactures	1278.2	3433.38	2.45
Chemicals & related products	1581.3	14944.95	15.20
Engineering goods	2256.57	36619.31	39.09
Textiles (excluding readymade garments)	2512.46	9528.17	7.98
Readymade garments	2215.54	9496.69	8.28
Other manufactured goods	3401.17	27128.86	26.99
Manufactured goods	13245.25	101151.4	100.00

Source: Calculated from DGCI&S data obtained from "India Trades" data base of CMIE.
Note: * Sectoral contribution has been calculated as the change of exports between 1991-92 and 2007-08 of the sector as a percentage of the change in total manufactured exports in the same period.

Table 8 Growth Rate of Exports of Selected Manufactured Products

Product group	Exports 1991-92 US $ million	Exports 2007-08 US $ million	CARG, 1991-92 to 2007-08 (%)
Primary & semi-finished iron & steel	92.21	4157.51	26.88
Non-ferrous metals	105.38	3055.71	23.42
Iron & steel bar/rods	62.43	1293.04	20.85
Ferro alloys	72.53	1113.99	18.62
Machinery & instruments	585.76	8724.77	18.39
Manufactures of metals	487.81	7027.5	18.14
Transport equipment	500.11	7029.16	17.96
Inorganic/organic/agro chemicals	201.88	2733.95	17.69
Electronic goods	267.21	3230.73	16.86
Residual chemicals & allied products	79.2	934.29	16.68
Drugs, pharmaceuticals & fine chemicals	633.46	7241.44	16.45
Dyes intermediates & coal tar chemicals	319.31	2699.12	14.27
Paints/enamels/varnishes	91	657.21	13.15
Project goods	18.85	128.34	12.74
Machine tools	47.79	300.14	12.17
Residual engineering items	16.49	89.34	11.14
Cosmetics/toiletries	256.45	678.93	6.27

Source: Calculated from DGCI&S data obtained from "India Trades" data base of CMIE.

Table 9 Export, Import, Net Export and R&D Intensity of Manufacturing Corporate Sector in India (per cent)

	1991-92	1992-93	2005-06	2006-07
All cos (3400 in 2006-07)				
Total import intensity	9.13	10.51	22.48	22.29
Total export intensity	5.24	6.08	12.88	14.98
Total net export intensity	-7.37	-8.05	-14.64	-12.59
Total R&D intensity	0.12	0.20	0.45	0.40
All cos except refineries and gems & jewellery (3373 in 2006-07)				
Total import intensity	5.30	6.27	12.67	12.80
Total export intensity	5.45	6.41	13.07	14.57
Total net export intensity	-3.81	-4.00	-4.47	-3.39
Total R&D intensity	0.15	0.24	0.67	0.59
All Indian cos except refineries and gems & jewellery (3180 in 2006-07)				
Total import intensity	5.72	6.67	13.67	13.34
Total export intensity	5.39	6.52	14.82	16.28
Total net exp intensity	-4.26	-4.40	-3.84	-2.51
Total R&D intensity	0.15	0.21	0.69	0.61
All foreign cos (193 in 2006-07)				
Total import intensity	3.30	4.64	11.10	10.46
Total export intensity	7.44	7.41	11.04	10.69
Total net export intensity	-0.03	-0.68	-6.44	-7.45
Total R&D intensity	0.13	0.40	0.45	0.36
All foreign cos before 1991 (145)				
Total import intensity	3.29	4.58	8.84	8.32
Total export intensity	7.45	7.43	9.09	8.98
Total net export intensity	-0.01	-0.57	-5.74	-6.42
Total R&D intensity	0.13	0.40	0.49	0.39
All foreign cos 1991 and later (48)				
Total import intensity	40.42	32.29	22.93	21.84
Total export intensity	0.00	0.00	21.28	19.88
Total net export intensity	-58.83	-58.83	-10.12	-12.94
Total R&D intensity	0.00	0.00	0.21	0.21

Source: Calculated from company-wise data obtained from Prowess data base, version 2.6 of CMIE.

Table 10 Sectoral Annual Rates of Manufacturing Growth (per cent)

	Basic goods	Capital good	Intermediate goods	Consumer goods	Consumer durables	Consumer non-durables
1992-93	2.74	4.42	4.60	5.07	-0.13	6.28
1993-94	9.29	-4.65	11.68	3.93	15.58	1.36
1994-95	9.55	9.16	5.32	12.11	16.20	11.21
1995-96	10.78	5.35	19.33	12.81	25.77	9.83
1996-97	3.02	11.44	8.12	6.21	4.64	6.62
1997-98	6.83	5.77	8.03	5.46	7.81	4.85
1998-99	1.70	12.64	6.12	2.20	5.57	1.11
1999-2000	5.51	6.96	8.79	5.70	14.15	3.23
2000-01	3.89	1.73	4.66	7.97	14.57	5.85
2001-02	2.42	-3.38	1.56	6.00	11.46	4.11
2002-03	4.83	10.50	3.88	7.07	-6.27	12.03
2003-04	5.46	13.59	6.37	7.16	11.61	5.76
2004-05	5.52	13.95	6.08	11.70	14.34	10.82
2005-06	6.70	15.73	2.51	12.03	15.30	10.94
2006-07	10.27	18.24	12.01	10.09	9.16	10.43
2007-08	6.96	18.02	8.93	6.06	-1.05	8.54
1991-92 to 2007-08*	5.93	8.51	7.29	7.55	9.64	7.00
2001-02 to 2007-08*	6.00	12.15	5.85	8.56	7.51	8.91

Source: RBI, Handbook of Statistics on Indian Economy*

Note: * CARG

Table 11 Import Intensity of Selected Manufactured Products (per cent)

	1991-92	1992-93	2005-06	2006-07
ACs and refrigerators	3.66	3.05	10.36	11.39
Auto ancillaries	3.76	4.48	7.29	7.96
Commercial vehicles	2.26	3.15	2.94	2.71
Communications Equipment	12.98	14.14	25.56	17.01
Computer hardware	17.05	12.07	30.72	28.01
Consumer electronics	7.12	6.03	7.75	11.23
Domestic electrical appliances	4.53	6.67	4.42	3.19
Drugs & Pharmaceuticals	8.53	10.00	12.88	13.40
Electronic components	16.42	26.30	19.60	19.66
Electronic equipments	5.98	6.70	10.83	15.87
Industrial machinery (other than textiles & chemicals)	1.69	2.06	9.46	10.45
Misc Electrical machinery	2.26	4.60	4.45	3.71
Passenger cars and multi utility vehicles	1.60	5.83	12.38	10.91
Steel Tubes & pipes	5.35	5.51	22.36	22.50
Textile machinery	2.44	8.70	10.86	9.97
Two & three wheelers	2.29	1.95	0.48	1.35

Source: Calculated from company-wise data obtained from Prowess data base, version 2.6 of CMIE.

Table 12 Net Export Intensity of Selected Manufactured Products (per cent)

	1991-92	1992-93	2005-06	2006-07
AC and refrigerators	-3.00	-2.36	-5.22	-6.27
Auto ancillaries	-0.85	-2.49	-3.94	-2.70
Commercial vehicles	2.35	1.40	-2.94	1.38
Communications Equipment	-17.41	-24.55	-30.85	-22.88
Computer hardware	-16.04	-12.61	-23.38	-21.80
Consumer electronics	-8.29	-7.23	-3.78	-8.05
Domestic electrical appliances	-4.21	-5.81	-5.31	-4.92
Drugs & Pharmaceuticals	0.01	-2.39	10.46	14.76
Electronic components	-15.11	-34.73	-8.53	-5.32
Electronic equipments	-19.26	-9.30	-5.87	-9.32
Industrial machinery (other than textiles & chemicals)	0.20	-5.16	-8.61	7.39
Misc Electrical Machinery	5.71	7.48	-21.48	16.08
Passenger cars and multi utility vehicles	-5.81	-8.74	-7.68	-7.70
Steel Tubes & pipes	-3.84	-2.83	-1.41	-3.52
Textile Machinery	-3.23	-8.38	-3.58	-3.55
Two-three wheelers	-4.92	-0.61	-2.28	-2.65

Source: Calculated from company-wise data obtained from Prowess data base, version 2.6 of CMIE.

Table 13 India's and Corporate Manufacturing Sectors Net Exports (Rs crores and per cent)

	2006-07
India	
Merchandise Exports	571779
Trade balance (merchandise exports minus imports)	-286276
Export/GDP	15.1
Trade balance/GDP	-6.9
CMIE Sample companies	
Exports	279020
Net exports (total foreign exchange earnings minus expenditure)	-234592
Export intensity	14.98
Net exp intensity	-12.59
Export (India/CMIE)	48.80
Net exports (India/CMIE)	97.5

Source: RBI, Handbook of Statistics on Indian Economy and Prowess data base, version 2.6 of CMIE.

Table 14 Sources of Accretion to Foreign Exchange Reserves since 1991

	April 1991 to September 2008 (US $ million)
Current Account	-74.1
Capital Account, of which	341.8
(i) Foreign investment, of which	160.8
(a) FDI	72.9
(b) FII	60.0
(ii) NRI deposits	30.8
(iii) External assistance	16.9
(iv) External commercial borrowings	60.1
(v) Others	73.2

Source: RBI, *Half Yearly Report on Foreign Exchange Reserves*, 2008-09 (covering the period up to September 2008).