India's Economic Reforms:

Private Corporate Sector Response

By

Mathew Joseph, Rupa R. Nitsure, L. Bhagirathi and Madan Sabnavis

Presented to

1998 ABAS International Conference on Emerging Economies

at

Budapest University of Economic Sciences

(July 13-15, 1998)

Abstract

The economic reforms introduced in India from 1991 involved two aspects for the corporate sector: first, a physical one implying enhanced freedom to produce and trade, and second, financial, having access to more avenues of finance both domestically and globally. Industry and exports grew rapidly after reforms but growth slowed in the last two years. The study examines the contours of corporate response to reforms based on representative samples of private companies for the period 1991-97. The study finds evidence of shifts in the pattern of finance to take advantage from the emergence of new cheaper sources of funds, large benefits from tax policy changes and limited cost reductions. The private corporate sector has built up large productive capacity during the post-reform period, and while capacity utilisation has gradually improved, there exists large underutilised capacity particularly in intermediate and capital goods. Size-wise analysis indicates that the response from large firms has been the fastest but the return from capital employed of those firms has been the lowest. The study also brings out the increasing outward orientation of private firms with export intensity of sales overtaking the import intensity during the post-reform period. Finally, the paper notes a slowdown towards the last year of the study and points to the need for a fresh round of remorms to rejuvenate the corporate sector.

India's Economic Reforms : Private Corporate Sector Response

*-Mathew Joseph, Rupa R. Nitsure, L. Bhagirathi and Madan Sabnavis**

The performance of the Indian economy in the 1980s had been better than that in the earlier decade; GDP grew by 5.8 per cent per annum and industry by 7.8 per cent per annum compared to just 2.9 per cent per annum and 4.4 per cent per annum respectively in the 1970s. However, the high growth rate in the 1980s became unsustainable as it had been accompanied by large fiscal and current account deficits which in turn led to huge rise in both domestic and external debt. Growth collapsed in the early 1990s and India faced a severe economic crisis almost reaching the brink of default on external payments. The government undertook a series of stabilisation and structural adjustment measures following the crisis. The new policy initiatives have been aimed at unleashing the productive forces in the economy through removal of dysfunctional controls and induction of competition, and thereby leading the economy back to a sustainable high growth trajectory.

It has been pointed out, by researchers on transition economies, that the process of macroeconomic stabilisation and liberalisation involves a large contraction in output in virtually every country in its early stages of transition (Hernandez-Cata, 1997). Besides, there is considerable underutilisation of industrial capacity in early stages. In India although the industrial output did not decline, its growth slid in the initial years of adjustment to just 0.6 per cent in 1991-92 and 2.3 per cent in 1992-93 in comparison with a growth of nearly 8.0 per cent per annum in the 1980s. From a moderate growth during 1991-93, industry witnessed a sustained acceleration in growth of 6.0 per cent in 1993-94, 9.4 per cent in 1994-95 and 12.1 per cent in 1995-96. Similarly, exports in dollar terms which declined by 1.5 per cent in 1991-92, recovered to grow at 3.8 per cent in 1992-93, and the growth accelerated to about 20.0 per cent per annum in the next three years up to 1995-96.

----

* *The authors are Economists working with the ICICI Limited, Mumbai. The views expressed in the paper are those of the authors and not of the organisation to which they belong.*

We would like to thank Dr. Ashok V. Desai, Dr. V.V. Desai, Mr. Niels Hermes, Dr. S.L. Rao and Dr. J.C. Sandesara for their valuable comments.

However, the growth momentum weakened during the years 1996-97 and 1997-98 as industrial growth slowed to 7.1 per cent and 4.2 per cent respectively and growth in exports decelerated to 5.3 per cent in 1996-97 and 2.6 per cent in 1997-98.

This paper attempts to understand the response of the private corporate sector to the various economic reform measures introduced in India since 1991. The study tracks the corporate response in terms of financial performance, the build-up in productive capacity and its utilisation and finally, the trade orientation. Besides the impact at the aggregate corporate level, attempts have been made to extend the query to firms of different sizes and also to various industry groups. The study also examines the sustainability of the impact considering of a slowdown in the growth momentum after 1995-96.

The rest of the paper is organised as follows. Section I outlines the major policy changes having a bearing on the operations of the corporate sector. Section II analyses the impact of reforms on the financial performance of the private corporate sector at the aggregate level. Sections III and IV examine the response of companies from this sector differentiated by size and industry grouping respectively. Section V analyses the trends in installed capacity and its utilisation in the private corporate sector classified into broad sectors and product groups. Section VI discusses the impact of reforms on the trade orientation of the private corporate sector. Section VII contains the summary and conclusions of the study.

I. Economic Reform Measures

The economic reforms have been directed towards making the corporate sector more competitive and efficient. The underlying rationale of economic reforms has been to move from a command economy to an open economy that is more responsive to market signals to achieve greater efficiency (Tarapore, 1997). The new measures spanned a wide area covering industrial and import licensing, taxation, foreign investment, financial markets and exports. Reforms have been manifested in physical as well as financial aspects.

Physical Aspects of Reforms

The physical changes have essentially revolved around providing a better environment for investment, and included measures such as delicensing of industries, public sector dereservation and easing of Monopolies and Restrictive Trade Practices Act (MRTP) regulation. These regulations had created a highly protected industrial regime where there was little competition and there was no comprehensive policy for industrial development (Neogi and Ghosh, 1998). These steps hence, aimed at removing procedural and policy hurdles that were placed before industry for investment.

Other measures such as import delicensing, reduction in import tariffs and decanalisation of imports have been introduced to hasten the inflow of high-technology based capital goods and cheaper raw materials, and accelerate the process of industrial growth. Import delicensing covered mostly raw materials, capital goods and intermediates and to a limited extent consumer goods. The peak customs tariff has been reduced from more than 300 per cent in 1990-91 to 50 per cent in 1996-97 and further to 40 per cent in 1997-98. The import-weighted average import duty has declined from 87 per cent in 1990-91 to 22.4 per cent in 1996-97 (World Bank, 1997). Also, restrictions on the import of technology have been eased. Further more, the foreign investment regime has been liberalised thereby opening up foreign capital for rapid economic growth especially in infrastructure and core sectors. In the past, foreign technology had seldom been transferred to the Indian partner as there had been restrictions on the amount of equity that a foreign partner could hold in a joint venture (Rao, 1998). Corporate tax rate has also been gradually reduced from 51.75 per cent in 1991-92 to 43.00 per cent in 1996-97 and further to 35.00 per cent in 1997-98 which was intended to boost corporate investment and output.

Financial Aspects of Reforms

Financial reforms included measures such as opening up of the capital market with the abolition of the Capital Issues Control Act 1947, giving way to free pricing of

capital issues and making equity finance an attractive source of funds for the corporate sector. Foreign institutional investors have also been allowed to invest in both equity and debt markets. Measures also included changes in the exchange rate regime leading eventually to a market-determined exchange rate, and current account convertibility facilitating a more liberal exchange control system. The exchange rate misalignment has been brought down with the effective exchange rate of the rupee depreciating by 36.1 per cent in nominal terms and 25.8 per cent in real terms between 1990-91 and 1992-93.[1]

Access to foreign funds has also been increased through a liberalised external commercial borrowings (ECBs) policy and allowing recourse to global depository receipts (GDRs), American depository receipts (ADRs) and foreign currency convertible bonds (FCCBs) . This enabled enterprises to take advantage of interest rate differentials between domestic and global markets and raise cheaper funds.

Financial sector reforms also aimed at strengthening public sector banks through recapitalisation and implementation of prudential norms. Competition has been fostered through the entry of private sector banks and freeing of deposit and lending rates of banks. Banks have been given greater freedom in their operations through the abolition of the requirement of the credit authorisation by the central bank, compulsory consortium lending by banks and the centrally imposed "maximum permissible bank finance" system. Further, concessional funds have been withdrawn from development finance institutions and their lending rates have been freed. Auctions for government securities have been introduced, in a move to make government borrowing at market-related interest rates, and pre-emptions in the form of cash reserve ratio (CRR) and statutory liquidity ratio (SLR) have been reduced. Further, the use of new money market instruments such as commercial paper (CP), certificates of deposit (CDs) and inter-corporate deposits (ICDs) have been encouraged. These new instruments have enlarged the corporate sector's access to funds from the financial system and enabled it to choose between various sources of

[1]This is based on RBI's 36-country export-weighted indices of nominal effective exchange rate and real effective exchange rate of the Indian rupee.

funds being priced competitively.

Challenges and Opportunities of Reforms

The economic reforms have provided both challenges and opportunities to the corporate sector. The removal of physical controls has given freedom to set up industrial units of any scale, offered scope to expand, merge and diversify. But this opportunity has brought in its train also larger competition. The easy import of cheaper raw materials and capital goods has reduced protection to domestic producers of these goods. The freeing of capital markets has raised the volume of issues manyfold in the market , but it has also entailed new regulation in order to maintain the quality of issues. The entry of foreign institutional investors has provided a boost to the stock markets, but the balance of payments position has become more vulnerable to sudden foreign capital outflows. Further, market-determined exchange rates have also meant closer monitoring of the foreign exchange market by authorities and their intervention to avoid wide exchange rate gyrations. In short, every measure of reform has provided an opportunity as well as posed a challenge to the system.

II. Impact of Reforms on the Private Corporate Sector: Overall Financial Trends

The private corporate sector witnessed a higher average growth of 19.3 per cent per annum in net sales (net of excise duties) during the period 1991-97 (Appendix 1) compared with 15.7 per cent per annum during 1985-91.[2] The average growth in net profits (profits after tax) has been also higher at 25.9 per cent per annum during the post-reform period compared with 19.3 per cent per annum in the immediate pre-reform period.

The improved corporate performance during the post-reform period has stemmed from two sets of factors: internal and external. The internal factors are those directly

[2]Based on ICICI's studies entitled, "Financial Performance of Companies: ICICI Portfolio" for samples of 417 companies up to 1989-90 and 532 companies for 1990-91. For 1991-97, the sample contains 973 companies and has been compiled from the Centre For Monitoring Indian Economy's (CMIE) data base.

emanating from the firms themselves under the pressure of competition, while the external ones are those common to all firms, being the effects of the new policy environment. The ultimate impact depends upon how a firm has been able to manage the challenges of increased competition and internalise the opportunities offered by the new policy environment.

Internal Factor: Cost Reduction

Competition has moved away from the traditional one of price competition. Competition now arises from new technological knowledge which leads to improved machinery, new products, reduction of costs and improvements in productivity (UNIDO 1996, Chapter 3). In the past, due to protected domestic markets, Indian enterprises had not been induced to improve efficiency (Neogi and Ghosh, 1998). However, reforms have led to the introduction of new techniques, technologies and processes to ensure that costs are continually reduced (Rao, 1998). This has been reiterated by the World Bank (1997) which attributes restructuring as a major reason behind the pattern of industrial growth in certain sectors in India during the period of reforms. To measure cost efficiency we have computed the total cost and its important components as a proportion of the value of production. Table 2.1 brings out this information for the private corporate sector as a whole for the past six years.

Table 2.1: Cost as Per Cent of Value of Production, 1991-97

	Total Cost	Raw Materials	Power & Fuel	Wages & Salaries	Selling Cost	Others
1991-92	88.3	56.8	7.0	5.8	5.3	13.4
1992-93	89.0	57.1	7.2	5.8	5.4	13.5
1993-94	89.6	56.4	7.2	5.7	5.7	14.6
1994-95	87.7	56.8	6.9	5.3	5.7	13.0
1995-96	86.7	57.1	6.5	5.1	5.6	12.4
1996-97	88.2	57.0	6.9	5.2	5.9	13.2

Note: Total cost includes costs on raw materials (including stores), power & fuel, wages & salaries, depreciation, selling expenses, administrative & miscellaneous expenses and others.

The total cost per unit of production rose initially up to 1993-94 and then fell in 1994-95 and 1995-96 mainly due to lower power and wage costs. Cost reduction could be

more pronounced at disaggregated levels, such as by size and industry, which are discussed later. This could, in fact, come out more sharply at the firm level as cost cutting is essentially a firm level process. However, the firm level exercise has not been attempted here.

The total unit cost of production rose again in 1996-97. This was mainly due to higher power & fuel and wage cost. The raw material costs did not show a declining trend possibly due to the production of higher quality products which necessitated the use of better quality raw materials. Further, the advantage of declining import tariffs might have been offset by the large depreciation of the rupee during the period.

In contrast, the unit cost of wages & salaries fell continuously from 1993-94 to 1995-96 and that of power & fuel in 1994-95 and 1995-96. The second aspect has been highlighted by Alagh (1998) who shows how increased attention to research & development has led to substantial savings in the use of energy in Indian industry during this period.

Interestingly, selling cost as a proportion of value of production has risen from 5.3 per cent in 1991-92 to 5.9 per cent in 1996-97. This is expected with increasing competition following reforms. Particularly significant has been the sharp rise in unit selling cost in 1996-97 - a year of slowdown in both production and sales.

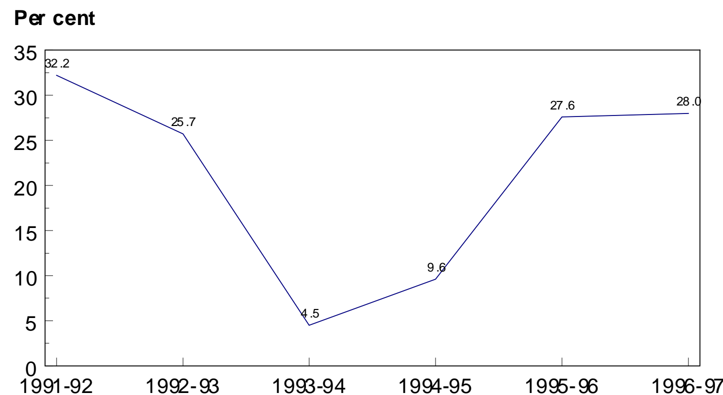
In short, while there has been some reductions in unit cost during the period, the overall impact of competition on cost efficiency has been limited at the aggregate level.

External Factor: Interest Payments

The major external factors that has had an important bearing on the profit behaviour of companies has been interest rates and taxes. The growth in interest payments over the six year period displayed a U-shaped curve, declining from 32.2 per cent in 1991-92 to 4.5 per cent in 1993-94 and rising continuously thereafter to 28.8 per

cent in 1996-97. This followed the cyclical nature of interest rates during this period (Chart 2.1).

Chart 2.1: Growth in Interest Payments, 1991-97



The sharp fall in the rate of growth in interest payments in 1992-93 and 1993-94 and low growth in interest payments in 1994-95 had been because of the following:

i) a fall in nominal interest rates after a peak was reached in 1991-92;
ii) the substitution of domestic long-term borrowings with cheaper alternatives such as Euro issues and domestic capital issues;
iii) the use of commercial paper and other short-term instruments where interest rates had been typically lower; and
iv) a better cash-flow management by the corporate sector.

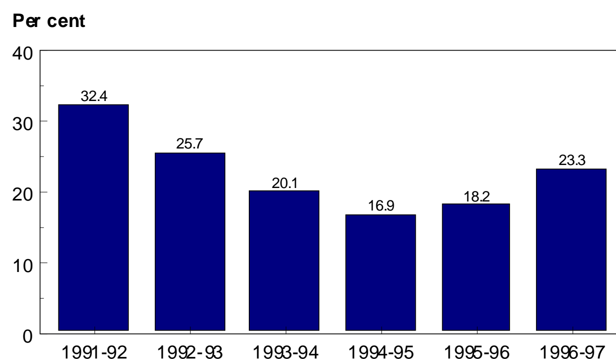
The lower growth in interest payments during 1992-95 had also been reflected in the effective interest rate[3] for the sample companies that declined continuously from 15.7 per cent in 1992-93 to 13.1 per cent in 1994-95. The subsequent higher growth in interest payments has indicated a rise in the effective interest rate to 13.6 per cent in 1995-96 and to 14.2 per cent in 1996-97.

[3]The effective interest rate for any year has been computed as the ratio of interest payments in that year to average outstanding of total borrowings in the previous and current year.

External Factor: Tax Provisions

On the fiscal side, there has been a very gradual lowering of the corporate tax rate during the period of study (Appendix 2). However, the effective tax rate, defined as the ratio of tax provisions to profits before tax declined continuously from 32.4 per cent in 1991-92 to 16.9 per cent in 1994-95 (Chart 2.2). This reflected the efforts taken by companies to lower tax liability possibly through adjustments in depreciation. The effective tax rate rose subsequently in 1995-96 and 1996-97. In 1995-96, tax provisions rose at a much higher rate than operating profits. In 1996-97, the high effective tax rate was on account of an increase in tax provisions as a new minimum alternative tax (MAT)[4] was introduced.

Chart 2.2: Effective Tax Rate of the Private Corporate Sector, 1991-97



Corporate Profitability

The net profit margin (ratio of net profits to net sales) of the private corporate sector had risen continuously between 1992-93 and 1995-96 from 3.8 per cent to 7.8 per cent due to high growth in net profits (profits after tax) during this period (Chart 2.3 and Appendix 3). The net profit margin declined in 1996-97 sharply to 5.7 per cent. The return on capital employed[5], in contrast, had declined almost continuously from

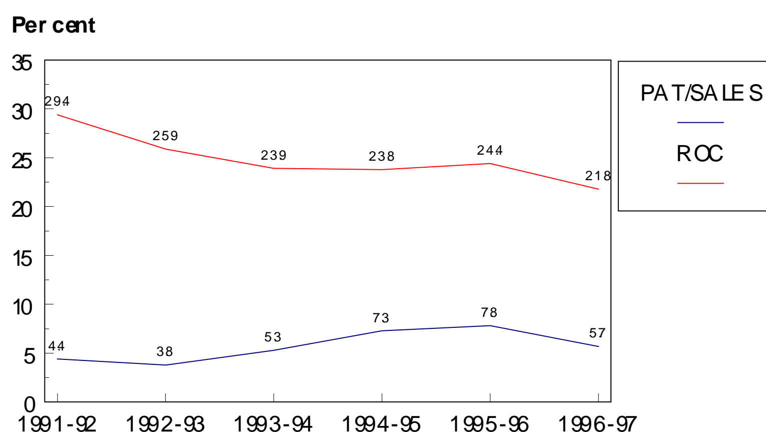
---

[4]MAT: Minimum Alternative Tax was introduced by the government in 1996-97 whereby all zero-tax companies (companies with positive profits before tax but not paying any tax) had to pay a minimum tax of 12.9 per cent calculated as the prevailing corporate tax rate (i.e. 43%) on a minimum 30 per cent of book profits.

[5] Return on capital employed is defined as the ratio of profits before depreciation, interest and taxes to capital employed which includes share capital, reserves and total borrowings.

a high of 29.4 per cent in 1991-92 to 21.8 per cent in 1996-97. This corresponds to a large build-up of capacity during the reform period that is not yet fully utilised. The capacity utilisation aspect has been discussed in more detail in Section V.

Chart 2.3: Profitability Ratios, 1991-97



Sources of Funds: External

Financial sector reforms opened up new avenues for raising funds for the corporate sector. Domestic equity markets became a major source of funds. Companies had also been able to access international markets for cheaper funds. Within domestic sources, companies had been able to issue instruments such as commercial paper and inter-corporate deposits for raising short-term funds. Further, the trend of declining interest rates made borrowings a cheaper option. In short, there had been a gradual shift towards the use of external sources of funds during 1991-95, which got reversed during 1995-97 as capital markets became subdued.

The increase in external funds came from two sources: capital market and borrowings. The boom in the capital market that facilitated the high mobilization of resources was mainly due to reforms signified by the abolition of the Office of the Controller of Capital Issues (CCI) and the freeing of share pricing. However, as Appendix 4 shows, while the share of paid-up capital by itself did not rise significantly during this period, averaging 4.8 per cent during 1992-96, companies had been able

to mobilise substantial amounts in the form of share premium[6]. Share premium accounted for about 18 per cent of total resources raised in 1992-93 rising to 25.8 per cent during 1993-95. This premium tapered off to 11.4 per cent in 1995-96 and 6.3 per cent in 1996-97 resulting in a decline in the share of fresh capital issues as well from 4.1 per cent in 1994-95 to 1.1 per cent in 1996-97.

In the debt segment too there has been perceptible changes. The corporate sector has been able to access foreign borrowed funds, whose share in total funds rose from 1.8 per cent in 1992-93 to 8.3 per cent in 1996-97. The availability of alternative borrowing sources and the equity market boom reduced the share of financial institutions (FIs) in total funds for some time during 1993-96[7], but their share rose sharply in 1996-97. A similar trend has been observed in the case of debentures and bonds as their share declined during 1994-96, but rose in 1996-97. Equity market thus became a significant source of funds for the corporate sector unlike in countries such as the US and the UK where corporations made use of capital market, especially equity, only as a last resort[8] (Singh, 1998). Financial liberalisation also saw the emergence of new money market instruments such as the commercial paper and inter-corporate deposits. While their share in total sources was only 4.0 per cent at its peak, it increased in 1993-94 and 1996-97 as the share of bank borrowings for working capital declined. Hence, there has been some element of substitutability between them and bank borrowings.

Sources of Funds: Internal

There has been a shift away from internal sources of funds from 29.9 per cent in

---

[6]Share premium is a premium raised on fresh capital by companies and is reckoned as the excess of the issue price over the face value.

[7]The role of financial institutions (FIs), which are basically term lending institutions, is understated here because FIs are also involved in underwriting and direct subscription to capital market instruments. In fact, about 20 per cent of the disbursements of FIs was in this form during this period . This is not reflected in this data.

[8]This is based on the theory of "pecking order" where companies rely largely on internal sources to promote growth. If more resources are required they use long term loans or bank borrowings and only as a last resort go to the capital market. The underlying reason is that equity finance reduces the control of management by expanding ownership.

1991-92 to 26.6 per cent in 1994-95. The share of internal funds rose in 1995-96 and 1996-97. The decline in the share of internal funds in the first phase occurred despite a high growth in profits, due to a boom in the equity market and a greater reliance on borrowings in a regime of declining interest rates. The rise in share of internal funds subsequently in 1995-96 has been due to factors such as, the stagnant capital markets and a high growth in profits earned by the corporate sector. In 1996-97, in spite of a decline in net profits, the share of internal funds remained at the previous year's level. This is so because, on the one hand, the flow of funds from external sources such as equity market and even banks dried up, on the other, depreciation, a part of internal sources of funds, increased reflecting the large build up of capacity. This was, to some extent, offset by a substantially larger flow of funds from FIs and debentures and bonds.

Debt-Equity Ratio

The changes in the financing pattern of the corporate sector during the 1990s had a healthy impact on the leverage ratio of the corporate sector (Table 2.2).

Table 2.2: Debt-Equity Ratio, 1991-97

	Long-term debt/equity	Total debt/equity
1991-92	1.14	1.64
1992-93	1.03	1.49
1993-94	0.82	1.15
1994-95	0.66	0.95
1995-96	0.63	0.92
1996-97	0.71	1.01

The total debt-equity ratio for the private corporate sector declined continuously from 1.64 in 1991-92 to 0.92 in 1995-96 and rose marginally to 1.01 in 1996-97. The ratio of long-term debt to equity also followed the same trend.

It has been argued by Varma (1998) that prior to reforms the corporate sector had been highly leveraged due to subsidised finance from institutional sources. This became no longer possible with the withdrawal of concessional funds to financial

institutions and they paying more attention to the quality of their assets. In addition, there had been a boom in the equity market further helping the process of deleveraging. Prior to reforms, due to the CCI's pricing formula for capital issues, companies had found equity a less attractive proposition on account of the very low prices which could be fixed (Rao, 1997). The downturn in the stock market in 1996-97, however, stopped this process from going any further.

Uses of Funds

From the availability and sources of funds for the corporate sector, we may now turn to their deployment pattern. In the context of a capital market boom there had arisen a choice between physical investment and financial investment. Table 2.3 shows that fixed capital formation had grown strongly from 6.1 per cent in 1991-92 to 45.3 per cent in 1994-95. In 1995-96, it grew further by 24.6 per cent on top of the high growth of 1994-95.

Table 2.3: Growth in Capital Formation, 1992-97

(Per cent)

Year	Gross Capital Formation	Gross Fixed Capital Formation
1992-93	8.9	6.1
1993-94	3.5	20.6
1994-95	68.1	45.3
1995-96	21.2	24.6
1996-97	-4.0	9.1

On the other hand, as Appendix 5 shows, there had been a fall in the share of gross fixed assets in the use of funds during 1993-95 in favour of financial investments. However, the fact that fixed capital formation did rise strongly during this period suggests that the diversion of funds into financial investments in 1993-94 and 1994-95, had not been at the expense of real asset creation.

The discussion so far can now be summarized as follows. Economic reforms had been all-encompassing and provided a number of challenges and opportunities to

the corporate sector. The private corporate sector registered a higher growth in sales and net profits during the period of reforms compared with the pre-reform period. Higher profits accrued mainly due to external factors induced by policy changes such as lower interest and tax rates and the availability of cheaper funds through capital market, domestic and foreign borrowings. The impact of internal factors in the form of cost reduction has been rather limited. While net profit margin rose, return on capital employed declined mainly due to lack of full utilisation of capacity created by the private corporate sector through plentiful availability of cheap funds. However, while the boom in the equity market did increase the share of financial investments in total uses of funds, the rate of fixed capital formation rose at a rapid pace during 1993-95, indicating that higher financial investments had not been at the expense of capital formation. Finally, there has been a weakening of the corporate performance towards the last year of the study, i.e., 1996-97 which has been reflected in net sales, profitability, unit cost, capital formation, interest rate, effective tax rate and debt-equity ratio.

III. Corporate Impact of Reforms by Size

It is quite clear that the private corporate sector as a whole responded well to economic reforms. In this section we examine whether the results are seen across the board or are size specific. For this purpose, companies have been grouped on the basis of the size of their net sales: large companies (net sales over Rs. 5.0 bn in 1996-97), medium companies (net sales between Rs. 1.0 and Rs. 5.0 bn) and small companies (net sales less than Rs. 1.0 bn). The aggregate sample consisted of 521 small, 347 medium and 105 large companies. The large companies in the sample accounted for 60 per cent of net sales and 63 per cent of gross fixed assets of the 973 sample companies.

The large companies generally had registered a higher growth in sales compared with the overall sample as well as medium and small companies (Appendix 6). Thus, the growth in sales has been directly related to size, with large companies having the highest growth rates followed by medium and small companies. This

could be because it is the large firms who could move into areas of high demand easily making use of opportunities provided by reforms - in both its physical and financial aspects.

Net profits of large companies also had grown at a faster rate than the aggregate sample as also the other groups (Appendix 6). Net profit margin, i.e., net profits as a ratio of net sales, for large companies had also been higher than that of the aggregate sample as well as small and medium companies. (Appendix 7).

The variations in profit margin has been analysed in terms of factors internal to firms and also those external. The results of internal attempts at enhancing efficiency have been measured by the movements in ratios of total cost and its components to the value of production (Table 3.1).

Table 3.1: Total Cost as Percent of Value of Production, 1991-97

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
All Companies	88.3	89.0	89.6	87.7	86.7	88.2
Small	92.0	89.8	89.7	88.0	88.9	92.0
Medium	88.4	88.7	89.0	87.3	87.2	88.1
Large	88.2	89.0	89.1	87.8	86.1	88.6

In general, unit cost of production has been lowest for large firms followed by medium and small firms. Total cost as percentage of value of production for large companies has shown a slightly declining trend during 1994-96 but rose in 1996-97. There has been a decline in the ratio of wages & salaries to value of production during 1991-97, in power & fuel during 1992-96 and in raw materials during 1992-95.

In the case of medium size companies, the ratio of total cost to value of production declined in 1994-95 and remained almost at that level in 1995-96 before rising in 1996-97. The share of wages & salaries started declining only after 1994-95 indicating that they have been relatively slower in cutting down labour costs. The

small firms, having the highest ratio of manufacturing costs to value of production, have shown a declining trend during 1992-95. The share of raw materials had declined up to 1993-94 and then rose until 1995-96. In the case of wages & salaries the share had shown a declining trend during 1993-95 but rose sharply in 1996-97.

The impact of external factors has been examined next. Large firms had an advantage in raising funds from the market at a lower cost (Appendix 8). The cost of borrowing had declined with increase in the size of a firm. Small firms, in fact, had faced a twin disadvantage of paying higher interest rates as well as having less access to capital market share premium and foreign borrowings (discussed later).

There had been no perceptible difference in the tax incidence of companies based on size and the larger ones had a marginally lower tax incidence compared with the others in five out of the six years. Therefore, the superior performance of large companies can be attributed to higher growth in sales, relatively faster introduction of cost reduction measures and easy access to cheaper funds. Simultaneously, they had continuously paid a higher rate of equity dividend during the period, which has been substantially higher than that paid by small and medium companies (Appendix 9). This has been so because of the fact that large companies have been more dependent on equity markets and have earned higher profits.

Profitability Ratio: Return on Capital Employed

In line with the findings at the aggregate level, there has been a decline in the return on capital employed for all the groups: small (1991-97), medium (1992-93, 1994-95 and 1996-97) and large (1992-93, 1993-94 and 1996-97) (Appendix 7). The return on capital employed for large companies had been continuously below that of the sample average, while that of medium and small companies had been generally higher than the sample average. One of the reason for this could be that the investment by large firms have a larger gestation period. While the declining returns for small companies had been due to lower growth in profits, that for large companies had been due to higher fixed capital formation, as depicted by the sharp fall in the ratio of sales to gross fixed assets from 1.81 in 1991-92 to 1.51 in 1996-97

(Table 3.2). Growth in sales for large companies, as mentioned earlier, had been the highest among all the size groups which meant that gross fixed assets grew at an even faster rate. This leads to the conclusion that it has been the large companies which built up new capacities faster.

Table 3.2: Sales to GFA Ratio, 1991-97

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
All companies	1.85	1.76	1.70	1.69	1.69	1.57
Small	1.93	1.86	1.84	1.83	1.79	1.52
Medium	1.89	1.87	1.84	1.85	1.87	1.71
Large	1.81	1.67	1.60	1.58	1.58	1.51

Sources of Funds

Huisman and Hermes (1998) have put forward a hypothesis that if financial liberalisation were to reduce imperfections in financial markets, then there should be few differences in access to credit across firms. A higher dependence on internal funds by small firms is used as evidence that firms have problems in borrowing funds. Their study, which covers the period 1984-94, shows that liberalisation did not lead to removing these imperfections. The small firms still had problems in obtaining external funds through borrowings, which was the case prior to reforms and hence, had to rely more on internal funds. The pattern of corporate financing for these groups has been analysed against this background.

The small and medium companies on an average had a slightly higher dependence on internal sources of funds (about 33%) during 1991-97 compared with the total sample (30.5%). Among the external sources, these companies had placed relatively less reliance on capital markets in comparison with borrowings. They had been relatively more dependent on non-capital market sources, such as borrowings especially from financial institutions and banks (which increased slowly but steadily during 1994-97).

The large companies on an average had accessed as much as 70 per cent of their

funds from external sources with the figure averaging 74 per cent between 1991-92 to 1994-95. Within external sources, capital markets accounted for 27.0 per cent of total funds for large companies which had been higher than the sample average of 25.9 per cent. They had been able to extract the highest share premium rates in all the years, thus showing their strong presence in the capital market . In fact, they had been able to mobilise substantial share premium even in 1996-97 even although the primary market was stagnant.

Within the debt segment, large companies had depended more on debentures than the rest of the firms. They had been a bit less dependent on financial institutions for funds with their share being at 8.0 per cent (over 10% for small and medium firms) and had been able to take recourse to alternative sources particularly, foreign borrowings (Appendix 10).

Thus, the picture that emerges here is somewhat different from what Huisman and Hermes (1998) have shown. While small and medium firms had relied more on internal sources in comparison with large companies, they had been still more dependent on borrowings from intermediaries even though on an average basis had paid higher interest rates on those borrowings. However, large firms had been able to borrow at lower interest rates domestically and by virtue of their superior credit rating had also accessed international markets. Hence, size by itself has not been a limiting factor in access to borrowings. Table 3.3 below shows that the share of domestic borrowings in total sources had been the highest for small companies followed by medium and large companies. Even in case foreign borrowings are included, the share of total borrowings has been still higher for small companies in comparison with large and medium companies.

Table 3.3: Share of Average Domestic Borrowings and Total Borrowings in Total Sources, 1991-97

(Per cent)

	Domestic borrowings to total sources	Total borrowings to total sources
All companies	21.4	25.5
Small	26.4	26.8
Medium	24.5	25.3
Large	19.4	25.4

In this context, Harris, Schiantarelli and Siregar (1994) have shown that in Indonesia during 1981-88, the period when the economy was undergoing financial reforms, there had been a tendency for small firms to have greater access to domestic borrowings mainly due to the fact that the larger ones had gone in for cheaper external borrowings. On the other hand, reforms had led to an increase in overall leveraging in Indonesia. The Indian case is analogous to the Indonesian case in the first respect, but is different as far as the leveraging part is concerned.

With a distinct advantage in the capital market in raising equity as well as being higher profit earners, the large companies had lower debt-equity ratio than the aggregate sample as well as small and medium companies. The trends in movement in debt-equity ratio, however, was the same for all groups: declining up to 1995-96 and then rising in 1996-97 (Appendix 11).

Hence, the discussion above shows that while the corporate sector as a whole responded well to economic reforms, it has been larger companies that witnessed higher growth in sales, effected cost cutting faster and had higher growth in profits. However, they had been also the companies which had the lowest return on capital employed as they raised substantial resources in both the debt and equity markets for deployment in fixed capital formation. They had been able to secure the highest share premium rate and accessed also other cheaper sources of finance such as foreign borrowings and euro equities to reduce their overall cost of funds. However,

while small and medium firms did rely more on internal sources in comparison with large companies, they had still been more dependent on borrowings.

IV. Corporate Impact by Industry Group

This section attempts an inter-industry examination of the impact of reforms. As mentioned earlier, economic reforms provided opportunities as well as posed challenges to Indian industry. Opportunities had been manifested in the form of lower direct and indirect taxes, particularly customs tariffs leading to cheaper imports; less administrative restrictions including delicensing of industries and imports leading to lower transaction costs in doing business; and access to cheaper sources of internal and external funds. Challenges came in the form of increased competition, both external and internal.

To understand how different industries reacted to reforms, their average performance in terms of growth in sales and net-profit margin have been juxtaposed and analysed with the overall performance. Growth in sales has been taken to be indicative of positive responses in terms of higher production in this period, while changes in net profit margin have been taken to signify the impact on profits [9]. Growth in net profits has not been used for statistical reasons due to very high or low growth rates for individual industries in certain years distort the average growth during the six-year period. The high or low growth in sales or profit margin for various industry groups has been defined on the basis of being higher or lower than the growth in sales and net profit margin of the aggregate sample during this period.

The industries have been classified into four categories: i) industries with high growth in sales and high net profit margin ii) industries with high growth in sales and low net profit margin, iii) industries with low growth in sales and high net profit margin and, iv) industries with low growth in sales and low net profit margin. Table 4.1 summarises the performance of different industries from 1991-92 to 1996-97 under

[9]Theory of firm points to profit and sales maximisation as the alternative objectives of a firm.

this classification.

i) Industries with high growth in sales and net profit margin

Industries in this group are telecommunications, silk textiles, pesticides, inorganic chemicals, two & three-wheelers, software, cosmetics & toiletries and the diversified group of companies.

These industries with the exception of software, cosmetics & toiletries and the diversified companies have typically brought about cost reduction on a sustained basis (for a period of three years or so) up to 1995-96. This coupled with the high growth in sales have resulted in a high profit margin (Table 4.1).

ii) Industries with high growth in sales and low net profit margin

Industries under this category are: computers, passenger cars, consumer electronics, commercial vehicles, auto-ancillaries, tyres & tubes, sugar, vegetable oils & vanaspati, cotton & blended yarn, electrical machinery and iron & steel.

There had been two sets of factors working towards low profit margin of these industries. Firstly, interest costs had risen at a higher than average rate in all these industries except computers and passenger cars. Secondly, cost reduction is not seen on a sustained basis for these industries except in passenger cars and to some extent in iron & steel.

iii) Industries with low growth in sales but high net profit margin

This group consists of aluminium, nitrogenous fertilisers, cigarettes, tea, woollen textiles, organic chemicals, drugs & pharmaceuticals, ceramic products and petrochemicals.

These industries with the exception of tea, cigarettes and petrochemicals reduced costs on a sustained basis till 1995-96. In the absence of strong growth in sales, these industries would have to sustain the cost cutting measures in the future, especially since in 1996-97 there has been a reversal in cost efficiency in most of

these industries.

iv) Industries with low growth in sales and low net profit margin

These include cocoa & related products, cotton blended & woven fabrics, man-made fibres, pulp, paper & paper products, phosphatic fertilisers, paints & varnishes, soaps & detergents, plastic products, cement, glass & glass products and non-electrical machinery.

While these industries did reduce costs at various points of time, they had not really done it on a sustained basis to have an impact on profits. This combined with lower growth in sales had adversely affected the level of profit margins of these industries.

Thus, cost cutting becomes essential to maintain profit margins in the face of competition. Rao (1998) notes that industries such as sugar, edible oils and fertilisers have not progressed adequately in this direction and have survived mainly on government help. If companies in these industries do not improve their efficiency, they will not be able to survive when the controls are removed and will become "dinosaurs".

Table 4.1: Industry-wise Total Cost as Per Cent of Value of Production, 1991-97

	No. of Cos.	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
i) Industries with high growth in sales and high net profit margin							
Telecommunications (52.0, 8.1)	6	84.4	85.8	83.6	81.2	76.1	89.2
Silk textiles (33.5, 34.8)	2	66.7	60.6	66.8	57.8	55.6	61.4
Pesticides (25.8, 9.0)	6	82.3	81.0	80.8	84.4	81.9	87.5
Inorganic chemicals (22.7, 11.1)	33	83.1	84.4	84.7	81.3	71.2	76.4
Two & three wheelers (21.5, 9.2)	7	94.4	94.3	88.8	76.8	87.5	87.0
Software (21.2, 6.9)	2	76.8	82.4	88.4	88.3	85.0	91.0
Cosmetics & toiletries (20.9, 6.5)	12	85.7	87.6	87.7	87.4	86.8	87.7
Diversified (19.3, 6.9)	40	89.0	88.9	89.5	87.9	87.0	90.1
ii) Industries with high growth in sales and low net profit margin							
Computers (33.5, 3.0)	4	87.9	87.7	92.3	92.0	91.2	90.3
Passenger cars (29.7, 3.7)	3	98.5	95.2	94.1	93.2	87.3	88.4
Consumer electronics (21.1, 4.0)	11	90.9	89.6	92.0	89.2	89.7	94.3
Commercial vehicles (24.5, 4.6)	5	88.9	91.0	101.7	93.2	91.2	89.8
Auto-ancillaries (23.0, 5.4)	54	87.8	88.7	89.7	88.0	87.2	87.0
Tyres & tubes (20.9, 2.3)	9	88.3	88.4	89.7	93.3	91.0	90.6
Sugar & allied products (21.5, 2.9)	19	86.1	80.7	85.2	87.5	87.9	81.7
Vegetable oils & vanaspati (21.6, 1.4)	8	94.8	96.4	94.2	93.9	93.4	97.0
Cotton & blended yarn (20.6, 3.8)	62	86.7	90.3	87.0	86.6	91.0	91.6
Electrical machinery (20.3, 4.9)	57	90.0	89.9	90.8	89.1	88.7	89.5
Iron & steel (19.6, 4.8)	79	89.5	92.7	91.5	88.8	86.0	89.6
iii) Industries with low growth in sales and high net profit margin							
Aluminium (15.9, 12.9)	10	83.6	84.0	84.0	76.8	72.9	80.8
Nitrogenous fertilisers (15.8, 11.7)	8	81.5	80.2	78.6	79.1	74.4	81.2
Cigarettes (18.3, 9.3)	3	78.8	83.5	85.2	85.8	81.7	81.4
Tea (9.2, 7.7)	18	80.6	81	79.5	91.5	89.6	87.1
Woollen textiles (17.6, 5.7)	6	89.8	82.1	81.5	80.0	79.7	88.6
Organic chemicals (16.4, 7.8)	20	83.7	87.4	86.3	84.5	81.5	85.8
Drugs & pharmaceuticals (19.3, 7.2)	40	89.5	88.5	87.7	86.3	86.9	85.3
Ceramic products (16.9, 6.4)	14	86.5	86.9	86.1	82.4	80.3	86.3
Petrochemicals (18.3, 5.8)	9	85.4	86.8	90.9	85.0	84.4	86.5

Note: Figures in brackets stand for average growth in sales and average net profit margin in that order.

(Contd. on next page)

Table 4.1 (Contd.): **Industry-wise Total Cost as Per Cent of Value of Production, 1991-97**

	No. of Cos.	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
iv) Industries with low growth in sales and low net profit margin							
Cocoa & cocoa products (19.2, 3.6)	2	92.3	95.5	97.9	89.2	90.9	88.9
Cotton woven fabrics (17.6, 4.9)	27	88.6	90.1	90.2	86.6	90.3	91.6
Man-made fibres (12.4, 0.5)	33	92.0	92.2	88.0	98.2	95.6	95.9
Pulp, paper & paper prdts (15.0, 5.0)	39	89.5	91.4	89.8	91.0	84.0	90.4
Phosphatic fertilisers (6.7, 1.4)	5	92.9	91.3	97.3	91.2	97.9	86.9
Paints & varnishes (17.6, 5.1)	6	87.1	89.5	90.3	85.8	87.0	88.5
Soaps & detergents (18.0, 3.9)	6	94.0	98.5	88.7	87.3	92.4	87.5
Plastic products (17.9, 4.4)	32	88.3	90.2	89.3	84.7	86.9	91.4
Cement (16.0, 4.9)	25	81.5	90.1	91.9	87.3	81.9	87.1
Glass & glass products (17.7, 3.9)	7	89.0	87.4	89.1	88.6	83.1	88.7
Non-electrical machinery (17.1, 5.2)	69	87.7	87.7	89.2	88.3	87.6	87.4
All Companies (19.3, 5.7)	**973**	**88.3**	**89.0**	**89.6**	**87.7**	**86.7**	**88.2**

Note: Figures in brackets stand for average growth in sales and average net profit margin in that order.

V. Capacity Build-up and Utilisation in the Private Corporate Sector

In this section, an attempt has been made to understand the response of the private corporate sector to economic reforms in terms of building up of additional capacity and its utilisation. Data on 932 medium and large-scale companies from the private corporate sector have been analysed for four years (from 1993-94 through 1996-97) to arrive at various product-level capacities and their utilisation rates. In all, information had been obtained on 1,600 products manufactured by these companies, which jointly generated Rs. 1291 billion in 1996-97, by way of sales. This total sample of 1,600 products has been classified into 94 product groups which have been further regrouped into five use-based industrial categories -- basic goods, capital goods, intermediate goods, consumer durables and consumer non-durable goods. Various product groups have been assigned moving weights for various years, on the basis of the proportion of their sales realisation in the total sales realisation of the sample. For the year 1996-97, of the total weight of 100.00, the basic goods industry accounted for 22.2, capital goods industry 19.1, intermediate goods industry 29.5, consumer durable goods industry 13.7 and consumer non-durable goods industry 15.6.

To compute the capacity utilisation rate for a particular product group, the concepts of installed capacity, actual production and capacity utilisation are interrelated as under:

$$\text{Capacity Utilisation (in \%)} = \frac{\text{Actual Production}}{\text{Installed Capacity}} \times 100$$

In order to compute the capacity utilisation rate for a particular product, the information on installed capacity and actual production has been obtained from all sample companies engaged in manufacturing that product.

Capacity Build-up in the Private Corporate Sector

Table 5.1 presents summarized information on the growth in installed capacity for industries in the broad use-based classification. It shows that the growth rate of overall installed capacity in real terms for the private corporate sector, accelerated from 4.6 per cent in 1993-94 to 18.7 per cent in 1994-95 but later decelerated to 11.1 per cent in 1995-96. However, it again showed an uptrend by registering a growth rate of 15.6 per cent in 1996-97. During 1996-97, the capacity build-up has been strong at 32.5 per cent for the intermediate goods, 16.1 per cent for the capital goods industry and 9.7 per cent for the consumer non-durables, reflecting better business expectations in these industries vis-a-vis other user industries.

Table 5.1: Growth of Installed Capacity in the Private Corporate Sector, (Use-based Classification), 1993-97

				(Per cent)
	1993-94*	1994-95	1995-96	1996-97
Basic goods	5.8	13.4	6.1	2.6
Capital goods	3.8	19.8	31.1	16.1
Intermediate goods	7.7	22.3	5.0	32.5
Consumer durables	2.9	31.2	13.3	6.6
Consumer non-durables	1.5	8.1	6.3	9.7
All industries	**4.6**	**18.7**	**11.0**	**15.6**

* The sample in this year consisted of 503 companies whereas for other years the sample consisted for 932 companies.

A detailed analysis of the growth in installed capacity at sectoral levels in 1996-97 shows that it has been more than 10.0 per cent for the following industries:

(i) Basic goods: Steel ingots, aluminium ingots/billets, non-ferrous rolled products, aluminium plates/sheets.
(ii) Capital goods: Air compressors, agricultural machinery, commercial vehicles, jeeps, jelly-filled cables.
(iii) Intermediate goods: Auto electricals, polyester and nylon filament yarns, plastics in primary form and plastic products.
(iv) Consumer durables: Two wheelers and refrigerators.
(v) Consumer non-durables: Soaps & detergents, lamps, ceramic tiles, food products, vanaspati, bulk drugs, tablets, dairy products, capsules and liquids.

Thus, these are the product groups from the private corporate sector, which had endeavoured to build-up better competitive strength even during the year of overall slowdown in industrial output growth.

The possible reasons for the large build-up of capacity are: with delicensing and public sector dereservation, the private sector has got the freedom to set up industrial units and expand them irrespective of size; expectations of large demand expansion with reforms and strategic pre-emption by large firms.

Capacity Utilisation

Capacity utilisation rates in the private corporate sector from 1991-92 through 1996-97 are given in Table 5.2 based on use-based classification. It indicates that the overall utilisation rate had been significantly lower at 66.8 per cent in 1991-92 decelerating to 65.3 per cent in 1992-93. This deceleration was prominent among the intermediate and consumer durable goods industries. However, even during the overall low demand growth situation in 1992-93, utilisation rates had improved for basic and capital goods industries.

Table 5.2: Capacity Utilisation in Private Corporate Sector by Industrial Category, 1991-97

(Per cent)

	1991-92*	1992-93*	1993-94	1994-95	1995-96	1996-97
Basic goods	72.0	75.0	74.1	75.5	81.9	85.2
Capital goods	59.1	60.0	60.3	71.2	70.0	70.3
Intermediate goods	83.0	74.4	55.1	52.2	56.3	53.4
Consumer durables	43.2	40.2	87.0	82.6	89.0	95.5
Consumer non-durables	76.8	76.7	71.7	73.9	75.9	73.7
All industries	**66.8**	**65.3**	**66.7**	**67.9**	**71.9**	**72.6**

* These values are taken from earlier ICICI studies on 'Capacity Utilisation in The Private Corporate Sector', 1991-92 and 1992-93. The sample in these years consisted of 483 companies.

The overall picture is that the private corporate sector has been able to stage a smart recovery from the 1991 crisis. The most prominent features of this recovery are as follows :

(i) At the aggregate level, the capacity utilisation rate for the sample companies has increased steadily from 1992-93 through 1996-97 indicating a faster growth of production vis-a-vis installed capacity.

(ii) There has been a steady increase in the capacity utilisation rates of basic and consumer durable goods industries in the last three years, i.e., 1994-97.

(iii) The capacity utilisation rate for the consumer non-durable goods has remained stagnant during the post-1991 period.

(iv) The average capacity utilisation rate for the intermediate goods sector has declined from around 80 per cent to 55 per cent during the post-liberalisation period due to an excessive capacity build-up.

(v) The capacity utilisation rate for the capital goods sector has remained in the neighbourhood of 70 per cent during 1994-97 depicting a significant increase from its level at 60 per cent during 1991-94 period.

In short, capacity utilisation in capital goods and intermediate goods has remained low. This could be because of two reasons. First, it has been in these sectors where capacity build-up has been highest and, second, it has also been in these sectors

where the impact of import liberalisation - both of quantitative restrictions and decrease in tariffs - has been the maximum.

A detailed analysis of capacity utilisation performance bringing out the best performers (i.e., the product groups for which utilisation rate was consistently more than 80 per cent during 1993-94 to 1996-97 and under-performers (i.e., product groups for which utilisation rate was consistently below 50 per cent during 1993-94 to 1996-97) can be seen in Appendix 12.

Demand Analysis

The deceleration in overall industrial growth during 1996-97 and 1997-98 has caused considerable concern. Though the overall capacity utilisation rate had increased for the sample companies during 1996-97, certain sectors suffered severe slowdown during the year. The industries which witnessed negative growth in 'sales in quantity', which reflects demand decline, during 1996-97 are indicated below:

(i) Basic goods: Fertilisers, sponge iron, sulphuric acid, non-ferrous rolled products and aluminium sheets/plates.
(ii) Capital goods: Welding equipment, gear boxes, conveyors, printed circuit boards, wires & cables, cutting tools, machine tools, computers, construction & mining machinery and dairy equipments.
(iii) Intermediate goods: Nylon filament yarn, polypropylene yarn, wood products, PVC pipes, dyes & pigments, electronic components and telecommunications.
(iv) Consumer durables: Diamonds and consumer entertainment electronics.
(v) Consumer non-durables: Paper & paper products, vanaspati, capsules, miscellaneous rubber products, leather products, fats & oils and ointments.

Barring a few exceptions such as construction & mining machinery, telecommunications, wood products etc., most of the industries above had been striving hard to meet the rapidly growing demand during 1994-95 and 1995-96. This led existing producers in these sectors to expand capacity, and new, particularly foreign, producers to enter the market. As noted by Ashok Desai (1998), the expansion of capacity finally caught up with the demand, and led to the present state

10

of capacity exceeding demand. However, he feels that though demand recession is painful for industry, it does lead industry to cut down costs and improve quality. It also leads to lower prices which ultimately helps to improve the standard of living.

To sum up, the medium and large-scale segment of the private corporate sector has generally coped well with the new environment introduced by the liberalization programme since 1991. There has been a substantial growth in capacity creation particularly in capital, intermediate and consumer goods sectors. Its efficiency in the use of capital as represented by the capacity utilisation rate has consistently improved between 1992-93 and 1996-97, notwithstanding the buoyant growth in installed capacity. On the basis of the use-based classification of industries, while the performance of basic and consumer durable goods industries has shown a consistent improvement in terms of capacity utilisation, that of consumer non-durable and intermediate goods industries has been relatively stagnant or declining. The capacity utilisation rate for the capital goods industry had maintained its level around 70 per cent during 1994-97, despite intense competition from the imported machinery segment. However, in general, the capacity utilisation levels still remained low indicating the presence of large excess capacity.

VI. Trade Orientation of the Private Corporate Sector

In this section we discuss the effects of liberalisation on foreign trade. There is now considerable theoretical and empirical literature on the growth effects of trade liberalisation. Trade barriers depress investment by raising the cost of capital goods, intermediates and raw materials; prevents the transmission of technical knowledge embodied in imports; and promotes inefficient high-cost domestic production. Therefore, openness to international trade will lead to raising the long-run growth of the economy[10].

The response of the Indian private corporate sector to the various trade policy

[10] Please see Srinivasan (1998) for a brief survey on recent empirical research on international trade and growth.

reforms since 1991 including the large exchange rate adjustments can be seen from the trends in export and import intensities defined as ratio of foreign exchange income/imports (c.i.f.) to net sales (net of excise duties) of companies. The data used here is based on a sample of 995 private companies for the post-reform period (1991-97) and a sample of 480 companies in the immediate pre-reform period (1988-91)[11] and is given in Table 6.1.

Table 6.1: Export and Import Intensities of Private Corporate Sector, 1988-97

		(Per cent)
	Export Intensity	Import Intensity
1988-89	7.1	8.0
1989-90	8.0	8.8
1990-91	8.2	8.2
1991-92	10.8	8.1
1992-93	12.4	9.0
1993-94	13.3	9.3
1994-95	13.2	12.1
1995-96	14.0	14.0
1996-97	13.5	13.1

Notes: 1. Export intensity is defined as the ratio of foreign exchange income to net sales (net of excise duties) of companies and import intensity the ratio of imports (c.i.f.) to net sales.
2. Based on a sample of 480 companies up to 1990-91 and 995 companies thereafter.

It can be seen from the table above that the average intensity of both exports and imports of companies in the private sector rose after reforms; export intensity increased to an average of 12.9 per cent and import intensity to 10.9 per cent during 1991-97 from 7.8 per cent and 8.3 per cent respectively during 1988-91. Most interestingly, the average export intensity of the private corporate sector during the post-reform period has been more than the average import intensity. During the pre-reform period, it was the other way round, i.e., import intensity was more than export

[11] Post-reform period data is compiled from Capitaline package of Capital Market Publishers India Ltd, Mumbai supplemented by annual reports of companies and direct correspondence. Pre-reform data is from earlier ICICI studies on export performance of companies.

intensity.

Dividing the post-liberalisation period into two equal sub-periods, we get a distinct pattern. While the growth in export intensity has been some what gradual, that in import intensity has been steep; export intensity moved up from 12.2 per cent during 1991-94 to 13.6 per cent during 1994-97 whereas import intensity rose from 8.8 per cent to 13.1 per cent between the two sub-periods. This can be explained by two factors: one, the initial import liberalisation has been accompanied by substantial exchange rate depreciation and two, the industrial growth recovered gradually and became strong only in the second sub-period, both moderating the import growth in the first sub-period and raising it in the second. Whatever the pattern of shifts in the trade orientation of the corporate sector, we find a strong association between import liberalisation and export growth. This has been examined in more detail below.

Import Liberalisation and Export Growth

Import controls adversely affect exports in two main ways: firstly, by making exports more unprofitable than import substitutes and secondly, by denying cheaper raw materials, components, and machinery either domestically or from abroad (Clements and Sjaastad, 1984; and Greenaway and Milner, 1987). Srinivasan (1998) particularly talks about the access to advanced technology and production processes through capital goods imports which is significant for growth and productivity in developing countries. Therefore, import liberalisation should have positive impact on exports.

There are several empirical studies on the impact of import liberalisation on exports in the Indian context for the period prior to 1990. The studies by Bhattacharya (1989), Atul Sarma (1990), Indian Institute of Foreign Trade (1990), Export- Import Bank of India (1991), Dholakia *et al*. (1992) and Singh (1994) have validated the positive relationship between imports and exports during the pre-liberalisation period. A recent cross-section study by Majumdar and Chibber (1997) using firm level data for over 1000 Indian firms found a significant positive relationship between export intensity and import intensity (defined as ratio of imports to operating expenses)

during the period, 1988-94.

Data and Estimation[12]

To estimate the relationship between export intensity and import intensity in the post-reform period 1991-92 to 1996-97, we have used the Ordinary Least Squares (OLS) method. This is a cross sectional study using industry level data for 17 industries[13] in each of the six years. A total sample of 910 firms from the manufacturing sector have been classified into different industries. Export and import intensities have been obtained at the industry level by adding up the firm level data on the respective variables. The results of the estimation are given in the table below. It shows that in all the six years, export intensity shows a positive and significant relationship with import intensity.[14]

[12]We gratefully acknowledge the help rendered by Mr. H. Keshava of The ICICI Ltd. in the estimation of the relationship between exports and imports as carried out here.

[13]The 17 industries are automobile & auto ancillaries, cement, chemicals & petrochemicals, electrical equipment, electronics, food products, glass & pottery, machinery manufacture, metal products (ferrous), metal products (non ferrous), pulp, paper & paper products, rubber products, sugar, textiles, miscellaneous, gems & jewellery and diversified. A more detailed classification of industries including service sectors with their respective import and export intensities for two sub-periods of post-reform period is given in Appendix 12.

[14]Since a comprehensive definition of imports (i.e., including raw materials, intermediates and capital goods) was used while measuring import intensity, a lagged value of this variable was also expected to explain some of the variation in export intensity. However, due to the problem of multicollinearity, this estimation did not yield any meaningful result. However, when used independently, import intensity with one year lag also showed a similar positive and significant relationship with export intensity.

Table 6.2: Regression Results, 1991-97
[Dependant Variable = Export Intensity (%)]

	Constant	Import Intensity (%)	R^2	D.W.
1991-92	-3.379 (-0.84)	1.752 (6.31)	0.73	1.52
1992-93	-4.007 (-1.02)	1.831 (7.05)	0.77	1.60
1993-94	-7.020 (-1.33)	2.211 (5.48)	0.67	2.08
1994-95	-4.795 (-1.31)	1.445 (7.03)	0.77	2.03
1995-96	-9.706 (-1.91)	1.691 (5.78)	0.69	2.48
1996-97	-2.511 (-0.74)	1.165 (6.69)	0.75	1.49

Note: Figures in parentheses are 't' values.

It may be noted firstly that the coefficient of import intensity has been above one in all the years implying that a one percentage point increase in import intensity leads to a more than one percentage point rise in export intensity. Secondly, we find a definite variation in the coefficient value of import intensity as between the early phase of liberalisation, i.e., 1991-1994, when the co-efficient ranged from 1.8 to 2.2, and the later period, i.e., 1994-97, when the coefficient value ranged from 1.2 to 1.7. That is, the degree of impact of import liberalisation on export growth diminished as between the first phase and the second phase. This has been explained by what has been indicated earlier that the early phase of import liberalisation has been accompanied by a large depreciation of the rupee and a low industrial growth. Large rupee depreciation moderated the impact of import liberalisation on imports and boosted exports, and low industrial growth also adversely affecting the imports in the earlier period. In the later period, as industrial growth picked up strongly imports too grew faster reducing the extent of import-export relationship.

VII. Summary and Conclusions

The economic reforms introduced in India since 1991 had two basic dimensions: a physical one, representing loosening of controls and enhanced enterprise freedom and second, financial, involving better access to funds. The private corporate sector witnessed a higher growth in sales and net profits during the period of reforms than during the pre-reform period. This came about mainly due to external factors based on policy changes centred around low interest and tax rates, capital markets, foreign borrowings, etc. Internal factors in the form of cost reduction had a limited impact on profits. However, the rising profitability has also been accompanied by a falling return on capital employed signifying the continuing low utilisation of capacity built up during the reform period. An equity market boom along with the withdrawal of concessional funds for long-term lending helped the process of deleveraging of the corporate sector. Large companies performed better than the others in terms of growth in sales, cost reduction and growth in net profits. Their return on capital employed, however, has fallen the sharpest as they accessed more debt and equity funds to create a large addition to manufacturing capacity. There has been significant variation in the performance of different industries in the private corporate sector. However, industries which successfully implemented cost reduction measures include telecommunications, silk textiles, pesticides, inorganic chemicals, two & three-wheelers, passenger cars, aluminium, nitrogenous fertilisers, woollen textiles, organic chemicals, drugs & pharmaceuticals and ceramic products.

Overall, capacity build-up in real terms accelerated during 1994-97. There had been a gradual increase in capacity utilisation of the private corporate sector signifying somewhat faster growth in output than capacity. Still, the level of capacity utilisation has remained low indicating the presence of large excess capacity particularly in intermediate and capital goods. The capacity utilisation rates for basic goods and consumer durable goods increased steadily during 1994-97 reaching high levels by 1996-97.

Companies in the private corporate sector have become more outward oriented with

both export and import intensities of their net sales increasing in the 1990s. In the post-reform period, export intensity of the private corporate sector has stayed higher than its import intensity, in sharp contrast to the trend in the pre-reform period.

Finally, the study has noted the reversal of trend in almost every indicator of corporate performance in 1996-97. This is indicative of the tailing off of the impact of the package of reform measures introduced so far and the need for a second round of reforms to further stimulate the corporate sector.

The next phase of reforms should focus on both physical and financial aspects of reforms. First of all, the corporate sector has been facing constraints in their attempts to reduce costs. Reforms should aim at removing these constraints in areas such as labour and land laws, infrastructure facilities and regulatory procedures relating to mergers and acquisition of companies. Further, imports should be more liberalised as this is necessary for improving the efficiency of firms and also hastening the growth in exports.

Financial reforms should usher in a low interest rate regime. There is further scope to improve the efficiency of the banking sector and it is also necessary to reduce the fiscal deficit of the government. Lastly, the revival of the equity market is essential to provide a boost to industrial investment.

The better performance of the private corporate sector during the post-reform period is predominantly due to the advantages stemming from policy induced external factors such as low interest rates, taxes and availability of cheap external sources of funds including domestic equity. There is no overwhelming evidence to show that firms have brought about large reduction in manufacturing costs. Unless, firms become more competitive through reducing their costs, the good corporate performance is not sustainable.

Appendix 1: Performance of 973 Sample Companies, 1991-97

(Change in per cent)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	Average (1991-97)
Net sales	21.2	14.9	17.5	23.4	25.8	13.1	19.3
Other income	29.4	31.5	10.5	46.3	30.5	9.1	26.2
Non-recurring income	13.0	47.9	61.6	34.7	-24.8	6.5	23.2
Total income	21.4	15.4	15.4	25.6	25.6	11.8	19.2
Manufacturing expenses	21.1	15.4	14.5	24.0	25.4	13.0	18.9
PBDIT	23.3	15.3	20.1	33.5	26.1	6.6	20.8
Interest	32.2	25.7	4.5	9.6	27.6	28.0	21.3
Depreciation	19.1	19.8	-4.6	21.1	27.0	28.2	18.4
PBT	18.2	3.2	53.6	56.9	25.1	-11.9	24.2
Tax	48.5	-18.4	19.6	31.7	35.0	12.3	21.5
PAT	7.6	13.5	65.3	63.2	23.1	-17.2	25.9

Note: PBDIT: Profits before depreciation, interest and tax
PBT: Profits before tax
PAT: Profits after tax

Appendix 2: Corporate Tax Rates, 1991-97

(Per cent)

	Tax Rate	Surcharge	Total
1991-92	45	15	51.75
1992-93	45	15	51.75
1993-94	45	15	51.75
1994-95	40	15	46.00
1995-96	40	15	46.00
1996-97	40	7.5	43.00

Appendix 3: Profitability Ratios (973 companies), 1991-97

(Per cent)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
PBDIT/Net sales	17.1	16.6	16.7	18.0	18.7	17.7
PAT/Net sales	4.4	3.8	5.3	7.3	7.8	5.7
PAT/GFA	8.1	6.6	9.1	12.3	13.2	8.8
PAT/Total assets	4.7	3.7	5.0	6.5	6.9	4.7
PAT/Networth	16.6	12.7	15.2	17.3	17.3	12.0
PBDIT/Capital employed	29.4	25.9	23.9	23.8	24.4	21.8

Note: PBDIT: Profits before depreciation, interest and tax
PAT: Profits after tax
GFA: Gross fixed assets

Appendix 4: Sources of Funds, 1991-97

(Percentage share in total)						
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Internal	**29.9**	**29.0**	**27.7**	**26.6**	**35.3**	**35.2**
Retained profits	14.4	11.3	16.9	17.5	23.4	16.6
Depreciation	15.5	17.6	10.8	9.2	11.9	18.6
External	**70.1**	**71.0**	**72.3**	**73.4**	**64.7**	**64.8**
Capital markets	16.5	32.6	43.4	32.9	14.1	15.9
Fresh capital	3.0	5.7	5.8	4.1	3.7	1.1
Share premium	3.3	17.9	25.8	25.8	11.4	6.3
Debentures/bonds	10.4	8.5	10.8	2.6	-1.0	7.4
Fixed deposits	-0.2	0.4	1.0	0.3	0.0	1.1
Borrowings	29.9	27.1	7.6	22.2	31.6	34.4
Banks (short)	8.4	11.1	-2.4	9.2	13.4	4.4
Banks (long)	0.0	0.1	-0.5	4.8	4.8	4.0
FIs	14.8	11.7	3.5	3.4	6.9	12.5
Inter-corporate	0.9	0.1	1.1	1.1	0.4	1.1
Foreign	2.1	2.5	1.8	4.7	5.2	8.3
Commercial paper	0.7	0.4	2.9	-1.5	-0.9	1.5
Others	3.0	1.2	0.2	2.9	1.8	2.5
Current liabilities	23.8	11.3	21.3	18.3	19.1	14.5
Sundry creditors	14.1	7.1	10.2	9.7	12.0	9.5

Appendix 5: Uses of Funds, 1991-97

(Percentage share in total)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Gross fixed assets	53.5	55.0	51.2	45.6	57.7	69.5
Inventories	13.8	16.0	5.5	12.8	14.2	6.7
Financial investments	2.5	2.2	17.5	14.6	2.7	5.9
Receivables & debtors	25.6	20.1	16.8	19.2	21.9	18.5
Others	4.6	6.7	9.0	7.8	3.5	-0.6

Appendix 6: Growth in Sales and Net Profits (Size-wise), 1991-97

(Per cent)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Sales						
All companies	21.2	14.9	17.5	23.4	25.8	13.1
Small	19.9	11.8	13.7	16.6	16.9	0.6
Medium	20.2	15.4	14.7	22.1	24.4	9.3
Large	22.3	15.3	20.1	25.6	28.3	17.6
Net Profits						
All companies	7.6	13.5	65.3	63.2	23.1	-17.2
Small	14.8	-18.3	112.2	53.0	-0.4	-82.4
Medium	-1.4	15.3	71.5	53.9	22.8	-23.6
Large	9.1	16.4	56.6	71.9	26.0	-8.5

Appendix 7: Profitability Ratios (Size-wise), 1991-97

(Per cent)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Net profits/Sales						
All companies	4.4	3.8	5.3	7.3	7.8	5.7
Small	3.2	2.0	3.6	4.7	3.9	0.7
Medium	3.6	3.0	4.6	6.2	6.6	4.2
Large	5.1	4.6	6.2	8.5	9.2	6.9
Return on Capital						
All companies	29.4	25.9	23.9	23.8	24.4	21.8
Small	34.1	30.0	28.9	27.6	24.6	19.7
Medium	30.8	23.0	26.8	26.3	26.5	23.4
Large	27.9	23.8	22.0	22.2	23.5	21.4

Appendix 8: Average Interest Rate (Size-wise), 1991-97

						(Per cent)
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
All companies	15.7	15.7	14.1	13.1	13.6	14.2
Large	14.1	13.8	12.2	10.9	11.4	12.2
Medium	16.3	17.1	15.3	14.2	15.0	15.4
Small	16.6	17.0	15.5	14.9	15.4	16.1

Appendix 9: Equity Dividend Rate (Size-wise), 1991-97

						(Per cent)
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
All groups	19.8	19.8	23.6	27.2	27.8	27.9
Small	11.4	11.1	12.7	14.4	13.0	11.2
Medium	16.2	16.3	18.7	21.6	22.0	21.1
Large	25.7	25.3	30.8	33.5	36.9	37.9

Appendix 10: Share of Foreign borrowings in Total Sources (Size-Wise), 1991-97

				(Per cent)
Year	All Companies	Small	Medium	Large
1991-92	2.1	-0.2	1.7	2.6
1992-93	2.5	-0.2	0.8	3.5
1993-94	1.8	0.4	0.2	2.6
1994-95	4.7	0.0	0.5	7.1
1995-96	5.2	1.4	0.3	8.2
1996-97	8.3	0.8	1.3	11.7

Appendix 11: Debt-Equity Ratio (Size-Wise), 1991-97

(Per cent)				
Year	All Companies	Small	Medium	Large
1991-92	1.64	2.24	1.79	1.48
1992-93	1.49	2.13	1.64	1.34
1993-94	1.15	1.57	1.17	1.09
1994-95	0.95	1.26	0.98	0.90
1995-96	0.92	1.19	0.97	0.87
1996-97	1.01	1.24	1.03	0.98

Appendix 12: Industry-wise Capacity Utilisation

Product groups for which utilisation rate had been consistently more than 80 per cent during 1993-97

(i) Basic goods industries : Cement, caustic soda, urea and soda ash.

(ii) Capital goods industries: Elevators, air compressors, agricultural machinery and miscellaneous electrical equipment.

(iii) Intermediate goods industries : Petroleum products and nylon filament yarn.

(iv) Consumer durables : Diamonds and passenger cars.

(v) Consumer non-durables : Lamp filaments, tea and "soaps & detergents".

Product groups for which utilisation rate had been consistently below 50 per cent during 1993-97

(i) Basic goods industries: Pig iron, ferrous castings, and industrial gases like nitrogen and oxygen.

(ii) Capital goods industries: Pressure vessels, printed circuit boards, wires & cables other than jelly filled cables, cutting tools, machine tools, computers, construction and mining machinery and dairy equipment.

(iii) Intermediate goods industries: Polypropylene yarn, electronic components, paints & varnishes and batteries.

(iv) Consumer durables: Consumer entertainment electronics.

(v) Consumer non-durables: Dairy products, tablets, miscellaneous rubber products, leather products, liquids, food products and fats & oils.

Appendix 13

Average Import and Export Intensities of the Private Corporate Sector by Industry Group

(Per cent)

	No. of Cos.	Import Intensity		Export Intensity	
		1991-94	1994-97	1991-94	1994-97
Automobile & auto ancillaries	58	6.6	8.4	9.0	8.7
Cement	29	2.5	4.4	3.2	4.0
Chemicals	129	9.9	12.2	7.3	9.2
Drugs & pharmaceuticals	48	12.7	15.4	13.2	19.6
Electrical equipments	30	9.2	12.4	7.6	8.8
Electronics	47	14.8	18.0	9.9	9.8
Food products	54	2.6	5.1	18.5	16.2
Gems & jewellery	7	45.2	53.6	95.8	80.8
Glass & pottery	20	9.8	13.2	11.3	16.8
Leather & leather products	14	6.6	13.2	25.1	28.6
Machinery manufacture	104	10.0	11.2	7.6	7.6
Metal products (ferrous)	67	13.4	20.3	11.6	13.2
Metal products (non-ferrous)	11	7.5	15.6	8.8	12.7
Petrochemicals	46	11.4	20.6	6.9	10.5
Pulp, paper & paper products	21	8.5	9.8	4.3	6.3
Rubber products	13	9.5	11.4	11.2	8.1
Shipping	6	3.1	0.5	72.1	65.2
Sugar	12	0.9	2.0	2.4	1.0
Textiles	114	6.6	16.2	18.8	24.6
Trading	12	7.0	7.2	85.2	87.0
Diversified	33	8.1	15.5	7.0	8.4
Miscellaneous	120	7.1	9.4	32.9	32.0
All industries	**995**	**8.8**	**13.1**	**12.2**	**13.5**

References

Alagh Y. K. (1998), "Technological Change in Indian Industry", *Economic and Political Weekly*, January 24.

Bhattacharya, Manas (1989), "Import-Intensity of Exports", *Indian Economic Journal*, Vol. 36.

Clements, Kenneth W. and Larry A. Sjaastad, (1984), "How Protection Taxes Exporters", *Thames Essays*, Trade Policy Centre, London.

Desai, Ashok (1998), "The Industrial Recession Revisited", *Business Standard*, Mumbai, April 14, 1998.

Dholakia, R.H., *et al*. (1992), "Issues in Strategy for Export Promotion"' *Economic and Political Weekly*, November, Mumbai.

Export-Import Bank of India (1991), "How Import Intensive are Indian Exports?", *Occasional Paper*, No. 16, December, Mumbai.

Greenaway, David and Chris R. Milner (1987), "True Protection' Concepts and Their Role in Evaluating Trade Policies in LDCs", *Journal of Development Studies,* Vol. 23, pp. 200-19.

Harris J. R., Schiantarelli F. and Siregar M. G. (1994), "The Effect of Financial Liberalisation on the Capital Structure and Investment Decisions of Indonesian manufacturing Establishments", *The World Bank Economic Review,* Volume 8, No. 1.

Hernandez-Cata, Ernesto (Dec 1997), "Liberalization and the Behaviour of Output During the Transition from Plan to Market, *"IMF Staff Papers"*, Vol. 44, No. 4, pp. 405-429.

Huisman J. and Hermes N. (1997), "Financial Liberalisation in India and the Impact on Business Investment", *International Journal of Development Banking,* Volume 15,

No. 2, July 1997 (July-December).

Indian Institute of Foreign Trade (1990), *Impact of Liberalisation on Exports*, New Delhi.

Majumdar, S.K. and Chibber, P.K. (1997), "The Export Orientation of Firms in Indian Industry: Does Foreign Ownership Matter?", Centre for International Business Education, University of Michigan, mimeograph.

Neogi C. and Ghosh B. (1998), "Impact of liberalisation on Performance of Indian Industries - A Firm level Study", *Economic and Political Weekly*, February 28.

Rao S. L. (1998a), "The Indian Dinosaurs", *Economic and Political Weekly*, January 17.

Rao S. L. (1998b), "Towards a National Competition Policy for India", *Economic and Political Weekly,* February 28.

Sarma, Atul (1990), "Import Intensities in the Indian Industries in the context of New Economic Policy - An Analysis in input-output framework", *Man and Development*, September.

Singh, D. (1994), "Import of Liberalisation on Exports", *RBI Occasional Papers*, Vol.15, No. 1, March, pp. 55-74.

Singh Ajit (1998), "Liberalisation , the Stock Market, and the Market for Corporate Control: A Bridge too Far for the Indian Economy?", "*India's Economic Reforms and Development: Essays for Manmohan Singh",* edited by Isher Judge Ahluwalia and I.M.D.Little.

Srinivasan, T.N. (1998), "India's Export Performance: A Comparative Analysis", in Ahluwalia, I.J. and Little, I.M.D. ed., *India's Economic Reforms and Development, Essays for Manmohan Singh*, Oxford University Press, New Delhi, pp. 197-228.

Tarapore S.S. (1997), "An assessment of Indian Economic Reforms", *Prajnan* Volume XXV, Nos. 3-4.

UNIDO (1996), "*Industrial Development: Global Report*".

Varma J. R. (1998), "Indian Financial Sector Reforms: A Corporate Perspective", *Vikalpa: The Journal for Decision Making,* Volume 22, No. 1, Jan-Mar 1998, IIM Ahmedabad.

World Bank (1997), "*India: Sustaining Rapid Economic Growth: A World Bank Country Study".*