

**Trade Liberalization and India's Imports in the Reform Period  
(1990-91 to 2000-01).**

Dissertation submitted to Jawaharlal Nehru University  
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MASTER OF PHILOSOPHY

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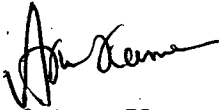
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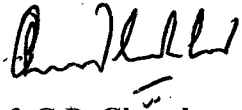
CERTIFICATE

This is to certify that the dissertation entitled “**Trade Liberalization and India’s Imports in the Reform Period (1990-91 to 2000-01)**”, submitted by Ms. Anuradha Basumatari, is in partial fulfilment of the requirements for the award of the degree of **MASTER OF PHILOSOPHY** of this University. This dissertation is her own work and has not been previously submitted for any other degree to this or any other university.

We recommend that this dissertation be placed before the examiners for evaluation.

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Prof. C.P. Chandrasekhar  
(Supervisor)

In Memory of  
My Late Uncle  
Kumud Dutta  
And  
Dedicated to My Parents

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# Chapter – 1

## Introduction

In the post Independent economic history of India, 1991 is an important landmark year wherein the country went through a severe economic crisis. The response to the crisis materialized in a set of policies aimed at stabilization and structural reform. While the stabilization policies were aimed at correcting the weaknesses that had developed on the fiscal and the balance of payments fronts, the structural reforms sought to remove the rigidities that had entered into the various segments of the Indian economy. The structural reforms introduced in the early 90s broadly covered the areas of fiscal policy, industrial licensing, foreign trade, foreign investment, exchange rate management and the financial sector. The principal aims of the structural adjustment policies can be stated as follows:

- i. to do away with or substantially reduce controls on capacity creation, production and prices, and let market forces influence the investment and operational decisions of domestic and foreign economic agents within the domestic tariff area;
- ii. to allow international competition and therefore international relative prices to influence the decisions of these agents;
- iii. to reduce the presence of state agencies in production and trade, except in areas where market failure necessitates state entry; and
- iv. to liberalize the financial sector by reducing controls on the banking system, allowing for the proliferation of financial institutions and instruments and permitting foreign entry into the financial sector.

The crisis in the balance of payments was widely identified as the proximate cause of the impetus towards substantial economic liberalization that was initiated in 1991. However, under present circumstances India's balance of payments (BOP) position seems to be the principal source of comfort for India's policy makers. The BOP has been in an overall surplus since 1996-97, with reserves rising, on an average, by US \$6.21 billion per annum during 1996-97 to 2001-02 (*Economic Survey, 2002-2003*). Large inflows of invisibles in 2001-02, which reached a level of 2.9 percent of GDP, ensured a small current



account surplus of 0.3 percent of GDP after a gap of 24 years (current account surplus was last recorded in 1977-78), so that the large inflows of deposits, debt and investment contributed in the net to an accumulation of reserves that have in recent times touched a record level of around US \$74 billion as on January 31, 2003. While remittance, debt and investment flows have played an important role here, the fact is India's trade deficit which barring the two years 1998-99 and 1999-2000 has remained close to or well below the levels reached at the end of the 80s also contributed to create these conditions. We may also mention that there has been a sharp deceleration in export growth since 1995-96. While exports rose by 91 percent over the six-year period 1989-90 to 1995-96, the increase over the subsequent six years ending in 2001-02 was only 38 per cent (Chandrasekhar, 2002). Exports (in dollar value) declined by 1.6 per cent in 2001-02, as against a growth of 21.0 per cent in 2000-01 and an average rise of 8.6 per cent in the 1990s as per data published by the Directorate General of Commercial Intelligence and Statistics (DGCI&S). Growth in volume of exports decelerated sharply from 23.9 per cent in 2000-01 to 3.8 per cent in 2001-02. This has been attributed to the weakening of global demand and slackening of trade growth since 2001 (*Economic Survey, 2002-2003*). Therefore, the dynamism that was expected on the export front in the wake of reform has not been realized. On the other hand, while exports on BOP basis in 2001-02 remained stagnant at previous year's level, imports declined by 2.8 per cent, thus resulting in a decline in merchandise trade deficit, as percent of GDP from 3.1 percent in 2000-01 to 2.6 percent in 2001-02 (*Economic Survey, 2002-2003*). This would imply that containment of imports has had a crucial role to play in the "gains" registered on the trade front.

A distinguishing feature of the economic reforms of the 90s was the effort to dilute import controls by rapidly reducing the number of tariff items subject to quantitative restrictions, licensing, and other forms of discretionary controls on imports. India has been following a consistent policy of gradual removal of import restrictions since 1991, when the economic reforms were initiated. India began removing BOP related Quantitative Restrictions (QRs) unilaterally since 1996. QRs were removed on 488 items in 1996, 391

items in 1997 and 894 items in 1998. As per India's commitments to the WTO<sup>1</sup>, out of the remaining 1,429 items for which QRs were maintained on BOP grounds under the General Agreement on Tariffs and Trade (GATT) provisions, QRs on 714 items were removed on March 31, 2000 and the balance QRs on 715 items were removed on March 31, 2001. With this progressive removal of QRs maintained on BOP considerations, restrictions still in force only relate to those items as permissible under Articles XX and XXI of the GATT on grounds such as security, health, safety or moral conduct (*Report on Currency and Finance*, 2001-02). The relaxation of QRs was reflected in the decline in the proportion of canalized items in total imports in value terms from 27 per cent to 19 per cent between the ten-year period from 1988-89 to 1997-98. Exactly 340 items had been shifted from the 'Restricted list' to the 'Open General License (OGL)<sup>2</sup> list', with effect from April 1998. Imports of capital goods and intermediates were the first to be substantially liberalized by placing them under the OGL category, by reducing tariffs and by offering concessional duties for 'project imports' and imports allowed at zero duty subject to promises of exports to be realized. However, a number of significant measures of liberalization of industrial and trade policy had been introduced in the budget of 1985 under the Rajiv Gandhi government. As part of *Import deregulation* measures, restrictions on imports of capital goods were somewhat eased to encourage technological modernization. Also, there was some replacement of quantitative import restrictions by tariffs, primarily in cases where there was no competing domestic production. In 1985-86, the very first year that the liberalization policy was introduced, the dollar value of non-oil imports increased by 22 percent from the previous year, the annual average for the period being around 14 percent. From 1985-86 to 1989-90, the dollar value of imports increased by about 8 percent a year on an average. During the same period there was a significant reduction in India's oil import bill from US \$4078.0 million to US \$3009.0 million, especially in 1986-87 when it fell to US \$2199.5 million. The main import growth came from capital goods, gems, intermediate goods and components. This was partly the result of the continuation and extension of import liberalization. The general notion was that there was little

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<sup>1</sup> The removal of QRs on 1,429 items was the direct consequence of the Indo-US agreement carried out within the provisions of WTO. Since India did not have a balance of payments problem, the QRs could not be continued (Krishna, 2001).

<sup>2</sup> An item being placed on the OGL list implies free import.

liberalization of imports that competed with domestic production (except to some extent for exporting firms). Liberalization of noncompetitive imports was somewhat greater, particularly for inputs in industries such as computers, electronics and chemicals. Therefore, unlike the 90s when the pace of liberalization was substantially accelerated, especially after 1998 wherein import controls were lifted and quantitative restrictions removed along with continuous lowering of import tariffs, liberalization was limited and halting during the 80s.

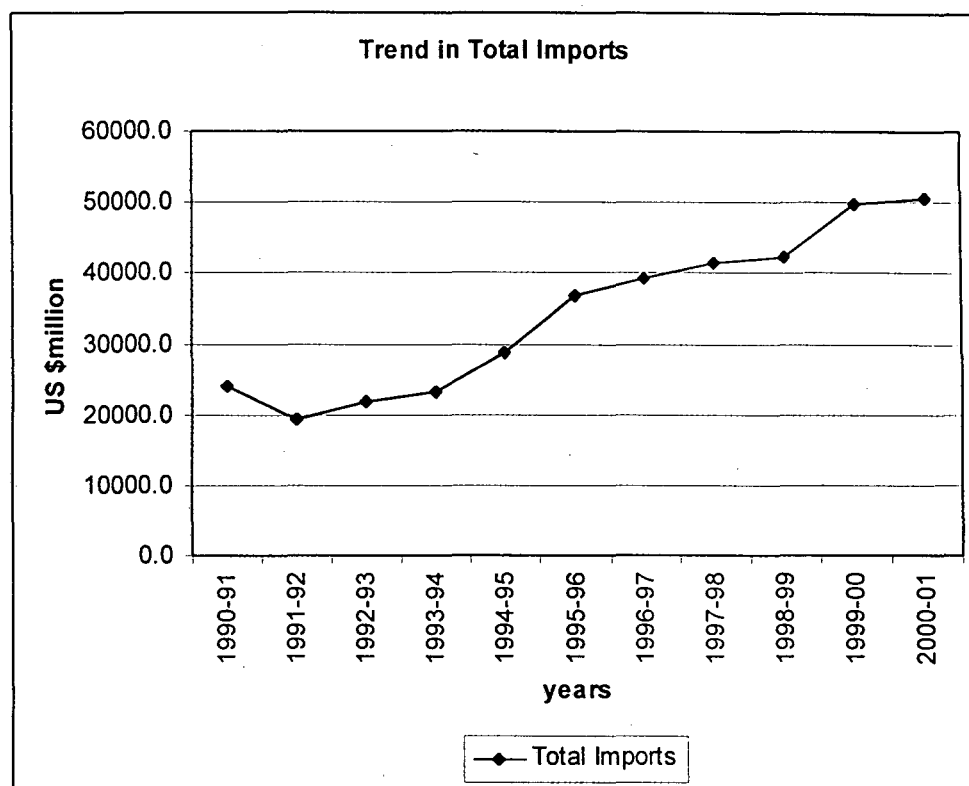
The Government has clearly stated its commitment to bringing tariff rates down to international levels in a phased manner. There has been a consistent decline in these rates over the years 1998-99 to 2000-01 from the peak rate of 300 percent in June 1991 to a peak rate of 35 percent in 2000-01. Capital goods imports, which were earlier subject to tariff rates of around 100 percent, now attracted duties in the range of 20-35 percent, with the basic import duty on general capital goods at 25 percent. Import duties on equipments are even lower for projects in specific sectors and nil for export oriented projects. Thus with aggressive pursuance of policies with respect to opening up of the economy to import penetration in the 90s, serious apprehensions were raised about the potential adverse effects of such penetration on manufacturing and in particular on employment-intensive small-scale industries. Official spokesmen indicate that measures oriented towards freer imports haven't really resulted in an import surge as feared, citing the trends in imports as evidence. The evidence cited by them does indeed show a deceleration in import growth after 1996 (CHART 1.1). The total import bill in dollar terms rose sharply in the mid 90s from US \$24072.5 million in 1990-91 to US \$36675.3 million in 1995-96, decelerating somewhat in the years after 1995-96 till 1998-99 and rising sharply again in 1999-2000. In fact, the average annual increase in the import bill in dollar terms is 15.4 per cent for the period 1992-93 to 1996-97 and 6.8 per cent for the period 1997-98 to 2000-01<sup>3</sup>. Therefore, it was argued, the fear that a move aimed at diluting import controls had the potential to displace existing domestic production either directly by imports or indirectly by new products assembled domestically from imported inputs was misplaced. In fact, they held

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<sup>3</sup> Since 1991-92 was an exceptionally bad year, the annual rate of growth of imports having declined by 19.4 per cent from the previous year, the first phase of reforms has been taken to start from 1992-93 onwards and the second phase from 1997-98 onwards.

the view that Indian producers have clearly been able to hold their own against international competition.

CHART 1.1



The key issue that has arisen in recent years is the deceleration in growth in general, and in industry and agriculture in particular. The growth performance of the commodity producing sectors is critical for improving overall growth rate of the economy. The major objective of reforms in the industrial sector was to attain faster industrial growth aided by improved productivity and efficiency, so as to be competitive, domestically as well as globally. The initial exuberance reflected by this sector in terms of high growth in investment and production, particularly in manufacturing, however, could not be sustained. Therefore, the initial surge in imports that was observed seems to have been neutralized by the deceleration in the overall growth rate of the economy post mid-90s. Of the several factors that could be responsible for the 'containment' of imports post mid 90s, two

important factors that one comes across in literature are (i) the deceleration in industrial growth after 1995-96 and (ii) a sharp fall in the unit value of imports into India.

We discuss the slowdown in the commodity producing sectors, more specifically industry in the second chapter. Within industry we look at the manufacturing slowdown in greater detail, the role played by demand, saving and investment behavior and also the aspect of sustainability of services sector growth, which has been the driving force behind the present growth rate of the economy.

The third chapter examines whether and to what possible extent the deceleration in growth in the late 1990s explains the lower than expected rate of expansion of imports and also looks at trends in the import-production ratio in Non-Bulk Non-Export Related imports and its sub-categories, particularly Capital goods.

The fourth chapter looks at the performance of imports at a disaggregated level; bulk and non-bulk non-export related imports are studied separately and their movements at a disaggregated level examined with a view towards determining the role played by prices in influencing the size of India's import bill.

## **Chapter-2**

### **Growth deceleration in the Commodity Producing sectors and Sustainability of Services sector growth**

Economic reforms are now more than a decade old. This period witnessed a transition of India from a closed economy to a reasonably open economy. India's economic reforms were set off by fiscal and external sector compulsions reflected in the crisis of 1991. The major thrust driving the reform process was the quest for higher growth and efficiency along with macroeconomic stability. Macroeconomic stabilization was sought to be achieved by correcting the fiscal, external and monetary imbalances that had become unsustainable by the end of the 1980s. These policy changes were accompanied by structural reforms to impart competitive strength to the real economy. Structural reforms took the form of industrial deregulation, liberalization of foreign direct investment, trade liberalization, public enterprise reform and financial sector reform.

The reforms embraced all the diverse segments of economic activity, though their coverage and depth varied across the different sectors of the economy. The 'touchstone' of any reform process is the impact it has on the real economy. The first phase of the reform period, i.e., 1992-93 to 1996-97 was characterized by improved growth performance, the overall growth in this period being led by a marked acceleration in industrial growth. The growth momentum, however, slackened in the latter phase of reforms, i.e., 1997-98 to 2002-03, with the slowdown exacerbated by the global recessionary conditions.

For a meaningful decadal analysis of overall growth during the reform period, the period of reforms has been sub-divided into two phases viz., Phase I (1992-93 to 1996-97) and Phase II (1997-98 to 2002-03) in accordance with the RBI arrangement. The entire period of Phase I has been further divided into two sub-periods based on the growth performance of the economy. The first sub-period (1992-93 to 93-94) was the period of recovery from the crisis while the second sub-period (1994-95 to 1996-97) was marked by high growth of the economy. During the crisis year of 1991-92, the rate of growth of real GDP had dipped to 1.3 per cent, engendered to a large extent by sharp containment of

credit and accompanied by fiscal as well as import contraction. The economy however, made an impressive recovery during the first sub-period of Phase I (i.e., 1992-93 to 1993-94) with the real GDP growth improving to an average of 5.5 per cent per annum spread over all sectors. The economic recovery having gathered momentum in the first sub-period of Phase I was therefore placed on a higher growth trajectory in the subsequent period. During the second sub-period of Phase I, the growth rate of GDP averaged as much as 7.5 per cent per annum<sup>4</sup> (*Report on Currency & Finance*, RBI, 2001-02). The overall growth during the reform period was marked by higher services sector growth (8.0 per cent as compared with 6.7 per cent during the 1980s), while agriculture and industry witnessed some deceleration. This change in the growth process resulted in shifts in the production structure. The services sector (including construction) with high growth rate emerged as the 'lead' sector contributing over 50 per cent of GDP in the period of reforms as compared with 44.4 per cent in the pre-reform decade. The deceleration in agricultural growth led to a decline in its share to 27.0 per cent in the reform period from 35.7 per cent during the pre reform decade. The growth performance of agriculture was subdued in the 1990s with real GDP originating from agriculture growing at a modest 2.9 per cent resulting from near stagnation in crop yields and falling rate of public sector capital formation in this sector, despite consecutive good monsoons. Over the 1990s, the growth rate of foodgrain production dropped to 1.75 per cent per annum from 3.38 per cent over the 1980s (Chandrasekhar and Ghosh, 2002). The drastic decline in real public investment has been stated as one of the important factors behind the drop in the rate of growth of foodgrain output. Real public sector capital formation in agriculture at 1980-81 prices was found to have fallen from Rs.1,796 crore in 1980-81, to Rs.1,154 crore by 1990 and remained close to that level thereafter.

The adverse impact of the crisis of 1991 was perhaps most pronounced in the case of the industrial sector in India, which experienced a negative growth of 0.6 per cent in 1991-92. Following the reform measures, there was an initial turn-around in the industrial growth profile. There was a sharp acceleration in the rate of growth of overall GDP largely

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<sup>4</sup> This was the only period in India's economic history during which real GDP growth exceeded 7.0 per cent consecutively over a period of three years.

due to the phenomenal growth of 10.8 per cent per annum in the industrial sector. The upswing in industrial growth during 1994-95 to 1996-97 (second sub-period of Phase I) has been regarded as an outcome of removal of various constraints in the form of licensing and other restrictions as a part of the liberalization initiatives. The growth of GDP, however, moderated in 1997-98, which marks the beginning of Phase II. Within the second phase, real GDP growth after dipping to 4.8 per cent in 1997-98, recovered during the years 1998-99 and 1999-2000 to over 6 per cent. One of the factors to which this recovery has been attributed is the high growth emanating from services sector, and within the services sector, the growth of 'community, social and personal services', particularly 'public administration and defence (PAD)'. The Fifth Pay Commission Award led to an increase in GDP originating from the sub-sector of 'public administration and defence' in 1997-98, with its lagged effect persisting till 1999-2000<sup>5</sup>. The growth in PAD during the period 1997-98 through 1999-2000 has been far higher than growth in services excluding PAD and therefore PAD undoubtedly contributed to the overall growth of services. However, the perception that PAD alone is responsible for higher services growth has been contradicted. In fact, the role of public administration and defence in the growth of services has been accepted as limited with the impetus coming from sources other than PAD. This limitation has been based on the finding that although the Fifth Pay Commission related pay increases might have distorted estimates of GDP originating from services for a few years; they do not affect the trend growth that remains at 8.2 per cent during the reform-period (1992-93 to 2001-02) even if Government administration is excluded altogether (*Report on Currency and Finance 2001-02*, RBI). Here one may mention that although India ranked high during the 1990s among select emerging market economies in terms of average real GDP growth (TABLE 2.1), the growth momentum in most other emerging market economies was led by the industrial sector rather than the services sector. Therefore, although the services sector provided some resilience to the overall growth process, the pronounced deceleration in manufacturing activities during the second phase of the reform period i.e., 1997-98 to 2002-03 posed a major challenge for sustaining the growth momentum. The average rate of growth of manufacturing was found to have

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<sup>5</sup> Increased expenditure of the Government in the form of wage bill gets directly reflected in its value added even without any addition to services.



decelerated by as much as eight percentage points during this phase as compared to the phase 1994-95 to 1996-97 (TABLE 2.2). In the more recent period, growth of overall GDP dipped to 4.4 per cent in 2000-01. This has been attributed to poor performance of agriculture, coupled with a significant deceleration in the growth rate of GDP from the services sector, particularly 'financing, insurance, real estate and business services'.

**TABLE 2.1**  
**Growth Performance in Select Emerging Market Economies**

(Annual average growth rate in percent)

Country	GDP		Agriculture		Industry		Services	
	1980-1990	1990-2000	1980-1990	1990-2000	1980-1990	1990-2000	1980-1990	1990-2000
Argentina	-0.7	4.3	0.7	3.4	-1.3	3.8	0.0	4.5
Brazil	2.7	2.9	2.8	3.2	2.0	2.6	3.3	3.0
China	10.1	10.3	5.9	4.1	11.1	13.7	13.5	9.0
<b>India</b>	<b>5.8</b>	<b>6.0</b>	<b>3.1</b>	<b>3.0</b>	<b>6.9</b>	<b>6.4</b>	<b>7.0</b>	<b>8.0</b>
Indonesia	6.1	4.2	3.6	2.1	7.3	5.2	6.5	4.0
Malaysia	5.3	7.0	3.4	0.3	6.8	8.6	4.9	7.2
Mexico	1.1	3.1	0.8	1.8	1.1	3.8	1.4	2.9
Thailand	7.6	4.2	3.9	2.1	9.8	5.3	7.3	3.7

Source: Reproduced from Report on Currency & Finance, 2001-02, RBI

**TABLE 2.2**  
**Sectoral Growth Rates of Real Gross Domestic Product: Reform Period**

(percent)

Sector	Phase I		Phase II
	Sub-period I:	Sub-period II:	1997-98 to 2002-03
	1992-93 to 1993-94	1994-95 to 1996-97	
1. Agriculture & allied activities	5.0	4.6	1.0
Agriculture	5.2	4.7	*
2. Industry	5.3	10.8	4.3
Manufacturing	6.3	12.2	4.2
3. Services	6.0	7.9	7.9
4. GDP at Factor Cost	5.5	7.5	5.3

\* Not available separately

Source: Reproduced from Report on Currency & Finance, 2001-02, RBI

Against this backdrop, the following section examines crucial macro-economic aggregates viz., saving and investment during the period of reforms. Such an exercise

becomes important since the process of economic growth hinges critically on the generation of greater saving and its channelisation into productive investment.

### Saving Behavior:

During the period of reforms as a whole, the rate of Gross Domestic Savings (GDS) increased to 23.1 per cent from 19.8 per cent in the preceding decade with some year-to-year variability being witnessed in both periods. The behavior of the saving rate and economic growth in India during the reform period seems to suggest that the high growth phase is associated with higher order of increase in domestic saving (Table 2.3).

**TABLE 2.3**  
**Rates and Composition of Gross Domestic Saving by Institutional Sources**

Item	(percent)		
	Phase I		Phase II
	Sub-period I: 1992-93 to 1993-94	Sub-period II: 1994-95 to 1996-97	1997-98 to 2001-02
<b>1. Private Sector</b>	<b>21.0</b> (95.0)	<b>22.6</b> (92.7)	<b>24.1</b> (104.6)
1.1 Household Sector	18.0 (81.1)	18.3 (75.0)	20.2 (87.5)
1.1.1 Financial Saving	9.9 (54.9)	10.4 (56.7)	10.5 (52.2)
1.1.2 Physical Saving	8.1 (45.1)	7.9 (43.3)	9.7 (47.8)
1.2 Private Corporate Sector	3.1 (13.8)	4.3 (17.6)	3.9 (17.1)
<b>2. Public Sector</b>	<b>1.1</b> (5.0)	<b>1.8</b> (7.3)	<b>-1.1</b> (-4.6)
<b>3. Gross Domestic Saving</b>	<b>22.2</b> (100.0)	<b>24.4</b> (100.0)	<b>23.1</b> (100.0)

Notes: 1) Rates have been worked out as a percentage of GDP at current market prices.

2) Figures in parentheses indicate percentage share in Gross Domestic Saving except for items 1.1.1 and 1.1.2, where they indicate the percentage shares in household sector saving.

Source: Reproduced from Report on Currency & Finance, 2001-02, RBI

Within the first phase, the second sub-period that was also a period of high GDP growth, witnessed an increase of 2.2 percentage points in the domestic saving rate over the first sub-period. During the second phase of reforms, which was marked by a distinct

deceleration of growth, the saving rate declined by 1.3 percentage points to reach 23.1 percent from 24.4 per cent in the second sub-period of Phase I. Amongst the sources of domestic saving, a salient feature of the 1990s was the rising trend in the household sector saving. Within the household sector saving, the rate of saving held in financial assets steadily increased during this period, which could be attributed to more efficient financial intermediation, greater opportunities for diversification across financial assets and emergence of market related returns.

Secondly, the improved performance of the private corporate sector saving during the second sub-period of Phase I can be attributed to high industrial growth and rising profitability of corporate entities (TABLE 2.3). On the other hand, the distinct slowdown in corporate sector saving witnessed since 1996-97 can be attributed to declining profitability of these entities engendered by industrial slowdown.

Thirdly, the public sector witnessed a noticeable decline in its saving during the reform period. A considerable level of strain had been placed on the saving from this sector during the period of reforms, despite the increased emphasis on fiscal discipline (at least in the initial years) by the rising expenditure burden on account of factors such as higher interest payments and salaries coupled with a fall in tax-GDP ratio. Public sector saving turned negative (-1.1 per cent) during 1997-98 to 2001-02 from 1.8 per cent of GDP during 1994-95 to 1996-97-a reduction of 2.9 percentage points. During the 1990s, Gross tax-GDP ratio for the Central Government fell by about 2.0 percentage points whereas interest payments as a proportion of GDP rose from 3.8 per cent to 4.6 per cent during the same period. Similarly, falling trend in salaries as a proportion of GDP witnessed in the early 1990s also got reversed after the implementation of the award of the Fifth Pay Commission in the latter part of the 1990s.

Recent development in saving behavior show that the rate of Gross Domestic Saving has improved marginally to 24.0 per cent in 2001-02 from 23.4 per cent in 2000-01, mainly on account of an increase in the rate of household saving. This reflects increase in the holdings of both financial and physical assets by households. On the other hand, the rate of saving of the private corporate sector has declined marginally in 2001-02. Also,

there has been a further deterioration in the rate of public sector dis-saving to 2.5 per cent in 2001-02 from 2.3 per cent in 2000-01 and 0.9 per cent in 1999-2000 (TABLE 2.4).

**TABLE 2.4**

**Gross Domestic Saving and Investment**

percent of GDP  
(at current market prices)

Variable	1998-99	1999-00	2000-01@	2001-02*
	1	2	3	4
1. Household Saving	18.9	20.3	21.6	22.5
1.1 Financial Assets	10.5	10.8	10.4	11.2
1.2 Physical Assets	8.4	9.6	11.2	11.3
2. Private Corporate Sector	3.7	3.7	4.1	4.0
3. Public Sector	-1.0	-0.9	-2.3	-2.5
4. Gross Domestic Saving (GDS) (1+2+3)	21.7	23.2	23.4	24.0
5. Saving-Investment Gap	-1.0	-1.1	-0.6	0.2

@ Provisional estimates

\* Quick estimates

Source: Reproduced from Report on Currency & Finance, 2001-02, RBI

**Investment Behavior:**

The rate of domestic capital formation improved to 25.8 per cent of GDP during the second sub-period of Phase I reflecting greater investment demand (TABLE 2.5). However, in the second phase there was a significant slackening in the rate of domestic capital formation to a level of 23.9 per cent of GDP.

**TABLE 2.5****Rates and Composition of Gross Capital Formation by Institutional Sources**

(percent)

Item	Phase I		Phase II
	Sub-period I: 1992-93 to 1993-94	Sub-period II: 1994-95 to 1996-97	1997-98 to 2001-02
<b>1. Private Sector</b>	<b>14.1</b> (62.6)	<b>16.1</b> (67.2)	<b>15.8</b> (70.6)
1.1 Household Sector	8.1 (35.9)	7.9 (33.0)	9.7 (43.2)
1.2 Private Corporate Sector	6.0 (26.8)	8.2 (34.2)	6.1 (27.4)
<b>2. Public Sector</b>	<b>8.4</b> (37.4)	<b>7.8</b> (32.8)	<b>6.6</b> (29.4)
<b>3. Gross Capital Formation</b>	<b>22.5</b> (100.0)	<b>23.9</b> (100.0)	<b>22.4</b> (100.0)
<b>4. Gross Domestic Capital Formation</b>	<b>23.3</b>	<b>25.8</b>	<b>23.9</b>

Notes: 1) Rates have been worked out as a percentage of GDP at current market prices.

2) Figures in parentheses indicate percentage share in Gross Capital Formation.

Source: Reproduced from Report on Currency & Finance, 2001-02, RBI

The Industrial and Trade policy reforms of 1991 resulted in significant acceleration in private sector investment in the early 1990s, and was particularly led by a robust increase in manufacturing investment. The high investment demand in the industrial sector, apart from being aided by policy reforms, was facilitated by an improved domestic saving rate. However, a decelerating trend in the rate of private corporate sector investment was observed during the latter half of the 1990s. This was despite the continued rising trend shown in investment from the household sector, since investment from the private sector could not keep up with the momentum it witnessed in the initial years of the 1990s.

Also, unlike the 1980s, when high public investment was particularly aimed at boosting investment in infrastructure, public sector investment rate exhibited a steep fall during the 1990s. The fall was caused by deterioration in public sector saving rate, the reasons for which have already been delineated in the preceding section on saving. Besides these, low user charges on public infrastructure services has been cited as responsible for reducing the ability of the government to undertake investment in basic infrastructure. Further, the process of fiscal adjustment led to direct cutbacks on the capital expenditure of both Central and State Governments.

Among the three sectors, a steady downturn in investment rates was experienced by the agricultural sector during the decade of reforms. The rate of investment in industry, accounting for the largest proportion of aggregate investment, exhibited a rise in the initial years of the reform decade. This period of high investment was associated with high growth rate of GDP originating from the industrial sector. In the subsequent years, however, the rate of investment underwent a steep decline, as was the case with the rate of growth of output from this sector. The investment rate declined to 23.7 per cent in 2001-02 from 24.0 per cent in 2000-01. As a result, the overall saving-investment gap recorded a surplus at 0.2 per cent of GDP in 2001-02 from (-) 0.6 per cent of GDP in 2000-01 (TABLE 2.4).

#### **Profile of Industrial Growth:**

The actual industrial growth during the latter phase of the reform period fell below the 'potential' growth, indicating a decline in the capacity utilization over the medium-term. An analysis of industrial slowdown as per the use-based classification has revealed that while consumer goods industries sustained growth momentum to some extent during the latter part of the reform period, substantial decline in growth was witnessed in basic and intermediate goods segments. The demand for these goods in the face of sustained consumption demand in the latter period of the reforms implies that industry may be undertaking inventory adjustment created by the initial phase of capacity creation and over production. Although production of capital goods witnessed an improved average growth during the latter phase of the reform period, a rapid decline was observed from 2000-01 onwards, indicating the impact of weakening investment demand in the economy. According to the use-based classification, consumer goods sector recorded the highest growth rate of 8.0 per cent during 2000-01, which fell to 6.0 in the next year while capital goods fell from 6.9 per cent in 1999-2000 to 1.8 per cent in the next year and further to (-) 3.4 per cent in 2001-02. In the latter phase of the reform period, capital goods production registered the highest growth rate in 1998-99 at 12.6 per cent (TABLE 2.6).

**TABLE 2.6****Growth rates of Industrial Production by use-based Classification**

Sectors	Weight	(percent)						
		1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Basic Goods	35.5	10.8	3.0	6.9	1.6	5.5	3.7	2.6
Capital Goods	9.3	5.3	11.5	5.8	12.6	6.9	1.8	-3.4
Intermediate Goods	26.5	19.4	8.1	8.0	6.1	8.8	4.7	1.5
Consumer Goods Of which	28.7	12.8	6.2	5.5	2.2	5.7	8.0	6.0
1. Consumer durables	5.4	25.8	4.6	7.8	5.6	14.1	14.5	11.5
2. Consumer non durables	23.3	9.8	6.6	4.8	1.2	3.2	5.8	4.1
<b>IIP (Index of Industrial Production)</b>	<b>100.0</b>	<b>13.0</b>	<b>6.1</b>	<b>6.7</b>	<b>4.1</b>	<b>6.7</b>	<b>5.0</b>	<b>2.7</b>

Source: Reproduced from Economic Survey, 2002-03

The loss of momentum in manufacturing growth, which occurred in the latter part of 1996, has since continued during the second phase of the reform period. The average rate of growth of manufacturing was found to have decelerated by as much as eight percentage points during 1997-98 to 2002-03 as compared to the phase 1994-95 to 1996-97. At the disaggregated two-digit level, the manufacturing sector witnessed substantial deceleration in the industry groups shown in the following table:

**TABLE 2.7****Growth Of IIP-Manufacturing at Two-Digit level**

Industry Group	Weight	(percent)	
		1992-93 to 1995-96	1996-97 to 2001-0
1. Food products	9.08	4.5	2.7
2. Cotton Textiles	5.52	6.1	2.4
3. Basic metal & alloy industries	7.45	15.6	3.1
4. Transport equipment & parts	3.98	10.1	7.6
5. Other manufacturing industries	2.56	8.4	4.8
6. Machinery & equipment other than transport equipment	9.57	9.4	6.4
7. Wood and wood products, furniture & fixtures	2.70	7.7	-4.3
8. Wool, silk and man-made fibre textiles	2.26	14.6	9.0
9. Jute and other vegetable fibre textiles (except cotton)	0.59	4.3	-0.2
10. Paper & paper products & printing, publishing & allied industries	2.65	8.7	5.4
<b>Overall Manufacturing</b>	<b>79.36</b>	<b>11.6</b>	<b>5.6</b>

Source: Reproduced in parts from Report on Currency and Finance, 2001-02, RBI

Growth rate of Machinery and equipment other than Transport equipment that has a total weight of 9.57 per cent in overall manufacturing fell from 9.4 per cent in 1992-93 to 1995-96 to 6.4 per cent in 1996-97 to 2001-02. While Basic Chemicals and Chemical Products (except products of Petroleum and Coal) with a weight of 14.00 per cent in overall manufacturing withstood the slowdown and posted a slight increase in the growth rate from 7.5 per cent in 1992-93 to 1995-96 to 8.0 per cent during 1996-97 to 2001-02.

Sectoral analysis of the growth process becomes more comprehensive with an assessment of aggregate demand as a supplement. The growth process during the 1990s can be analyzed in terms of autonomous, exogenous and policy-induced components of aggregate demand, which broadly relate to private, net external and government demand respectively. In the preceding sections we have already that

- (i) during the first phase of reforms, particularly in its second sub-period, improvement in growth emanated mainly from investment demand, with private consumption demand providing a strong support.
- (ii) During the second phase of reforms, the positive demand-pull stemmed from a high growth in the Government consumption expenditure. This increase reflected the rise in GDP originating from PAD owing to the effect of the Fifth Pay Commission Award.



**TABLE 2.8**

**Growth Rates and Relative Contributions of Select Components of Aggregate Demand  
(At 93-94 prices)**

(percent)

Item	Growth Rate			Relative Contribution		
	Phase I		Phase II	Phase I		Phase
	Sub-period I: 1992-93 to 1993-94	Sub-period II: 1994-95 to 1996-97	1997-98 to 2001-02	Sub-period I: 1992-93 to 1993-94	Sub-period II: 1994-95 to 1996-97	1997-98 2001-0
	1	2	3	4	5	6
1. Total final consumption expenditure	3.7	6.0	5.3	2.9	4.6	4.0
1.1 Private final consumption expenditure	3.5	6.2	4.7	2.4	4.1	3.0
1.2 Government final consumption expenditure	4.8	4.6	9.0	0.5	0.5	1.0
2. Gross Domestic Capital Formation	7.6	11.0	5.9	1.7	2.7	1.5
3. GDP at market prices	5.1	7.5	5.4	5.1	7.5	5.4

Note: The relative contributions of the components of aggregate demand doesn't add up to total on account of non-availability of Net exports in real terms.

Source: Reproduced from Report on Currency & Finance, 2001-02, RBI

A look at TABLE 2.8 seems to indicate that the slowdown in the economic activity during the second phase was a result of a rapid deceleration in investment demand coupled with a relatively lower growth in private consumption demand. Private final consumption expenditure fell from a growth rate of 6.2 per cent during the second sub-period of Phase I to 4.7 per cent in Phase II. Also, its relative contribution to aggregate demand fell from 4.1 per cent to 3.0 per cent in Phase II. However, in 2000-01, private final consumption expenditure contributed as much as 73.6 per cent of the growth in GDP at current market prices, which was considerably higher than not only the corresponding contribution of 48.4 per cent in 1999-2000, but also the average contribution of private final consumption expenditure to growth of 58.9 per cent in the previous three years (1997-98 to 1999-2000). The contribution of investment demand to growth has been following an uneven pattern, with a year of reasonably high contribution followed by a year of low contribution. The year 2001-02 can be cited as an example in this context, when investment accounted for around 21 per cent of the increase in GDP. Investment compensated for the decline in the share of contribution by consumption expenditure, which, nevertheless, remained the largest single contributor by accounting for more than fifty per cent of the increase in GDP growth (*Economic Survey*, 2002-03).

The growth process during the reform period also seems to have been influenced by the behavior of external demand. During the 1990s, under a more liberalized trade and exchange regime, the degree of openness of the Indian economy has considerably risen thereby making external demand an important factor in influencing the behavior of aggregate demand. The magnitude of the influence of external demand on aggregate demand can be examined broadly in terms of export growth for the Indian economy. The average growth in exports rose from 8.3 per cent in the 1980s to 11.9 per cent during the first sub-period of Phase I (1992-93 to 1993-94) and further to 14.8 per cent during the second sub-period (1994-95 to 1996-97). Growth in exports therefore could have been one of the important factors providing a significant impetus to aggregate demand in the economy. In the subsequent period, global demand weakened and volume of world trade registered a lower growth resulting in wide fluctuations in export growth with overall export growth decelerating to 5.9 per cent during 1997-98 to 2001-02. The deceleration in growth exhibited by world trade in goods and services from an average of 8.8 per cent during the period 1994-97 to 5.6 per cent during 1998-2001 has been stated as a likely contributor to the slowdown in aggregate demand during the second phase of the reform period.

In the light of the loss of momentum in manufacturing growth, which occurred in the latter part of 1996, the role of external demand becomes doubly important as a component of aggregate demand in an economy faced by constrained levels of investment caused by public sector dis-saving. The complex of import-substitution policies pursued by India till the mid 1980s has been known to have resulted in the pent-up demand for a range of manufactured goods, including specific brands of such goods. Although knowledge of these goods could be accessed from the international market, the products themselves could not be acquired within India or priced prohibitively so as to dissuade consumers. Liberalization made it possible for relatively small firms to service a host of import-intensive goods either through combining cheap imports and domestic parts or production using imported inputs and components. The 1993-94 to 1995-96 industrial boom could therefore be attributed to the release of the pent-up demand, servicing of which was aided

by the freed access to intermediates, components and capital goods while protecting most end-products, along with reducing tariffs substantially. Thus, once the pent-up demand that was of a transitory nature was satisfied, industry entered the phase of slowdown. An explanation could be that in the anticipation of high 'potential' demand driven by misconceptions about the large middle-income market in India, the producers, particularly international sellers of capital goods in Indian markets built up huge production or assembly capacities that were far in excess of what was warranted. Therefore, with the satiation of the pent-up domestic demand of 'once-for-all' nature for a host of import-intensive goods, further growth had to be based on an expansion of the domestic market or a surge in exports. However, with the relative contribution of private final consumption expenditure to aggregate demand falling in the second phase of reforms and a visible slowdown in exports, industry entered a phase of slow growth.

The services sector, though it provided some resilience to the overall growth process, particularly in times of slowdown in both industrial and agricultural growth, the pronounced deceleration in manufacturing activities during the second phase of reforms posed a major challenge for sustaining the growth momentum. Since the 1980s, growth process in India has been marked by a robust performance of services sector (excluding construction activities). The set of economic reform measures initiated since 1991 also impacted on the performance of the services sector.

- (i) Firstly, rising manufacturing growth due to reforms in the domestic industrial environment provided synergies to the services sector in the form of increased demand for producer services.
- (ii) Secondly, the liberalization of the financial sector provided an environment for faster growth of financial services.
- (iii) Thirdly, reforms in certain segments of infrastructure services also contributed to the growth of services.

The services sector has come to occupy a position of dominance in the composition of GDP since the 1980s. The average share of services sector increased to 45.4 per cent during the reform period as against 38.9 per cent in the pre-reform period. In terms of

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growth, services sector posted a higher growth of 7.8 per cent during the reform period as against 6.7 per cent during the preceding period. However, services sector is actually an amorphous entity; on the one hand, it includes sectors like 'public administration and defence', largely independent of the level of economic activity, and on the other, it has sectors like, 'trade, hotels and restaurants'. At the sub-sector level, 'trade, hotels and restaurants' continued to be the major segment in terms of its share in services-the share was 32.2 per cent from 1981-82 to 1990-91 with the share falling slightly to 30.7 per cent from 1992-93 to 2001-02, while still remaining at the top. There is a broad consensus that the recent surge in services has been contributed, among others, by the skill-intensive and high productivity activities such as Information Technology (IT) services, which have emerged as one of the fastest growing segments in the 1990s. External demand seems to have benefited the rapid growth in services sector; the typical example of which is the software industry and call centers. The decelerating trend witnessed in manufacturing and overall GDP seems to have been much less pronounced in case of services. Nevertheless, apprehensions have been raised about the sustainability of services sector growth.

There has been an increase in the share of producer services<sup>6</sup> in total services in the reform period. The growth rate of Gross Value Added (GVA) by producer services has increased from 7 per cent in 1981-82 to 1990-91 to 7.9 per cent in 1992-93 to 1994-95 and reached a peak figure of 8.2 per cent in 1995-96 to 2001-02. The share of producer services in total services has gone up from 67.6 per cent in 1981-82 to 1990-91 to around 70-71 per cent in the reform period. This can be explained by, *inter alia*, the phenomenon of increasing relevance of outsourcing by the Indian industry. Peripheral service-oriented activities, which were carried out earlier in-house, are being contracted out to the outside agencies in order to focus on core competencies in an increasingly competitive environment in the reform period. Furthermore, it has been suggested that the increasing share of producer services reflects the growing complementarity between services and manufacturing. This is especially so in the case of most manufactured products today. For instance, aerated soft drink that contain a large 'service' component, where the value added

<sup>6</sup> Activities like 'trade, transport, storage and communication', 'financing, insurance, real estate and business services', which are more of intermediate nature, are taken as producer services.



in the manufacturing process is insignificant compared to the value added in the branding of the drink by the advertising, packaging and entertainment sub-sectors, all of which are services (Reddy, 2003). The major demand for producer services emanates from the manufacturing sector as well as exports. The growing role of tradable services in international trade and exchange has come to be recognized with the General Agreement on Trade in Services (GATS). India's share in world exports of commercial exports has doubled from 0.6 per cent in 1990 to 1.2 per cent in 2000, while the share in world merchandise exports has gone up marginally from 0.5 per cent to 0.7 per cent during the same period. The compositional shifts in foreign trade in favor of services in the reform period has helped in the emergence of new sources of earnings in India's balance of payments viz., software service exports and other information technology skill intensive exports.

The emergence of producer services as an important source of services growth, therefore, reflects strong inter-sectoral linkages of services sector with other sectors, particularly industry. Apart from providing inputs, services contribute to the outward shift of the industrial sector's production frontier by enhancing productivity growth. Conversely, services growth could be sustained provided adequate demand impulses are generated in the commodity producing sectors. Therefore, although the services sector withstood the onslaught of deceleration, in the absence of an industrial revival the continuance of services growth appears unlikely. Growth of services triggered by manufacturing firms depends eventually on the growth of Indian industry. With industry continuing to under-perform and the agricultural sector languishing for want of attention as policy-makers pursue the 'chimera' of the services solution to more rapid economic growth, the services sector *per se* cannot improve the overall growth rate even if it continues to grow at higher rates in a somewhat isolated way. Thus, the acceleration in the overall growth rate of the economy would necessitate a distinct improvement in the growth performance of the commodity producing sectors from their present levels.

## Chapter-3

### Industrial slowdown and Trends in the import-production ratio

Liberalization of external trade formed an important aspect of the economic reforms programme launched in July, 1991. The Indian development strategy recognized the significance of liberal trade policy in the early 1980s, which was manifested in the form and number of important recommendations made at that time by several Committees, the notable ones amongst them being the following,

- a shift in emphasis from control to deregulation through simplification in import licensing system (Alexander Committee, 1978)
- clear recognition of dynamic comparative advantages associated with export growth (Tandon Committee, 1980)
- the need to harmonize foreign trade policies with other macroeconomic policies, advantages of an export-led growth strategy, a phased reduction in effective protection (Abid Hussain Committee, 1984) and
- the need to discourage inefficient import substitution (Narasimhan Committee, 1985).

Although policy efforts directed towards external liberalization can be traced back to late-70s and mid-80s, it is only during the 90s that such measures received a momentum as well as definitive direction. The trade policy changes in the post 1991 period sought to minimize the role of quantitative restrictions and substantially reduce the tariff rates. Some of these policy changes have already been stated in the first chapter. The five-year EXIM Policy 1992-97 aimed at eliminating licensing and quantitative restrictions substantially. Under this policy, exports and imports were allowed freely subject to the regulation by a Negative List of exports and a Negative List of imports. The Negative List of imports has been altogether removed under the revised EXIM policy 1997-2002. Further, continuous efforts were made to increase the coverage of items included in the OGL List. India has also taken significant policy initiatives at the multilateral levels for tariffication of the non-tariff measures. The country has made commitment to the WTO for phased removal of all

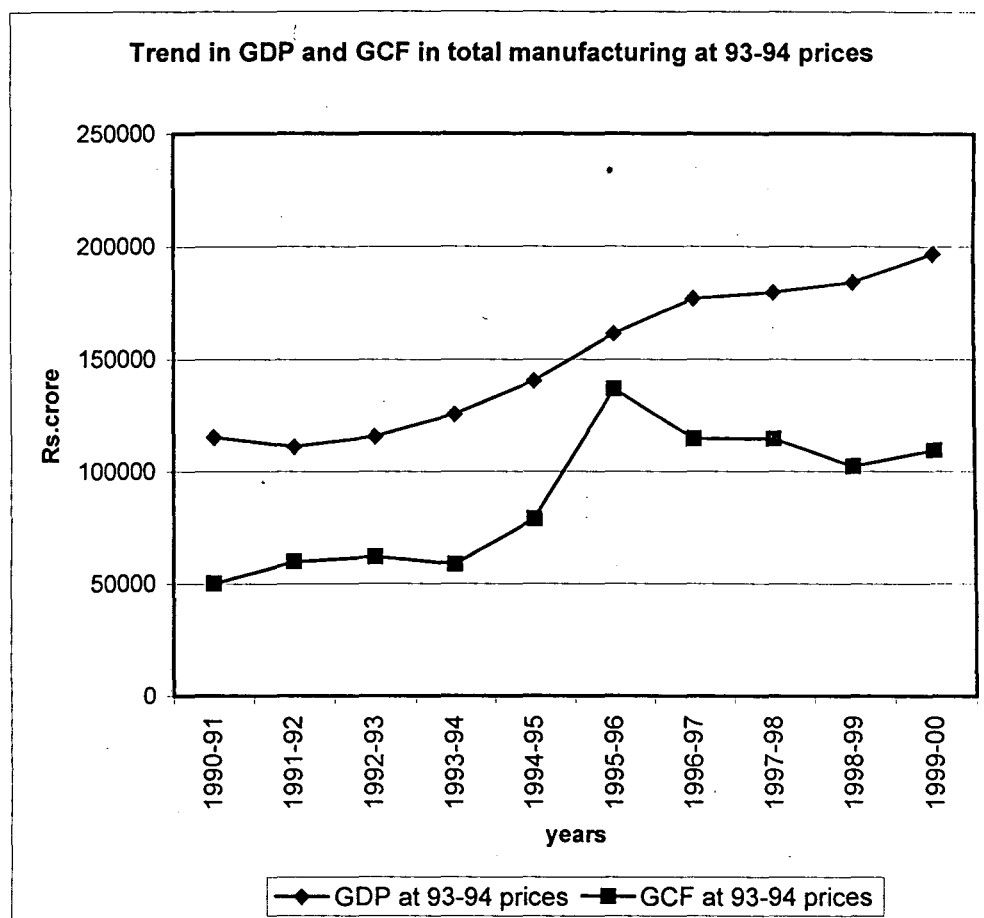
balance of payments related quantitative restrictions by 2003. The country has also made binding tariff commitment to the WTO for all agricultural products and 67 per cent of the manufactured products. Responding to such policy changes, India's foreign trade exhibited considerable buoyancy during the period 1993-94 to 1995-96 with both exports and imports recording, on an average, an increase of around 20 per cent per annum. The growth in India's foreign trade however decelerated in the subsequent years. For the purpose of analysis of India's import trade at the aggregate level, it would be appropriate to consider 1992-93 to 1995-96 as the first sub-period and the second sub-period consisting of the subsequent five years (i.e., 1996-97 to 2000-01). The year 1991-92 has been excluded being an exceptional year. That year witnessed considerable strain on the balance of payments. To meet the crisis, severe restrictions were placed on imports and the Rupee was adjusted downward in July 1991. Reflecting the perceptible impact of import compression measures taken by the Government and the Reserve Bank, imports in dollar terms suffered a steep decline of 19.4 per cent in the fiscal year 1991-92 in sharp contrast to a rise of 13.4 percent in the previous year. In terms of dollars, since the impact of import compression is clearly discernible in all the major commodity groups viz., bulk imports, capital goods, export- related items and others, the analysis of import trends along with trend in unit value and quantum indices has been undertaken from 1992-93 onwards. Consequent upon the removal of import compression measures, the imports of all major groups witnessed a rebound-both Bulk and Non-Bulk imports rose by 12.2 per cent and 11.7 per cent in dollar terms, respectively, during 1992-93.

The deceleration in import growth after 1996 coincides with the deceleration in production and investment in the industrial sector. Manufacturing industry has been in recession since mid-1996. Under the neoliberal reform agenda, the industrial sector in India has been subjected to the most wide-ranging set of liberalization measures for the longest period of time, starting from 1980, although the pace and nature of liberalization during the subsequent two decades has been substantially different. Some of the bottlenecks faced by Indian industry in the 1980s included myriads of controls and regulations, lack of technological development and restricted access to foreign technology that had resulted in a situation where the impetus to technological up gradation emanated

primarily from the public sector. The controls on industry through licensing, Monopoly and Restrictive Trade Practices (MRTP), thus inhibited competition. A set of policy measures was introduced to address these issues. Elements of the new industrial policy sought to increase competition by abolishing restrictions on MRTP companies, terminating the phased manufacturing programmes, freeing foreign direct investment and import of foreign technology and dereservation of sectors hitherto reserved for the public sector. The thrust of these measures was to create a competitive environment as a means to improve productivity and efficiency. These measures created a favorable environment for the industry to upgrade its technology and build-up its capacity through imports in order to cater to growing domestic and external demand. The industrial sector responded favorably to the initial phase of structural reforms, but later industrial deceleration set in. The manufacturing sector, which accounts for more than half of the overall industry, was affected the most with its growth decelerating not only to lower than the first phase of reforms but lower than the 1980s as well. The trend growth rate of GDP in manufacturing output at 93-94 prices for the period 1980-81 to 1989-90 stood at 7.0 percent while the trend growth rate was 7.1 percent for the 90s as a whole. During the first phase of reforms (1992-93 to 1996-97), the trend growth rate was higher at 11 per cent mainly due to the three years of accelerated industrial growth from 1993-94 to 1995-96. The trend growth rate of GCF in total manufacturing at 93-94 prices was around 6 per cent for the 80s, while the rate was around 10 per cent for the 90s; once again driven by the dynamism in manufacturing activity in the mid 90s (average annual growth rate was around 34 per cent during 1993-94 to 1995-96). The industrial performance data recorded the highest annual growth rate in 1995-96 at 14.1 percent for the manufacturing sector from 1994-95 to 2000-01. In other words, GDP in manufacturing grew at an accelerating pace and GCF reached an all time high during the three-year period of industrial boom from 1993-94 to 1995-96 (CHART 3.1).



CHART 3.1

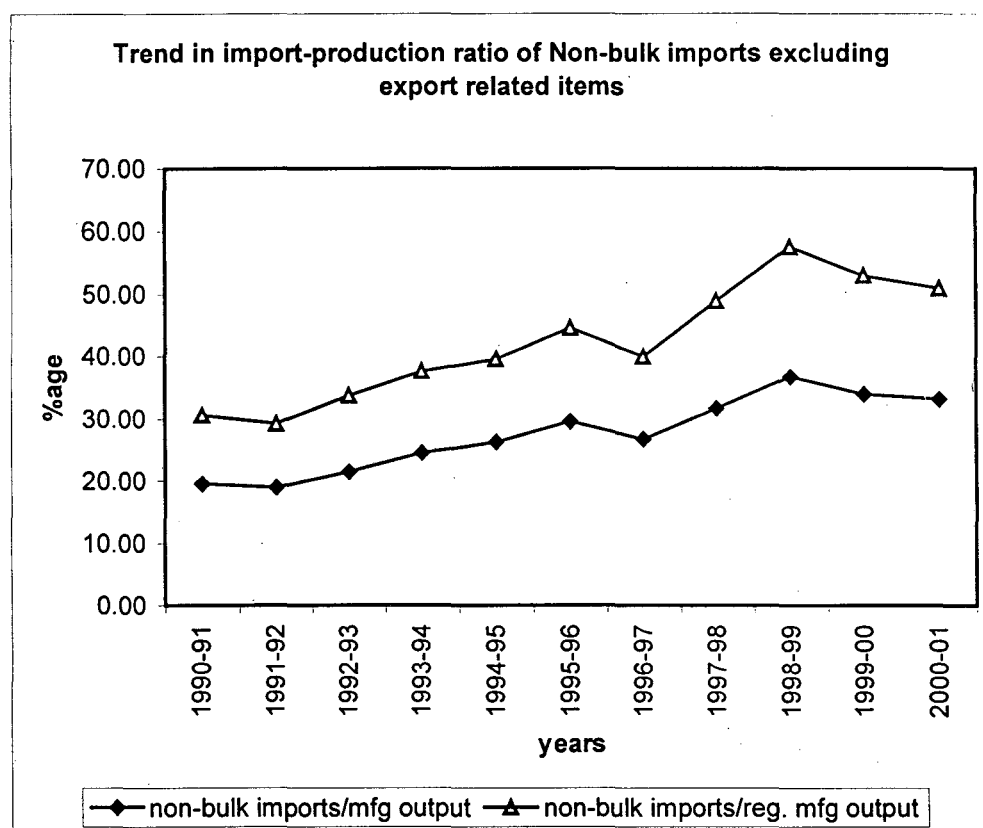


Also, as shown by CHART 1.1, these were the very years when total imports in dollar terms grew at an accelerating pace, while the years after that witnessed a deceleration in import growth. Therefore, at first sight it would appear that output movements in the principal sector dependent on imports for capital equipment, intermediates and components, i.e. industry, substantially explain the deceleration in import growth after 1995-96.

The 1990s witnessed a shift in the production structure in favor of the registered manufacturing sector as against the unregistered one. The share of registered manufacturing in industrial GDP has increased from 38.6 per cent in 1990-91 to 41.5 per cent in 2001-02 while the share of unregistered manufacturing has declined from 22.5 per cent to 21.6 per cent during the same period. We work out the import-production ratio in

total and registered manufacturing output separately by dividing Non-Bulk Non-Export Related imports in Rs.crore by gross output at current prices in total and registered manufacturing. The import-production ratio for the sub-categories Capital Goods and Others has also been calculated in a similar way: imports in Capital Goods and Others in Rs.crore have been divided by gross output at current prices in total and registered manufacturing as a whole. The ratio of imports to domestic production has been used as a proxy for import-intensity in order to determine whether the deceleration in imports post 1995-96 is reflected in the ratio, and if so, to what extent.

CHART 3.2



The import-production ratio as described by CHART 3.2, shows that the ratio in percentage terms has risen consistently throughout the 90s excepting 1996-97 and 1999-2000, the decline continuing till 2000-01. The ratio in total manufacturing output rose from 24.5 percent in 1993-94 to 29.5 percent in 1995-96 and from 37.6 percent to 44.6 percent

in registered manufacturing output for the same period. It touched a peak in 1998-99, the figures being 36.7 percent in total manufacturing and 57.5 percent in registered manufacturing. However, the two sub-categories within non-bulk non-export related imports do not quite show a similar trend in import intensity of domestic production.

**TABLE 3.1**  
**Import-production ratio of Capital Goods and Others in total and registered manufacturing output**

Years	1990-91		1991-92		1992-93		1993-94		1994-95		1995-96	
	Total	Reg	Total	Reg	Total	Reg	Total	Reg	Total	Reg	Total	Reg
<b>I. Capital Goods</b>	11.96	18.70	11.02	17.01	12.04	18.90	15.60	23.92	15.43	23.19	17.83	26.92
<b>II. Others</b>	7.60	11.89	7.90	12.20	9.44	14.82	8.91	13.65	10.87	16.33	11.69	17.65

Years	1996-97		1997-98		1998-99		1999-00		2000-01	
	Total	Reg	Total	Reg	Total	Reg	Total	Reg	Total	Reg
<b>I. Capital Goods</b>	15.96	23.81	15.69	24.22	16.79	26.27	14.56	22.72	13.39	20.60
<b>II. Others</b>	10.79	16.09	16.00	24.69	19.95	31.22	19.39	30.26	19.72	30.34

Source: 1. NAS, 2001 & 2002

2. Handbook of Statistics on Indian Economy, 2001-02, RBI

The ratio of imports of capital goods to domestic production in total and registered manufacturing output rose till the mid-90s starting 1991-92, fell somewhat in 1996-97, rising again slightly till 1998-99 and has been on a decline since then (CHART 3.3). The ratio rose sharply from 12.04 per cent in 1992-93 to 17.8 per cent in 1995-96 in total manufacturing output and from 18.9 per cent to 26.9 per cent in registered manufacturing output. The ratio however fell in the subsequent years-13.4 per cent in total and 20.6 per cent in registered manufacturing output in 2000-01, the last year for which figures can be calculated. On the other hand, the import-production ratio in registered manufacturing output for the sub-category Others exhibited a very slight increase in the initial years of the reform period, picking up very sharply during 1996-97 to 1997-98. It rose from 16.1 per cent in 1996-97 to an all time high of 31.2 per cent in 1998-99, remaining almost constant thereafter (CHART 3.4). For items like Machine Tools and Machinery except electrical & electronic under Capital Goods, the import-production ratio has only marginally declined from the mid 90s level and for manufactured consumer goods like Electronic and Computer Goods, it has in fact slightly risen during 1996-97 to 2000-01.

Transport Equipment and Project goods are the only items that have registered a somewhat sharp decline in the import-production ratio in the latter half of the reform period.

CHART 3.3

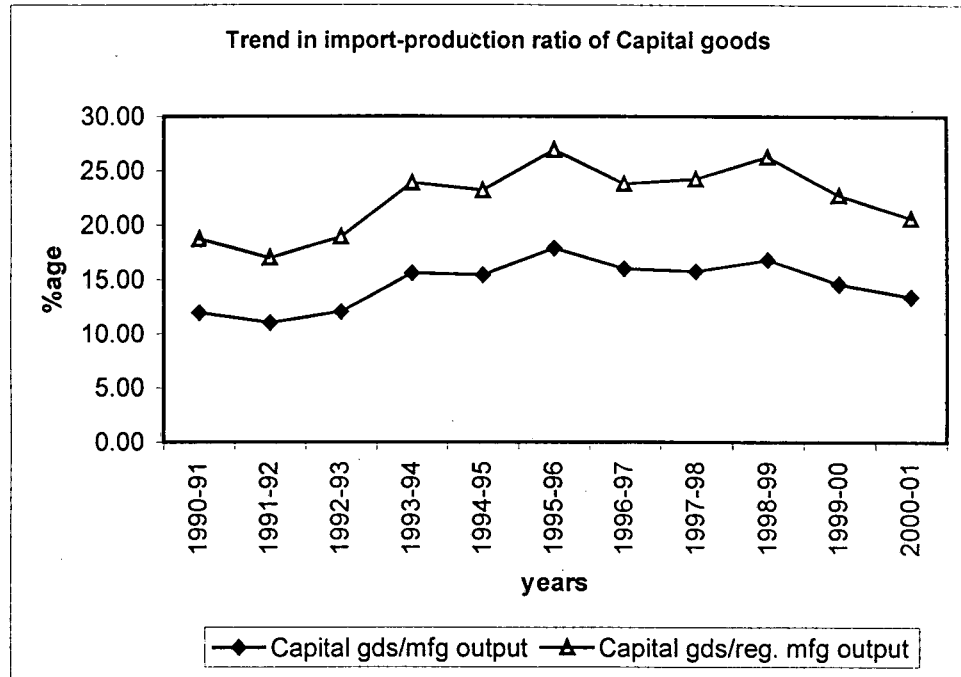
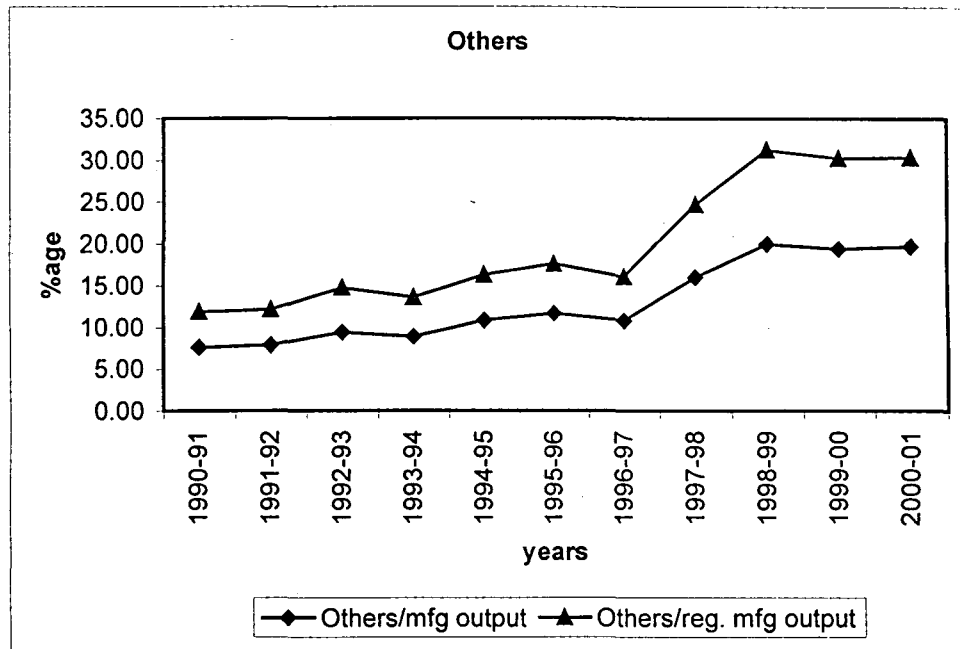


CHART 3.4



In sum, the import-production ratio has shown only a marginal tendency to decline for some commodities and for broad sub-heads like Others, it has in fact registered a sharp rise during 1996-97 to 2000-01. Also, for Capital Goods as a whole, the decline in the ratio has been less than expected (the average annual percentage change in the ratio in fact is the same in the two periods-1992-93 to 1995-96 and 1996-97 to 2000-01; about 23 per cent). In other words, marginal decline in the import-production ratio offers only a partial explanation for the sluggishness in the import bill and therefore provides an inadequate support to the view that liberalization has not accelerated the flow of imports into India. We undertake a simple exercise to illustrate the deceleration in industrial growth post mid-90s. On one hand, the rise in imports in the post mid-90s was much less than expected in the light of relaxation of import control measures while the decline in the import-production ratio that ought to have followed such pronounced deceleration in total imports was only marginal implying that it must have been growth that adjusted.

Let  $M_1/P_1=S_1$  be the import-production ratio for the period 1992-93 to 1995-96 and  $M_2/P_2=S_2$  be the ratio for the period 1996-97 to 2000-01.

$$M_1=S_1P_1 \text{ and } M_2=S_2P_2 \quad ; \quad S_2=S_1+ \Delta S \quad ; \quad P_2=P_1+ \Delta P$$

$$\begin{aligned} M_2-M_1 &= S_2P_2-S_1P_1 \\ &= S_2(P_1+ \Delta P)-S_1P_1 \\ &= (S_2-S_1)P_1+S_2 \Delta P \end{aligned}$$

Since  $M_2-M_1 < \text{expected}$  and  $S_2-S_1$  has remained more or less at the expected level therefore  $\Delta P$  or growth rate must have fallen.

There is evidence that besides the deceleration in industrial growth after 1995-96, there was one other tendency of significance that was operative: a sharp fall in the unit value of imports into India. In other words, trends in aggregate imports or for that matter sluggishness in import "value" growth would not provide a satisfactory explanation of the trend in real imports, and would therefore not be truly reflective of the competition faced by domestic producers-the possibility of displacement in case of their inability to restructure themselves to face the onslaught from imported commodities. The fourth chapter would therefore be an attempt at answering primarily the following: (1) to what extent has movements in quantum and unit value index of imports been responsible for the trend seen in the value of total imports and (2) whether the trend in value terms is compatible with that of real imports. The purpose of our investigation would entail looking at the performance of imports at a disaggregated level; bulk and non- bulk non-export related imports separately and their decompositions. In bulk imports a closer look would be taken at oil and non-oil categories separately since not only have oil imports fluctuated quite significantly but it is also known that movements in oil imports, which are influenced by oil prices have substantially influenced the size and direction of India's overall import bill. Within Non-bulk non-export related imports, unit value and quantum indices of Capital Goods would be dealt with in greater detail, with a view towards determining the role played by prices in influencing the demand for such imported goods as expected to be most affected by liberalization.

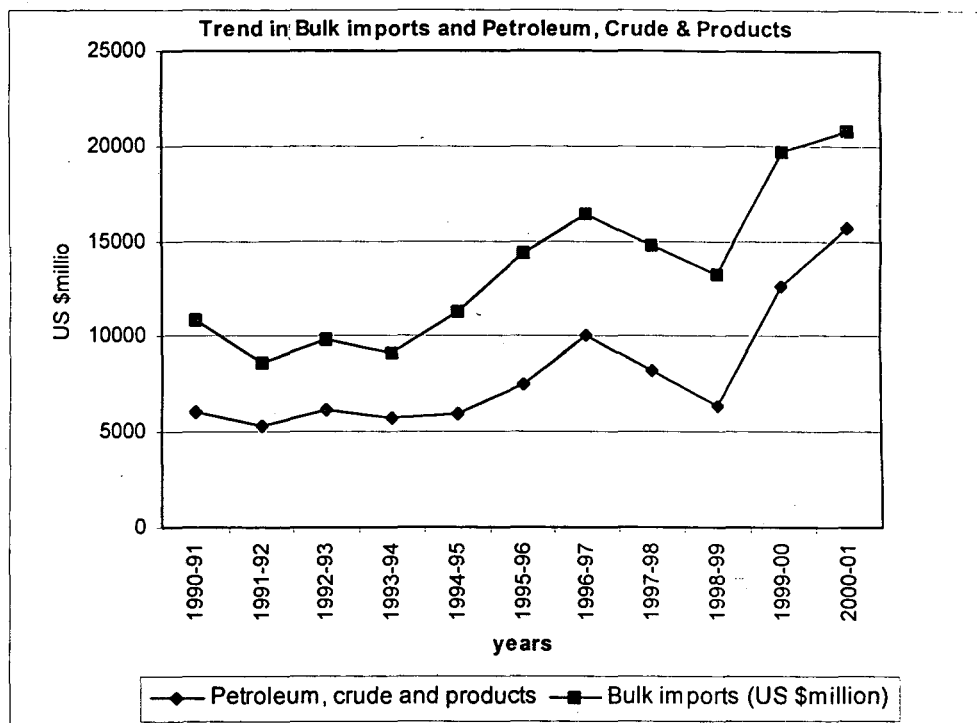
## Chapter-4

### Performance and examination of Price & Quantum indices of Bulk and Non-Bulk Non-Export Related imports

It has already been established in previous chapters that the deceleration witnessed in industry, particularly manufacturing offers only a partial explanation for the deceleration in the import bill in the second phase of reforms. Also, there was less than expected decline in the import-production ratio of Capital Goods and Non-Bulk Non-Export related imports as a whole, implying that the deceleration in the growth of total imports has been far more than warranted by the fall in import intensity of domestic production. In this chapter we not only take a look at the other operative force: a sharp fall in the unit value of imports into India but also at the quantum index in order to ascertain whether the decelerating trend in total imports observed at the aggregate level stands true when commodities or groups of commodities are considered in isolation. We begin with a decomposition of total imports into Bulk and Non-Bulk Non-Export Related imports followed by their further decomposition into sub-categories.

Bulk imports rose at an accelerating pace starting 1993-94 and continued till 1996-97, falling somewhat sharply in the years 1997-98 and 1998-99 and rising once again in 1999-2000 and 2000-01. They rose from around 9 billion dollars in 1993-94 to 16 billion dollars in 1996-97; fell to 13 billion in 1998-99, before rising again to 21 billion in 2000-01 (RBI *Handbook of Statistics 2000-01*, Table 119). The fall in total Bulk imports in 1997-98 and 1998-99 mainly reflects the sharp fall in international oil prices while the rise in 1999-2000 and 2000-01 reflects the hardening of international crude prices (CHART 4.1).

CHART 4.1



Imports of Petroleum Crude & Products have increased steeply from \$6.4 billion in 1998-99 to \$15.6 billion in 2000-01 enhancing the share of these imports in total imports to 31 per cent in 2000-01. While there has been some expansion in domestic refining capacity during this period, most of the rise in these imports in the recent past has been on account of the rise in international crude oil prices. International crude oil prices (UK Brent) had increased from a level of around \$10 per barrel during February 1999 to around \$33 per barrel during November 2000 due to production cuts effected by OPEC and tight supplies during this period. Crude oil prices, however, slumped since September 2001 despite supply cuts effected by the OPEC countries. Worsening economic outlook, faltering global energy demand and a lack of agreement on supply cuts between OPEC and non OPEC countries contributed to the slump in oil prices: international crude oil prices ruled at around \$19-20 per barrel as compared with more than \$27 per barrel during February 2001 (*Economic Survey, 2001-02*).



The unit value index fell somewhat sharply while the quantum index rose slightly for both Petroleum Crude & Products in 1997-98 and 1998-99; the overall effect on Bulk imports was that of a fall in its dollar value. On the other hand, in the subsequent two years, there was a very sharp rise in the unit value index of both Petroleum Crude & Products accompanied by an equally sharp rise in the quantum index of Petroleum Crude and a steep fall in the quantum index of Petroleum Products (CHART 4.2 & CHART 4.3). The fall in the quantum index of Petroleum Products in 1999-2000 and 2000-01 can be attributed to the sharp increase in the country's refining capacity from 69 Million Metric Tonnes Per Annum (MMTPA) to 112 MMTPA during 1999-2000. The increase in the refining capacity was because of the private sector Reliance Petroleum Limited refinery coming on stream. The refining capacity as on January 1, 2001 stood at 115 MMTPA and is expected to remain the same till the end of the Ninth Plan. With an increase in the refining capacity, the country turned from a net importer of Petroleum Products to an exporter of select Petroleum Products such as Gasoline, Naphtha/Natural Gasoline Liquid (NGL), High Speed Diesel (HSD) and Gas Oil. The net imports of Petroleum Products were 15.9 Million Metric Tonnes (MMT) in 1999-2000, 0.9 MMT in 2000-01 and -1.7 MMT during April-November 2001-02 (*Economic Survey, 2001-02*).

CHART 4.2

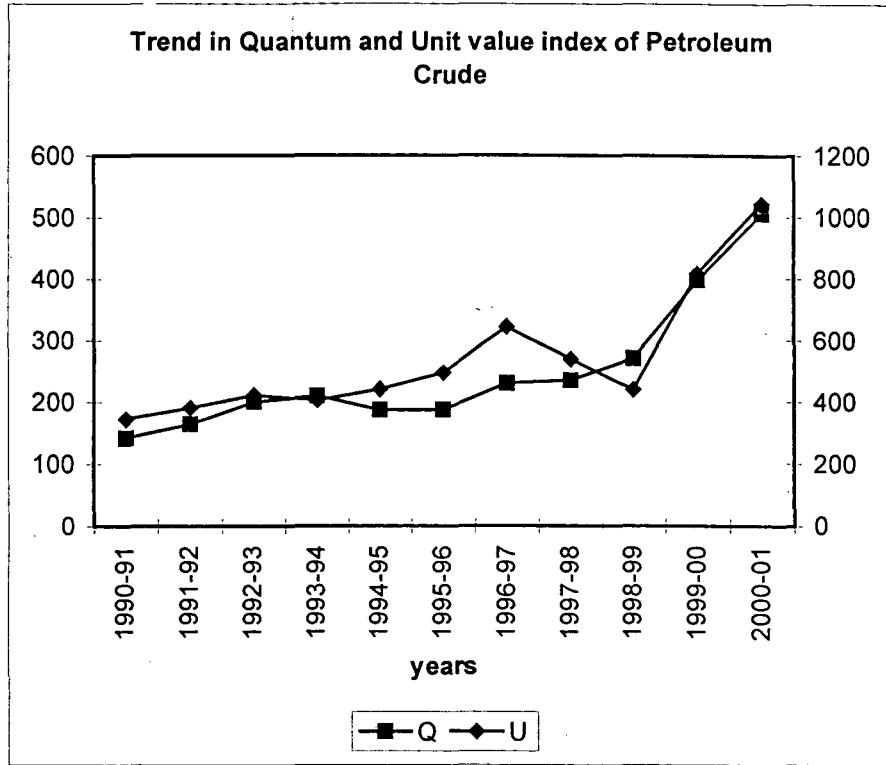
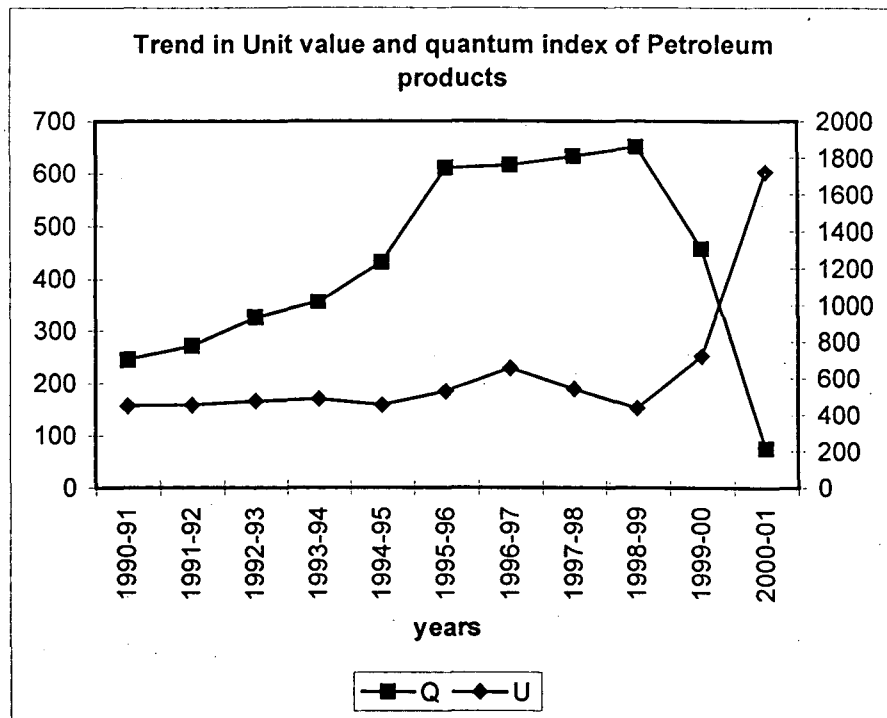
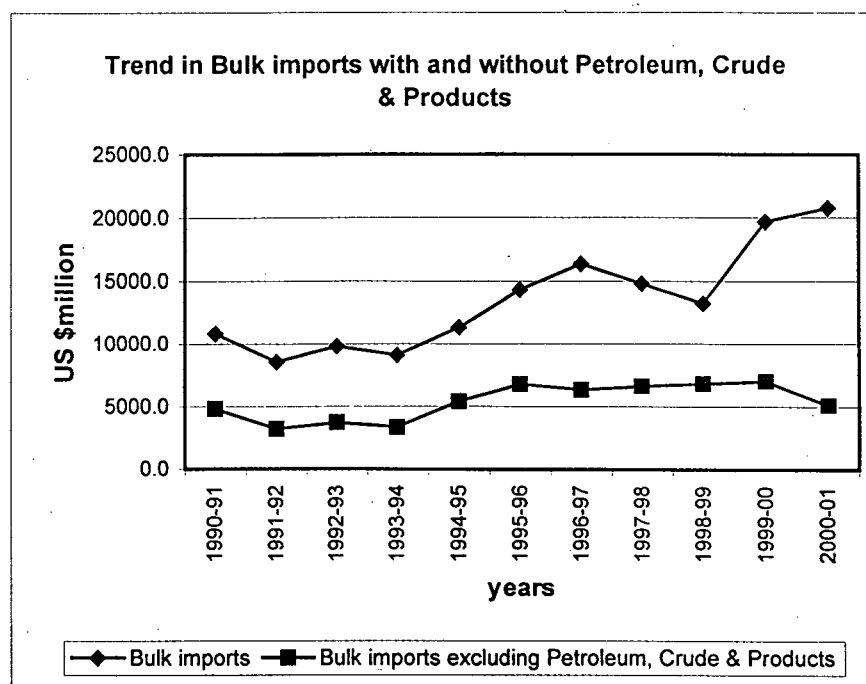


CHART 4.3



Also, for sub-period II as a whole, the average annual percentage change in unit value index is higher than the sub-period I average for both Petroleum Crude & Products. The sub-period I values are around 7 per cent and 4.2 percent while sub-period II values are considerably higher at 22 per cent and 38.3 per cent for Petroleum Crude & Products respectively. These values would imply greater volatility of prices in sub-period II. Therefore, we separate out the effect of oil prices on Bulk imports by excluding the sub-category Petroleum, Crude & Products in order to determine whether such exclusion considerably changes the trend in Bulk imports. A look at CHART 4.4 shows that Bulk imports with the exclusion of Petroleum, Crude & Products remained almost stagnant in sub-period II (1996-97 to 2000-01) contrary to the trend exhibited by Bulk imports without the exclusion.

CHART 4.4

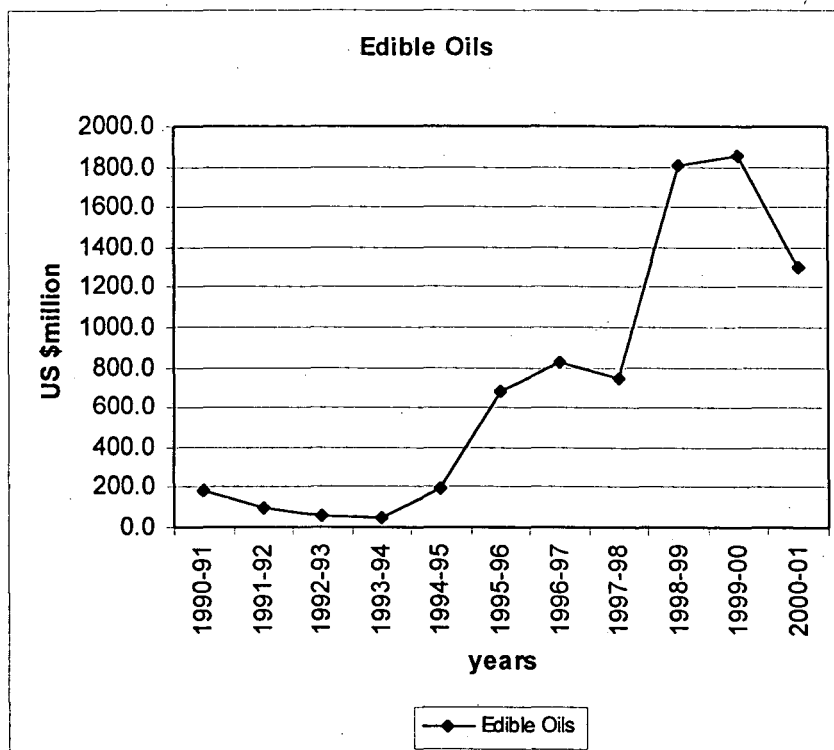


It may be noted that the annual growth rate of about 24-26 per cent registered by imports of bulk items in the mid 90s (1993-94 to 1995-96) resulted from the increase in the imports of mainly three items- Petroleum Products, Edible Oils and Fertilizers. The rise in the

import value of Petroleum Products was largely caused by the increase in the quantum and marginally by rise in oil price.

Edible Oil imports increased by more than 200 per cent between 1993-94 and 1995-96 due to increase in demand in line with the increase in population and unfavorable domestic production conditions (*Report on Currency & Finance*, RBI, 1995-96). In recent years, edible oil accounting for nearly 60 to 70 percent of the value of total agri-imports has become the single largest item of agri imports (*Economic Survey*, 2001-2002). This is indicated by the huge jump in edible oil imports in dollar terms between 1997-98 and 1999-2000, attributed to pressures emanating from domestic demand (CHART 4.5). The subsequent steep fall in 2000-01 is to some extent on account of a fall in refined palm oil imports, thereby leading to a better utilization of the domestic processing capacity.

CHART 4.5



Fertilizer imports rose very sharply between 1993-94 and 1995-96, touching a peak in 1995-96. The recovery in fertilizer consumption during 1995-96 pushed up the demand for import of fertilizers. From a negative annual growth rate of 15.5 per cent in 1993-94, the growth rate jumped to 27.4 per cent in 1994-95 and as much as 60 per cent in 1995-96. Further, among the fertilizers, Manufactured fertilizers witnessed the fastest annual growth rate during the mid 90s, as much as 81 per cent between 1994-95 and 1995-96. However, fertilizer imports declined in the subsequent years, the average annual growth rate being (-) 11.5 per cent for sub-period II (1996-97 to 2000-01). The average annual growth rate would have been higher but for the very steep fall in fertilizer imports in 1996-97 and 2000-01 (CHART 4.6). Also, a look at TABLE 4.1 shows that there has been a steady increase in consumption and production of fertilizers in thousand tonnes of nutrients in sub-period II, the only exception being 2000-01 when consumption fell somewhat. Therefore, the trend in fertilizers in volume terms seem to indicate that the fall in imports in sub-period II was more than made up by a steady although somewhat slow rise in domestic production, as reflected by the steady increase in consumption (CHART 4.7), implying that domestic production of Fertilizers has been competitive during sub-period II.

**TABLE 4.1**

**Production, Imports and Consumption of Fertilizers**

<b>All Fertilizers (NPK)</b>	<b>(Thousand tonnes of nutrients)</b>						
	<b>1990-91</b>	<b>1995-96</b>	<b>1996-97</b>	<b>1997-98</b>	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>
Production	9045	11335	11155	13062	13621	14289	14705
Imports	2758	3955	1975	3174	3145	4075	2090
Consumption	12546	13877	14308	16188	16798	18069	16702

Source: Reproduced in parts from Economic Survey, 2001-2002

CHART 4.6

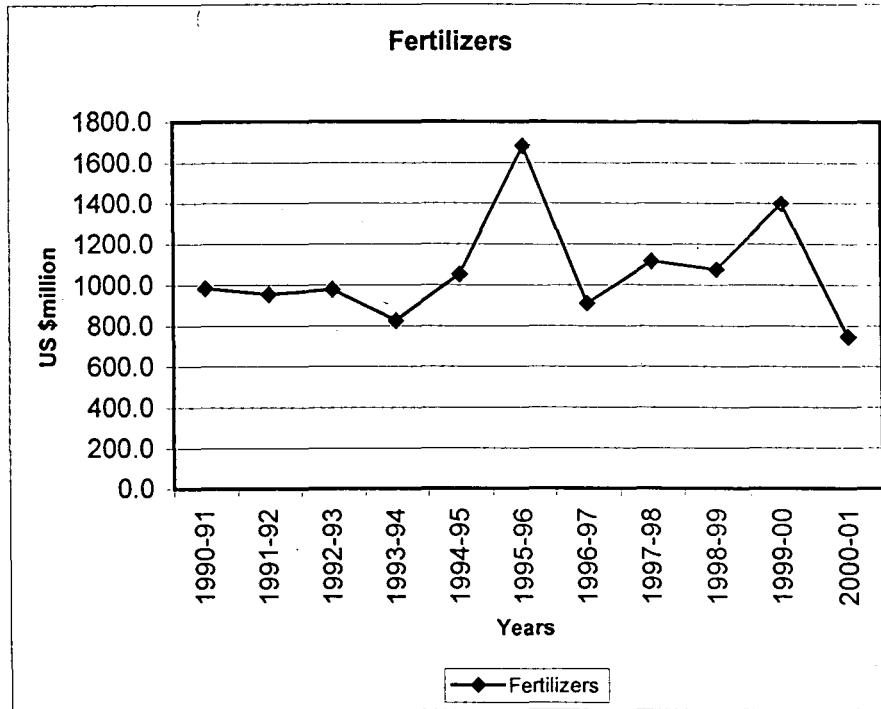
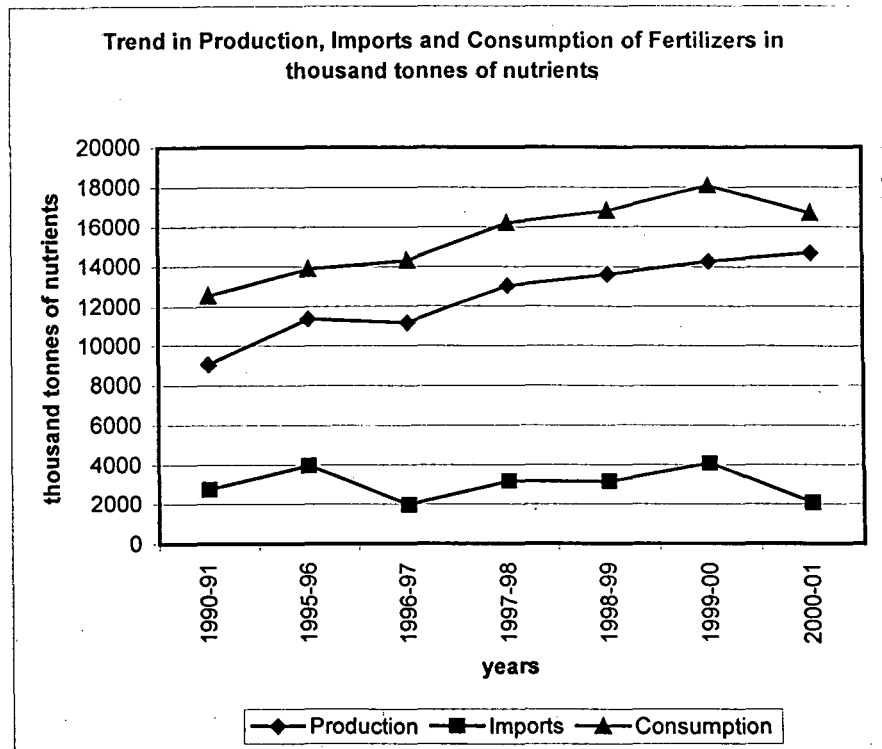


CHART 4.7



Therefore, at the end of the discussion of import trends in Bulk imports, we may attribute the deceleration in Bulk imports mainly to a change in international prices of oil. Here, we need to note that even with the removal of Petroleum, Crude & Products the deceleration in Total imports continues unabated (CHART 4.8). We have already discussed in the previous chapters that the slowdown in industrial activity, particularly manufacturing offers only a partial explanation and that a fall in the unit value of imports was the other operative force. In other words, a comprehensive picture of the deceleration phenomenon would entail looking at the unit value index of Non-Bulk Non-Export related imports, particularly Capital Goods in which an import surge was expected in the wake of liberalization. In this context, the next section would look at the following (i) trend in Capital Goods imports in sub-period I and sub-period II (ii) trend in imports of Others in the two sub-periods and (iii) trends in unit value and quantum indices of certain sub-items in the two sub-periods with a view towards determining whether the flow of imports in value terms was accompanied by a flow in volume terms.

Non-Bulk Non-Export Related Imports includes two main sub-categories, namely Capital Goods and Others. In sub-period I (1992-93 to 1995-96), both categories registered a rise in import value in dollar terms. The rise is somewhat slow for the initial years of recovery i.e., 1992-93 to 1993-94, the trend picking up in the subsequent years, more so for Capital Goods. Capital Goods imports rose from 6242.8 million dollars in 1993-94 to 10330.2 million dollars in 1995-96, a percentage jump of about 65 per cent.

CHART 4.8

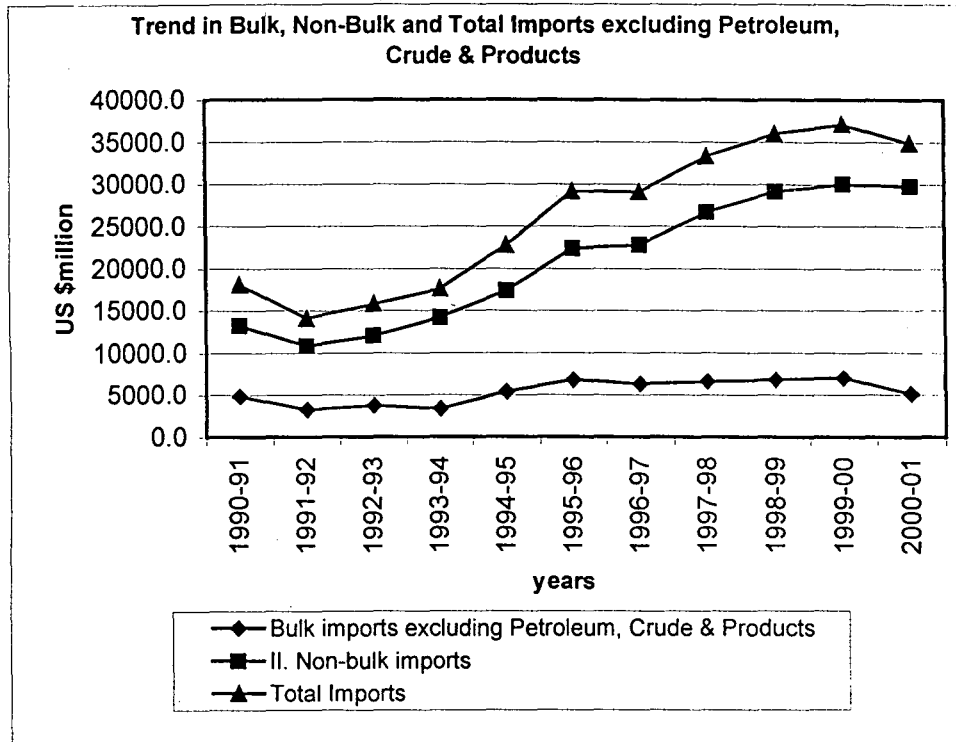
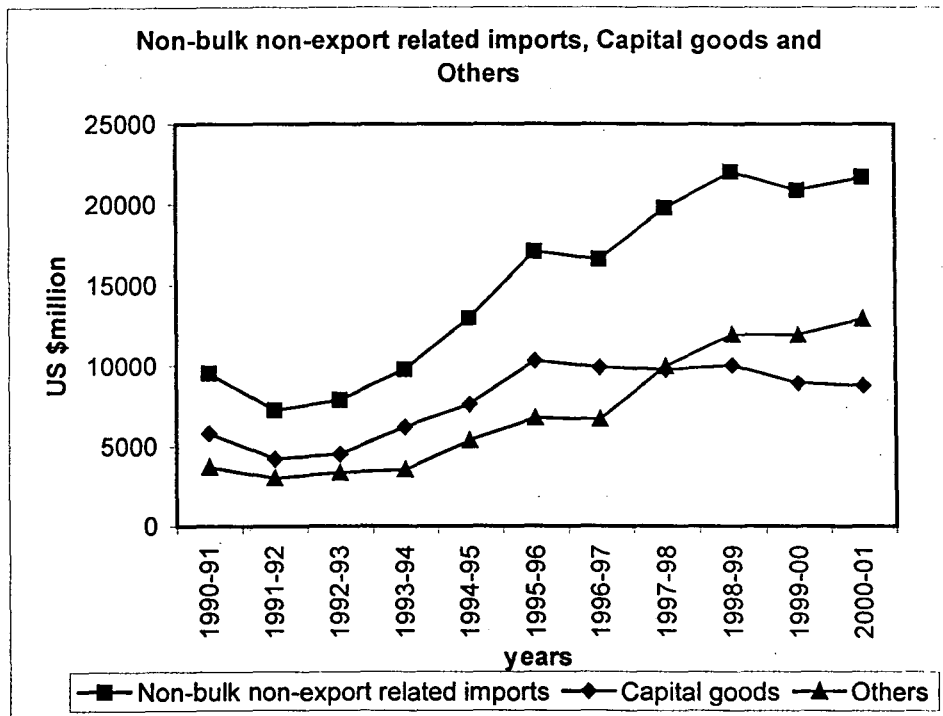


CHART 4.9





Amongst **Capital Goods** imports, Machinery except Electrical & Electronic exhibited the sharpest increase from 1993-94 to 1995-96, reached a peak in 1995-96 and gradually declined in the subsequent years. The average annual rate of increase from 1993-94 to 1995-96 was 34 per cent, the sub-period I (1992-93 to 1995-96) average being slightly lower at 29 per cent while the sub-period II (1996-97 to 2000-01) average was negative at about 7 per cent. The higher average annual rate of increase from 1993-94 to 1995-96 could be attributed to increased imports of not only Capital Goods but also components of Capital Goods in order to service the pent-up demand for a host of import-intensive goods. Transport Equipment recorded a negative average annual growth rate of 4 per cent in sub-period II while the average was around 47 per cent in sub-period I due to a percentage jump of 175 per cent from 1992-93 to 1993-94. Electrical machinery (including computer and electronic goods) recorded a sharp increase not only in sub-period I but also in sub-period II as a whole with the annual growth rates being higher in the earlier phase. Manufactures of metals have also risen consistently throughout the reform period, although somewhat decelerating in sub-period II. The average annual rate of increase is higher at 21.2 per cent for sub-period I (1992-93 to 1995-96) as compared to 7.0 per cent for sub-period II.

Within the sub-category **Others**, the more important items like (i) Professional, Scientific Controlling Instruments, Photographic Optical Goods, (ii) Medicinal & Pharmaceutical Products, and (iii) Artificial Resins and Plastic Materials, etc. registered a sharp rise in import value in sub-period I (1992-93 to 1995-96), the average annual growth rates ranging from 12 per cent to 23 per cent. However, sub-period II has been mainly characterized by either decelerating or negative growth rates. Notwithstanding the deceleration or fall in growth rates in sub-period II, Others have done better than Capital Goods in the aggregate as exhibited by import trends in CHART 4.9. Imports of Others have continued to rise in sub-period II, while Capital goods have more or less remained stagnant.

**Trends in quantum and unit value indices of commodities whose import trends in dollar terms have already been enlisted in the previous section<sup>7</sup>**

Machinery and Transport Equipment as a whole has registered a pronounced fall in the quantum index in sub-period II, particularly in the initial years, stagnating more or less thereafter. On the other hand, the unit value index has continued to rise sharply excepting the last two years of sub-period II i.e., 1999-2000 and 2000-01. The average annual percentage change in the quantum index has fallen from 44 per cent in sub-period I to as low as (-) 4.4 per cent in sub-period II while it has risen slightly from 8.3 percent to around 10 per cent for unit value index in the respective periods. For commodities like Transport Equipment although both unit value and quantum indices have registered a fall in sub-period II, the fall in unit value index has been more pronounced-negative (-3.2 per cent) in this case. On the other hand, both indices have more or less moved in tandem in case of Electrical machinery in sub-period II, the average annual percentage change in the two indices being slightly above 8 per cent. The percentage rise in the average annual rate of increase in the quantum index was twice (12 per cent) that of the fall in the unit value index of Manufactures of Metals in sub-period II over the earlier period. The average increased from 20 per cent in sub-period I to 32 per cent in sub-period II in case of quantum index, while it fell from 10.4 per cent to 4.3 per cent for unit value index.

Commodities like Professional, Scientific & controlling instruments & Apparatus (not elsewhere specified or included), Medicinal & Pharmaceutical Products and Artificial Resin & Plastic Material & Cellulose Ester registered a fall in the average annual rate of increase in the unit value index in sub-period II over the earlier period. While fall in the unit value index on average terms was accompanied by a fall in the quantum index for the latter two commodities, Professional, Scientific & controlling instruments & Apparatus (not elsewhere specified or included) registered a very sharp increase in the quantum index in sub-period II, the period average being as high as 102.2 per cent.

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<sup>7</sup> Transport Equipment, Electrical machinery, Manufactures of Metals are included in the broad category Machinery & Transport Equipment while the items included in the category Others appears under different broad heads in quantum and unit value indices tables of the Handbook of Statistics on Indian Economy. The names therefore may slightly differ for a few commodities.

In all, we can say that the unit value index fell in sub-period II for all commodities as mentioned under the broad heads Capital Goods and Others while the quantum index fell in some cases and rose in others. However, one needs to note that the trend in both indices for Capital goods like Transport Equipment, Manufactures of Metals and Electrical machinery differs when considered in isolation. In other words, firstly, the very sharp fall in the quantum index in sub-period II (in terms of average) from sub-period I as registered by the broad head Machinery and Transport equipment doesn't get reflected in the other items, which have registered relatively modest rise or fall over the earlier period average. Secondly, the trend in unit value index was sharply rising for Machinery and Transport equipment while it was falling for individual commodities in the latter sub-period.

### **Conclusion:**

In sum, during the period when imports in value terms appeared to have slowed to an extent greater than warranted by deceleration in industrial activity particularly manufacturing, fall in the unit value index was one of the factors at work. Also, the aggregate picture is not truly reflective of individual trends exhibited by commodities in the quantum index. This could imply that the actual volume of imports, especially in Capital Goods may have in fact increased. The possibility also exists that with the exhaustion of the pent-up demand for branded, imported or import-intensive goods, international producers who had accumulated excess inventories of imported components and intermediates resorted to price cuts of manufactured consumer goods. Since imports here consisted largely of capital goods, raw materials, intermediates and components sourced from abroad by transnational producers, the possibility of a reduction in transfer prices of imported inputs sourced from the parent or a third country subsidiary may have facilitated undertaking of price cuts. Therefore, even with a fall in unit value index import quantities could have been maintained in this manner. Such a situation doesn't bode well for Indian producers who face a definite possibility of displacement (Chandrasekhar, 2002).

Secondly, the size of India's import bill is to a significant extent influenced by movements in oil imports, which in turn are influenced by changes in international oil

prices. Therefore, the trade deficit that has remained close to or well below the levels reached at the end of the 80s and has registered a decline in 2001-02, resulting in a current account surplus would widen in the event of a sharp rise in oil prices. In fact, this can be corroborated by a delineation of imports growth in the more recent period. Import growth in dollar terms has remained stagnant in 2001-02, as in the previous year at 1.7 per cent despite an increase of 5.1 per cent in volume terms since the growth rate in value terms was moderated by a decline in POL imports by 10.5 per cent on account of softening of international crude oil prices. Moderation in international crude oil prices from an average (Dubai variety) of \$26.1 per barrel in 2000 to \$22.7 per barrel in 2001 resulted in lower imports by 10.5 per cent in 2001-02. On the other hand, import growth in the first seven months of the current financial year has been high, rising by 13.0 per cent as compared with a modest growth of 1.9 per cent in corresponding previous period. The growth has been buoyant on account of an increase in POL imports by 16.7 per cent due to hardening of international crude oil prices and rise in domestic energy demand.

Thirdly, a significant feature of the performance of imports in 2001-02 was the reversal in trend in imports of Capital goods, which increased by 6.3 per cent as against substantial declines in the preceding two years. Import growth, net of POL and gold & silver imports, posted a growth of 15.7 percent in April-October 2002 as compared with a rise of 6.5 per cent in the corresponding previous period. Imports of Capital goods have accelerated by 20.9 per cent mainly due to increase in transport equipment and non-electrical machinery imports (*Economic Survey, 2002-03*). This has been taken to be an indication of a pick up in domestic manufacturing activity. In other words, a recovery and sustained growth in industrial production can serve to bring about a substantial rise in the import bill and thus widen the trade deficit, unless India is able to realize the dynamism that was expected on the export front in the wake of reform and thereby secure itself a strong footing in world markets.

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## **References**

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- Chandrasekhar, C.P. (2002). 'Imports and the Balance of Payments Since Liberalisation', <http://www.macrosan.com>**
- Chandrasekhar, C.P. and Jayati Ghosh (2001). 'Has India Contained an Import Surge?', <http://www.macrosan.com>**
- Chandrasekhar, C.P. and Jayati Ghosh (2002). ' Burgeoning Foreign Exchange Reserves', <http://www.macrosan.com>**
- Chandrasekhar, C.P. and Jayati Ghosh (2002). *The market that failed: A Decade of Neoliberal Economic Reforms in India*, New Delhi: Leftword Books**
- Government of India (2001), *National Accounts Statistics Back Series, 1950-51 to 1992-93*, Central Statistical Organisation, Ministry of Statistics and Programme Implementation**
- Government of India (2001, 2002), *National Accounts Statistics*, Central Statistical Organisation, Ministry of Statistics and Programme Implementation**
- Government of India, Ministry of Commerce and Industry, Office of the Economic Adviser (2001). *Handbook of Industrial Policy and Statistics*, New Delhi: Ministry of Commerce and Industry**
- Government of India, Ministry of Finance, Economic Division (2001-02, 2002-03). *Economic Survey*, New Delhi: Ministry of Finance**
- Joshi, Vijay and I.M.D. Little (1998). *India: Macroeconomics and Political Economy 1964-1991*, New Delhi: Oxford University Press**

Krishna, Sridhar (2001). 'Phasing Out of Import Licensing: Impact on Small-Scale Industries', *Economic and Political Weekly*, Vol. 34, p. 2545

Reddy, C. Rammanohar (2003). 'Limits of a Service Economy' *The Hindu*, Saturday, June 21

Reserve Bank of India (2000-01). *Handbook of Statistics on Indian Economy*, Mumbai

Reserve Bank of India (various issues). *Report on Currency and Finance*, Mumbai

