

# **THE COMPOSITE TEXTILE MILL INDUSTRY: RESPONSES TO THE CHANGED ENVIRONMENT**

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I hereby affirm that the research for this dissertation titled, "The Composite Textile Mill Industry: Responses To The Changed Environment" being submitted to the Jawaharlal Nehru University for the award of the Degree of Master of Philosophy, in Applied Economics was carried out entirely by me at the Centre for Development Studies, Thiruvananthapuram.

  
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Certified that this dissertation is the bonafide work of Neetha.N. This has not been considered for the award of any other degree by any other university.

  
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## *CONTENTS*

<i>Chapter</i>	<i>Page</i>
1 Introduction	1
2 Trends in Domestic Demand	12
3 Trends in Exports	41
4 Responses of the Composite Mills	64
5 Analysis of the Mills	82
6 Summary and Conclusion	113
Appendix	
Bibliography	

## List of Tables

Table No.	Title	Page No.
Table 2.1	Household Purchase of Aggregate Quantities of Different Types of Textiles	17
Table 2.2	Per-Capita Purchase of Different Types of Textiles	20
Table 2.3	Unit Value of Different Types of Textiles	22
Table 2.4	Household Purchase of Textiles By Sector of Manufacture	24
Table 2.5	Unit Values of Textiles By Sector of Manufacture	26
Table 2.6	Per Capita Purchase of Textiles By Sector of Manufacture	27
Table 2.7	Aggregate Quantities of Different Types of Textiles, Urban/Rural	31
Table 2.8	Per Capita Purchase of Different Types of Textiles, Urban/Rural	33
Table 2.9	Aggregate Quantities of Household Purchase of Textiles in Urban & Rural area sectorwise	35
Table 2.10	Per Capita Purchase of All Textiles by Households in Different Income Groups	37
Table 2.11	Per Capita Purchase of All Textiles by Household in Different Income Groups	37
Table 2.12	Growth Rates of Per Capita Consumption of Textiles According to income Groups (1974-1987)	39
Table 3.1	Share of World Exports of Selected Textiles and Clothing 1965 - 85 (%)	42
Table 3.2	Share of Selected Country Groups in the World Trade of Textiles and Clothing Trade	43
Table 3.3	World Market Shares in Textile and Clothing of Selected Asian Competitors	45
Table 3.4	Commodity Composition of Indian Textile Exports 1971 - 1986	48
Table 3.5	Total Cotton Textile Exports	49
Table 3.6	Exports of Cotton Yarn	50
Table 3.7	Exports of Cotton Fabrics	52

Table 3.8	Average Unit Value Realization on Exports of Cotton Textiles	54
Table 3.9	Exports of Cotton Made ups	55
Table 3.10	Segmentwise Composition of Indian Garment Exports	57
Table 3.11	Market Distribution of Indian Textile Exports (%)	59
Table 3.12	Growth of World Demand for Textiles and Clothing, 1971-86	59
Table 3.13	Percentage Share of Different Regions in the Exports of Cotton Textiles	60
Table 3.14	Value of Textile Products Exported (1986-87 to 1990-91)	62
Table 4.1	Production of Mill Made Cloth	65
Table 4.2	Production of Yarn By Mills	66
Table 4.3	Production Consumption and Deliveries of Cotton Yarn	67
Table 4.4	Production of Fabrics by the Mill Sector	68
Table 4.5	Production of different types of yarn	69
Table 4.6	Production of Different Categories of Cotton Cloth	70
Table 4.7	Mills with 100% Export Oriented Unit	73
Table 4.8	Capital Expenditure by the Composite Mills of India	74
Table 4.9	Rate of Modernization in Textile Mills	76
Table 4.10	Recent Trends in Modernization in Composite Mills	78
Table 5.1	Classification of Mills According to Size Net Assets	87
Table 5.2	Distribution of Mills in Terms of Size and Gross Profitability	108
Table 5.3	Average Profitability of Various Classes and Coefficient of Variation	91
Table 5.4	Distribution of Class 1 Mills	93
Table 5.5	Distribution of Class 2 Mills	95
Table 5.6	Distribution of Class 3 Mills	96

Table 5.8	Distribution of Class 5 Mills	98
Table 5.9	Share of Export in the Total Sales	102
Table 5.10	Trend in Plant & Machinery / Gross Block Ratio	104

## List of Figures

No.	Title	Page. No
1.	Aggregate Household Purchase of Different Types of Textiles	18
2.	Per capita Purchase of Different Types of Textiles	21
3.	Sector wise Per capita Purchase of Cotton Textiles	28



## Chapter 1

### *INTRODUCTION*

From the perspective of a developing country the study of textile industry is important as in many of these countries the industry has come to occupy an important position in terms of its contribution to national output, employment and exports. The spectacular performance of the newly industrialising countries of South - East Asia namely Hongkong<sup>1</sup>, the Republic of Korea, Taiwan and Singapore is related in a major way to the growth of the textile industry<sup>2</sup>. Some of the less developed countries of Asia such as Thailand and Bangladesh also seem to follow this pattern.

The performance of the Indian textile industry appears to be extremely poor compared to its Asian counterparts despite the fact that it is the oldest and the largest manufacturing industry in India. The Indian textile industry is more than 150 years old and occupies a central position in the industrial structure by virtue of its size, employment, contribution to the national product, exports and final consumption expenditure. It accounts for about 20 per cent of the industrial production providing employment to about 15 million people and contributing nearly 25 per cent of the total value of exports. The structure of the industry is extremely complex with the hand spinning and hand weaving sectors

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<sup>1</sup> See, Kui, Wai Li (1993); *The Developing Economies - The World Economy Vol XXIV, No.2*, for a discussion on the importance of textile and clothing industry in Hongkong.

<sup>2</sup> See, Suphachalasai, Suphat (1990) *Export Growth of Thai Clothing and Textiles - The World Economy, Vol.13, No.1, March 1990*, for a discussion on the role of textiles and clothing in the export earnings of Thailand. In Thailand, Textiles and Clothing accounted for 37 per cent of the country's manufacturing workforce and 26 per cent of its manufacturing output in 1990.

(unorganized) at the one end and the modern sophisticated highly mechanized mill sector (organized) at the other. In between falls the small scale powerloom sector (unorganized) and the smaller mill sector (organized).

Apart from the poor overall performance of the industry, since 1960's the organized sector, especially the composite mills<sup>3</sup> have been passing through successive periods of crisis. A number of attempts were made to explain this phenomenon in academic, official, and business circles the major reasons being put forth included stagnancy of demand, skewed income distribution, competition from powerlooms, inadequate raw cotton availability, obsolescent machinery and controls and regulations on the industry.

The studies on composite mills are largely confined to the analysis of sickness - the characteristic feature of the mills during the sixties and seventies [Eapen (1978) Sastry (1979) Chandrasekhar (1981), Goswami (1985, 1990), Anubhai (1990), Khanna (1987)]. Apart from these studies a plethora of committees, task forces, working groups, conferences and seminars have addressed the problem of sickness in the industry and various explanations were given. Most of these studies tended to emphasise the stagnation in demand which it was argued resulted in technological obsolescence,

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<sup>3</sup> The manufacture of textiles can generally be divided into three stages - spinning, weaving and processing. The spinning operations take place exclusively in the organised sector in independent spinning mills or in the spinning sections of composite mills (where spinning, weaving and processing are combined in a single unit). The weaving operations in the organised sector take place in composite mills but a major part of the weaving operations in India is now performed in the decentralised sector viz, handlooms and powerlooms.

aggravated by the highly skewed distribution of income, increased competition from powerlooms and increased prices of raw materials. But even during this period there was a group of mills performing well, earning huge profits, moving against the general industry trend. Many studies have also analyzed the characteristic features of these mills.

Chandrasekhar (1981) pointed out that, deceleration in demand and therefore in aggregate output is related to the structure of and changes in income distribution on the one hand and the emergence of more durable varieties of cloth on the other. He argued that the rate of technical change in the industry was constrained by the rate of growth of the market in a situation in which technical change did not get reflected in lower prices and there was a freeze on expansion of loomage by the government. However, he pointed out that new techniques were adopted to some extent in the industry, though the diffusion of the techniques was low.

He viewed the weaving sector<sup>4</sup> as one catering to different market segments each having its own characteristics in terms of quality, finish, price elasticity of demand and so on. Broadly he identified two segments - that for ordinary textiles, a non oligopolistic segment where quality commands less of a premium and price elasticities are expected to be high and the other for sophisticated and costly fabrics, an oligopolistic segment where product characteristics like quality, design, finish and the extent of sales promotion rather than price per se are crucial in

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<sup>4</sup> He considers only the organised sector (composite mills).

determining the level of demand. Looking at the size distribution of mills quoted in the Bombay Stock Exchange according to product composition he found that the big composite mills were involved in the production of more sophisticated fabrics which constituted the high productivity sectors of the economy where profit since the late fifties was much higher than that for the industry as a whole. On the basis of this he analyzed the difference in the pace of technical change between mills in the industry and came to the conclusion that while mills in the oligopolistic group tend to invest large amounts on new and sophisticated machines the other group performed at a very low level of technology.

As far as the export alternative is concerned he pointed out that the export of cotton textiles offered no alternative to the domestic market for the Indian textile industry in the fifties and sixties, as the buoyant domestic market and subsequent inflation rendered production for the domestic market more profitable on the one hand and reduced the competitiveness of Indian exports on the other. This could not be overcome even by the policies of export promotion adopted by the government. Though there had been some increase in exports during the seventies it did not change the position of the industry as the international market became more demanding and only a few firms were able to exploit the market.

Goswami (1985, 1990) came to the conclusion that the firms catering to the needs of the high value market were doing well and the sick ones belonged to that segment of the industry producing low value added, non branded and almost homogeneous cloths. To him the growth of demand was dampened by the inappropriate fiscal policies

which raised the prices of blended and man made fabrics for which there was an increasing consumer preference. The rate of technical progress was found to be very high among mills specialised in high quality cloth while the other segment used obsolescent technology.

Khanna (1989) emphasized the importance of modernisation by arguing that it was the technological obsolescence in the industry which led to widespread industrial sickness. He also pointed out that the rate of modernisation was extremely high among the mills engaged in the production of blended fabrics.

Anubhai (1988) ascribed the sickness in the industry to structural, environmental, locational and managerial factors. Of the environmental factors he stressed trends in aggregate demand, macro level policies, resource availability and fluctuating cost of raw materials. The structural factors included competition from powerlooms and unionisation. This according to him was further worsened by the managerial factors which were reflected in the static perception of the managers relating to raw material, technology, product and market. The location of the mill according to him was one of the factors for their poor performance as the old mills located in old textile centres had to incur high locational costs<sup>5</sup> compared to new mills.

Some attempts were made to explain the stagnation in demand and the rationale underlying the better performance of the big textile

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<sup>5</sup> Here by location cost he means a comparatively high tax structure in the old centres and high degree of unionisation which led to the existence of a number of wage laws.

mills engaged in the production of mixed and blended textiles on the basis of elasticity of demand for different types of cloth<sup>6</sup>. Most of the studies argued in the following way:

Like other goods demand for textiles is primarily a function of prices and income. However, income elasticity was found to be more important in the demand for cloth than price elasticity. A large proportion of low priced textiles behaved as inferior goods with consumption declining across the various income groups as their real income rise<sup>7</sup>. This led to a decline in the per capita consumption of cotton textiles and a switch in favour of high priced cotton textile items, man made and blended fabrics. Since man made and blended textiles substitute cotton textiles disproportionately on account of their greater durability, this resulted in an overall stagnation in demand. With an increased demand for non-cotton and blended fabrics certain big textile mills specialising in their production were able to perform well.

On the whole three aspects of the industry's performance were widely discussed : (1) A deceleration in the demand for textiles as a result of a fall in the per capita consumption of cloth; (2) the technical backwardness of the industry reflected in the persistence and use of backward and outdated techniques, including machinery which are obsolescent and (3) the co-existence of two specific groups of mills with varying levels of productivity profitability and technology..

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<sup>6</sup> Murthy 1985, Goswami 1985,1990, Iyer 1982,1985, Sastry 1979.

<sup>7</sup> Stagnation in demand occurred over a period during which per capita income in real terms was rising.

*Scope of the study:*

Confronted with the hostile environment the composite mill industry was in the grip of sickness during the sixties and seventies. However, number of positive changes have taken place in the environment of the mills since the early eighties. These changes can be classified into (1) changes in the policy environment and; (2) changes in the market environment. Changes in the policy environment constitute changes in the macro policy environment and (2) changes in the policy environment specific to textiles.

The changes in the macro environment were brought about by the process initiated since the late seventies to move away from the regulatory policy environment. There has been a considerable relaxation in industrial licensing policy across a large number of industries. Attempts were also made to relax the restrictive clauses in the import of technology and capital. The duty structure on raw materials, components and capital goods was lowered considerably from time to time. The exchange rate policy has also been subject to change over time with an accent on liberalisation. Since 1978, a managed floating system has been brought in and the eighties witnessed substantial devaluation of the rupee (Narayana and Joseph 1993).

Upto the sixth plan, the direction of the textile policy was circumscribed by the overall direction of industrial planning as enshrined in the Industrial Policy Resolutions. The Indian textile industry has probably been the most tightly regulated in the world. It was one of the eighteen basic industries which was subject to a complex regime of licensing and controls implied by the Industries

Act of 1951. In addition to this, to promote the decentralised sector, weaving capacity in the mill sector was frozen at the existing level in 1956 with expansion permitted only for exports. However, along with the changes in the macro policy environment, policy changes specific to textile industry were also announced. The first among these was the Textile Policy of 1978 followed by the Integrated Textile Policy of 1981. These two policies shifted only marginally from the existing position over the years. However, two features of the 1981 policy needs special mention, (1) replacement of looms exclusively for purpose of modernisation and (2) revision of duty structure on man made fibres and their liberal imports to promote multi fibre policy. The Textile Policy of 1985 constitutes a radical departure from the past, with which the Indian textile industry has been more or less liberated from the government intervention in production and marketing. The novel features of this policy were:

- (1) Removal of barriers to entry and exit.
- (2) Complete flexibility in the use of cotton and man-made fibres.
- (3) A better recognition of the export potential of the textile sector.
- (4) Equal treatment of powerloom and handloom for fiscal purposes.
- (5) Allowing for the expansion and contraction of installed capacity by existing units.

Thus with these changes, the environment has changed considerably from one of controls to that of liberalisation of capacity, expansion, choice technology, import of capital and the type of cloth to be produced. Controls on production through reservation



of certain products for the handloom sector are not and on the stipulated production of hank yarn for this sector are not regarded as serious constraints on profitability and are frequently disregarded.

The changes in the market environment constituted the changed demographic, sociological and economic conditions which were reflected in the trends in demand. To this changed environment the textile mills responded in various ways as a strategy for survival and growth. Consequently a number of changes have taken place within the composite mills. The mills started modernising rapidly so as to produce high value added fabrics and ready made garments to keep up with the trends in demand. Simultaneously they started exporting and entering into tie-ups and sourcing agreements with foreign companies and stores. In brief, a distinct buoyancy can be seen in the industry after a long period. The changes that have taken place in the environment and the emerging trends constitute the basis of the present study.

*Objectives of the study:*

The study attempts to capture the responses of the mills to the markedly changed environment. The objectives of the study are to:

1. Analyse the changes in the environment industry which led the mills to undertake restructuring .
2. Examine the responses of the mills to these trends in terms of changed output composition, product mix, markets, rate of modernisation etc.
3. Evaluate the financial performance of the mills to identify the successful ones and bring out the characteristic features of the successful mills.

***Methodology and data source:***

The study is based on data for 59 mills selected from the Bombay Stock Exchange Directory for the period 1980-1990. The sample size is limited to 59 for which data was available for the whole period of eleven years. The sample mills accounted for more than one third of the total spindleage (4.31 million) and loomage (62.32 thousand)<sup>8</sup> that existed in the composite mill sector in 1990.

To analyze the response of the composite mill industry to this changed environment, data on production, product mix and exports are taken from the Indian Textile Bulletin and the Handbook of Statistics on Cotton Textile Industry. Information on important parameters like assets, liabilities, sales expenditure and profits is collected from the Bombay Stock Exchange Directory, Volume 8 for the mills in the sample. The performance of the mills is examined by analyzing the financial performance, which is taken as an indicator of their overall performance.

***Scheme of chapters:***

The study is divided into six chapters including the present one. The present chapter outlines the approach to the study, its objectives scope and methodology. An analysis of the environment is attempted in the second and third chapters so as to provide a backdrop for the analysis of mills. As stated earlier the analysis of the environment will be limited to the analysis of the trends in demand. The trends in demand are analyzed in two chapters; Chapter 2 examines the trends in domestic demand and Chapter 3

<sup>8</sup> The spindleage and loomage of the sample mills were calculated by adding up their installed spindleage and loomage capacity in 1990.

deals with trends in exports. Chapter 4 analyses the responses of the mills in terms of changes in output, product mix, exports and modernisation. In Chapter 5 the financial performance of the sample mills is analyzed and the characteristic features the successful mills are brought out. Chapter 6 sums up the whole analysis.

## Chapter 2

### *THE CHANGED DEMAND SCENARIO*

The behaviour of a firm can be viewed as an adjustment to the environment within which it operates. Changes in the environment define the opportunities and threats confronted by a firm and hence it has to adjust to survive. In the process of change and adjustment, some firms will succeed and some have to go out. This process of change and adjustment has always been there and can be viewed as a characteristic feature of all industries.

Several changes occurred in the environment of the textile mills, particularly in the late 70s and early 80s. During the 1980's though competition from powerlooms continued certain trends or changes in the environment enabled the mills to fight back. Since the study focuses on the performance of the mill sector it becomes imperative to provide an insight into these changes emerging in the environment. The changes in the environment will get reflected in trends in demand. Hence an analysis of the trends in demand is attempted.

In the Indian context with the tremendous growth of powerlooms, it becomes possible to say that the growth of cloth output is limited by the growth of demand. Thus, demand conditions become a major determinant of the growth of the textile industry which caters to domestic demand and exports. Till recently the demand side was more or less confined to domestic demand<sup>1</sup>. Though exports constituted an alternative, the relatively high profitability of

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<sup>1</sup> Chandrasekhar (1981).

domestic sales<sup>2</sup> in comparison with exports resulted in poor export performance in the sixties and seventies. But recently the trend seem to have changed with a discernible pick up in exports.

The analysis of the changed environment is organized into two chapters. The present chapter deals with changes in domestic demand followed in the next chapter by an examination of trends in exports. This chapter on trends in domestic demand is organized into four sections: Section 1 discusses the studies on domestic demand as well as limitations of the sources of data available on domestic demand. Section 2 deals with trends in aggregate demand, while Section 3 discusses trends in sector wise purchases. The urban-rural and income class disparities are examined in Sections 4 and 5 respectively.

#### *1. Trends in domestic demand:*

In the literature on the Indian textile industry the demand for textiles has been the subject of considerable analysis and debate since it was perceived to be closely linked to the performance of the industry<sup>3</sup>. A number of attempts have been made to study the trends in domestic demand using different time periods and different data sources<sup>4</sup>.

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<sup>2</sup> Particularly the mills which were capable of competing in the international market.

<sup>3</sup> Many in fact ascribe the ills of the industry such as sickness, low profitability and technological stagnation to a deficiency in the demand for textiles.

<sup>4</sup> Goswami (1987), Goswami and Shukla (1990), Anubhai (1988), Eapen (1978), Divatia (1992).

Irrespective of the time period or data sources chosen, these studies show certain broad trends:

1. An overall stagnation in per capita purchase since the mid sixties for textiles measured in metres as a result of a steady decline in per capita purchase of cotton textiles.
2. A particularly pronounced fall in per capita demand in rural as well as in urban areas; across all income and expenditure classes.
3. A growth in the per capita demand for pure synthetic and blended cloths in rural as well as in urban areas and across all income classes.

Some of the arguments which have been put forth to explain the observed trends are the following: stagnation in demand is on account of (1) the deceleration in the rate of growth of per capita real income; (2) the high rate of inflation since the mid sixties and a consequent shift in distribution of income which pushed down the average level of per capita consumption; (3) the increase in availability of more durable non-cotton and mixed cloths in a period of inflation led to the substitution of cotton textiles for non-cotton and mixed textiles among the middle classes and resulted in a cut back in per capita consumption<sup>5</sup> and (4) the inappropriate fiscal policies which raised the prices of non cotton cloth for which there was an increasing demand<sup>6</sup>.

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<sup>5</sup> Eapen (1975) and C.P.Chandrasekhar (1984).

<sup>6</sup> Goswami (1987), Goswami and Shukla (1989) and Goswami (1990).

***Data sources and limitations:***

In most of the studies, demand stagnancy as reflected in per capita consumption has been mainly discussed in quantitative terms. There are two sets of data on demand estimates. One is the data compiled by the Ministry of Textiles reported annually in the Economic Survey; the other is the data collected monthly, by the Market Research Wing of the Textile Committee, Ministry of Textiles, from an all India panel of 7450 representative households located in 58 urban and 100 rural centres all over the country [Consumer Purchase of Textiles Data (CPT)].

However both these sets of data are subject to certain limitations<sup>7</sup>, which have been discussed at length elsewhere. Briefly the data published in the Economic Survey have the following problems.

1. Data for the decentralized sector are not reliable since its production is estimated indirectly from the statistics of yarn supplied to the sector. Hence production estimates are dependent on the accuracy of the conversion factor used to convert yarn figures into cloth output.
2. Pure wool, polyester wool, acrylic and hosiery items are excluded which account for about 5 to 10 percent of the per capita consumption of textiles.

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<sup>7</sup> Misra, op. cit.

3. The data does not record the purchase of smuggled items of textiles or clothing brought under baggage rules. Estimates of such imports are around 2 to 10 percent of the total cloth production.

The CPT data which is viewed as a better and more reliable indicator is beset with the following limitations.

1. The sample size from which the data is estimated is too small to be representative of the entire country.

2. As in the case of all primary surveys the margin of error will be greater in reporting (imperfect consumer information) and entering the necessary information.

3. The data does not take into account non household purchases and also industrial uses of textiles. It is found that this constitute as much as 10 -18 percent of the total cloth consumption.

Despite these limitations the CPT data is most widely used as it gives more direct information which is also more detailed, inter alia fibre wise, sector wise, urban/ rural and income wise. Hence, the present analysis on demand is based on the data published by the CPT and covers the period for which CPT data are available, broadly 1972-86<sup>8</sup>. The purpose of this chapter is to analyze in detail the domestic demand conditions facing the industry

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<sup>8</sup> The data used for the analysis are taken from V.V.Divatia, Household Purchases of Textiles: 1972-1986, Journal of Indian School of Political Economy, Vol. 2, No. 2 and 3.



especially in the more recent period, so as to observe the changes since the seventies.

*2. Trends in aggregate household demand:*

We will first examine trends in the aggregate quantity of household purchases separately for cotton, non cotton and mixed fabrics and the total for the years from 1972 to 1987 (Table 2.1). An examination of the trends in different types of textiles reveals that, although there was an increase in the quantity purchased of all textiles over the period, their rates of growth continued to differ widely.

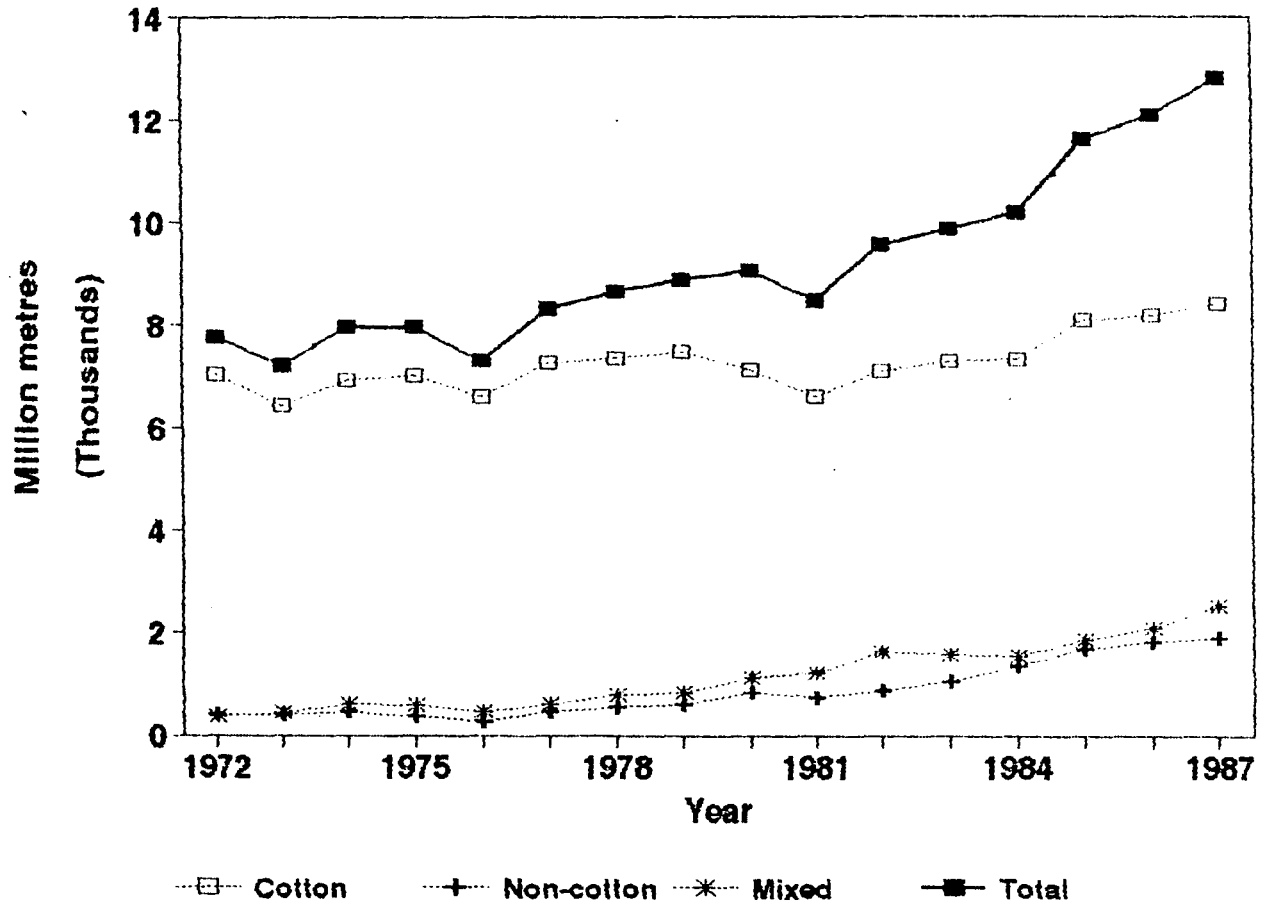
**Table 2.1**  
**Household Purchase of Different Types of Textiles**  
**Aggregate Quantities (million meters)**

Year	Cotton	Non cotton	Mixed	Total
1972	7028	377	355	7760
1973	6420	380	408	7208
1974	6915	449	583	7947
1975	7010	368	579	7957
1976	6580	257	462	7299
1977	7262	446	589	8297
1978	7358	545	757	8660
1979	7464	596	824	8884
1980	7107	822	1118	9047
1981	6592	697	1189	8478
1982	7092	857	1599	9548
1983	7287	1037	1538	9862
1984	7313	1352	1513	10178
1985	8109	1670	1836	11615
1986	8196	1804	2085	12085
1987	8411	1880	2501	12792

Source: V.V.Divatia: 'Household Purchase of Textiles-1974-86', in Journal of Indian School of Political Economy, Vol.2, No.2, May-Aug 1990.

FIG : 1

### Aggregate Household Purchase Different Types of Textiles



It is possible to identify two periods with distinct rates of growth (see Figure 1). During the first period (1972- 1977) total purchase of all textiles increased very slowly at an annual rate of growth 1.4 per cent, compared to a growth rate of 5.7 per cent in the second period (1978-1987). While in the first period growth in the purchase of cotton textiles was marginal, subsequently, there was a virtual stagnation upto 1984. The years that followed saw an increase in cotton textile purchase albeit at a annual compound growth rate of 1.9 per cent. Yet another interesting feature is that non-cotton textiles purchase showed a negative growth of -3.47 per annum during the period 1972-77, while mixed textiles grew at high rate of 10.66 per cent per annum. However, since 1977 the rate of growth of non-cotton surpassed that of mixed textiles.

Given these differing trends in purchase, there has been a significant shift in the proportion of different types of textiles purchased. The proportion of cotton textiles in the total has decreased from 91 per cent in 1972 to 79 per cent in 1980 and to 65 per cent in 1987 with an increase in the shares of non cotton and mixed varieties.

The analysis shows that the growth in the total household textile purchase is to a large extent on account of mixed as well as non-cotton textiles; however, the latter half of the eighties saw some recovery in the purchase of cotton textiles.

The aggregate figures do not take into consideration the effect of changes in population, hence the per capita figures are taken into account which are a better indicator of the trends in demand. The

per capita purchase figures are given in Table 2.2.

**Table 2.2**  
**Per-Capita Purchase of Different Types of Textiles**  
**Quantity in Metres**

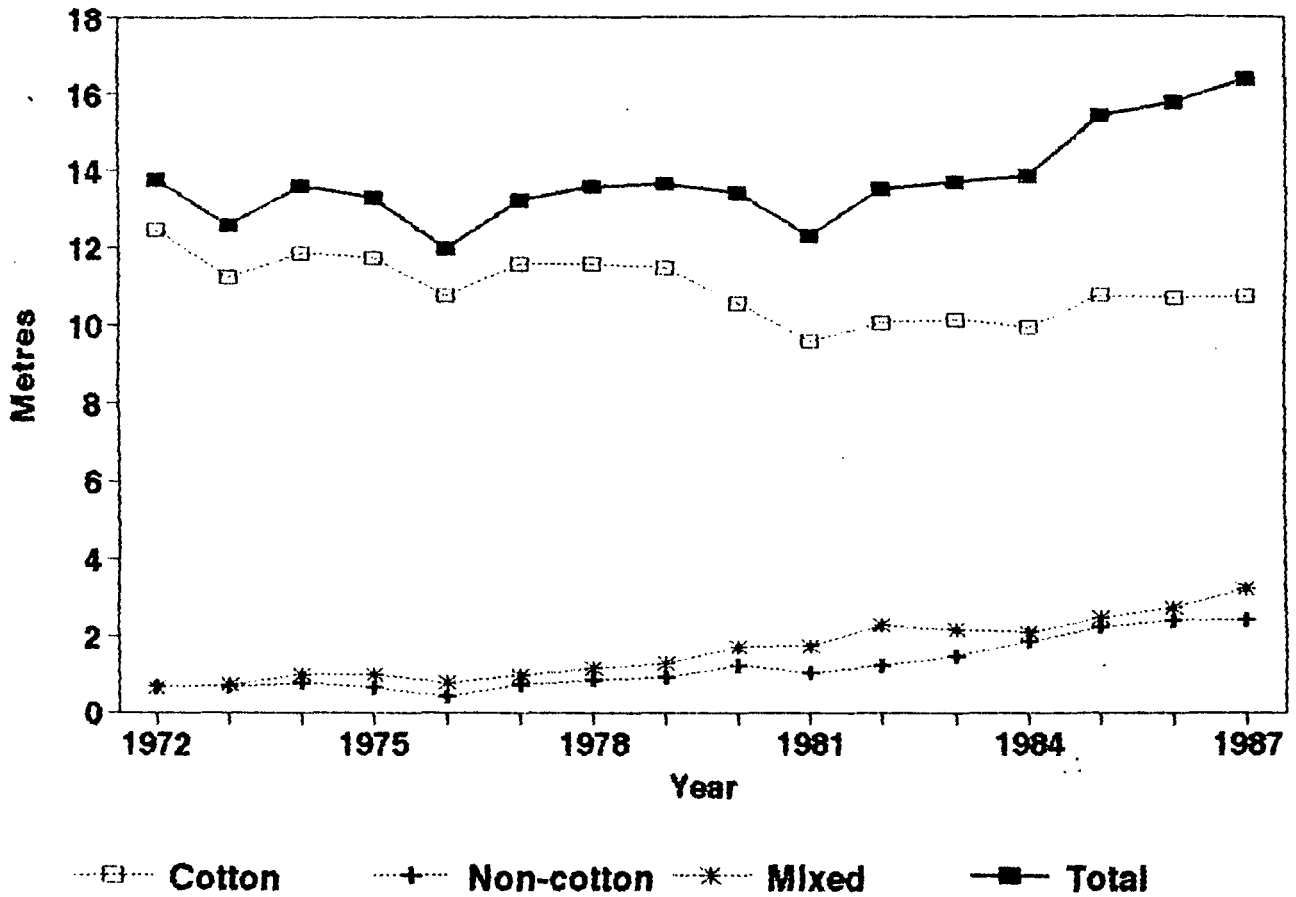
Year	Cotton	Non cotton	Mixed	Total
1972	12.48	0.67	0.63	13.78
1973	11.23	0.66	0.71	12.60
1974	11.85	0.77	1.00	13.62
1975	11.72	0.62	0.97	13.31
1976	10.79	0.42	0.76	11.97
1977	11.6	0.71	0.94	13.25
1978	11.6	0.84	1.15	13.59
1979	11.46	0.92	1.27	13.65
1980	10.56	1.20	1.66	13.42
1981	9.57	1.01	1.73	12.31
1982	10.04	1.21	2.26	13.51
1983	10.12	1.44	2.14	13.70
1984	9.94	1.84	2.06	13.84
1985	10.79	2.22	2.44	15.45
1986	10.71	2.36	2.72	15.79
1987	10.75	2.42	3.20	16.35

Source: V.V. Divatia, op.cit.

An examination of the Table shows that; broadly the trends are similar to the trends in per-capita demand in the aggregate purchases. However, per capita purchase of textiles more or less stagnated upto 1984, the rate of growth being 0.04 per cent per annum, primarily on account of the decline in per capita cotton textile purchase. This implies that the slow rise in the purchase of non cotton and mixed textiles during this period did not compensate for the fall in per capita consumption of cotton textiles. Since then, there was a recovery in the consumption of cotton textiles and much sharper increases in the purchase of non cotton and mixed textiles, resulting in a significant increase in per capita consumption of all textiles to 16.4 million metres in 1987. A graphical presentation of the trends in per capita purchase of different types of textiles is given in Figure 2.

FIG : 2

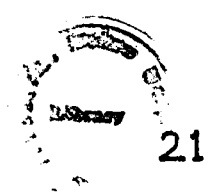
### Per-Capita Purchase Different Types of Textiles



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To take into account the differences in quality and durability between the three types of textiles their real unit values are taken. This type of an analysis also takes into consideration the effect of inflation on the value of purchase. The unit values for the three types of textiles as well as the total is given in Table 2.3.

Table 2.3  
Unit Value of Different Types of Textiles  
Value in Rs (constant prices)

Year	Cotton	Non cotton	Mixed	Total
1972	3.12	9.16	11.58	3.8
1973	3.51	11.38	14.25	4.53
1974	4.70	14.63	16.50	6.12
1975	5.02	19.60	19.95	6.78
1976	4.91	21.11	23.09	6.63
1977	5.34	22.76	24.42	7.63
1978	6.02	23.94	25.87	8.88
1979	6.28	26.40	27.58	9.60
1980	7.79	28.27	29.49	12.33
1981	8.26	32.85	31.51	13.54
1982	8.82	35.52	32.49	15.18
1983	9.15	35.95	34.48	15.92
1984	9.54	37.12	35.25	17.03
1985	10.03	40.64	36.35	18.59
1986	10.80	41.65	37.48	20.01
1987	11.69	46.82	36.99	21.81

Source: V.V. Divatia, op. cit.

It can be seen that the unit value of cotton textiles is much below that of non-cottons and mixed textiles, it was about one fourth of that of non-cottons and one third of mixed textiles. The differential has increased in respect of non-cotton, given the disparate growth rates. While the unit value of cotton textiles increased at a rate of 9.21 per cent, non cotton textiles showed a sharp increase which was almost five fold over the period (1972-87). Unit values of mixed textiles grew at a rate of 8.05 per cent which was lower than that of cotton textiles. Since all the

different types of textiles showed an increase in unit value during the entire period, the unit value of all textiles also showed an increase of 12.35 per cent per annum. Relating these to trends in per capita consumption of textiles we find that despite lower unit values of cotton cloth and a generally lower rate of increase there was a definite shift towards non-cotton and mixed fabrics, presumably towards more durable and better quality cloth. Since 1984 when total per capita consumption increased primarily on account of non-cotton and mixed fabrics, while the consumption of cotton textiles stabilized, the increase in unit values were much sharper for the former strengthening the shift towards durable better quality cloth. This appears to have happened within cotton textiles also (as we see later).

### *3. Sector wise trend:*

Since we are more concerned with the responses of the mills, it becomes important to disaggregate the total purchase between the different sectors and analyze the trends in sectoral demand. Disaggregate data is available only for cotton textiles. It is known that non-cotton textiles were largely produced in the decentralized powerloom sector with a change since the mid 80's while mixed textiles are produced across the sectors. Since the data on the latter are not available we confine our analysis to the purchase of cotton textiles, sector wise. The CPT distinguishes between millmade, powerloom and handloom fabrics, hosiery and khadi cloth. In the present analysis khadi and hosiery are clubbed together under 'other' textiles. Since, data before 1976 are

unreliable<sup>9</sup> the analysis is confined to 1976-87 (Table 2.4). Separate data for the powerloom sector are available only from 1980; till then, powerloom sector was included with the mills. However the 1981 and 1982 estimate still remain suspect, due to the possibility of some classification errors. It is only beginning with 1982 that the classification of purchases between mill made, powerloom and handloom, seems to be reasonably reliable<sup>10</sup>.

**Table 2.4**  
**Household Purchase of Cotton Textiles By Sector of Manufacture**  
**Aggregate Quantities (million metres)**

YEAR	MILL	P.L	H.L	OTHERS	TOTAL
1976	5444		667	468	6579
1977	5877		705	681	7263
1978	5919		661	779	7359
1979	5912		821	731	7464
1980	5733	187	625	560	7105
1981	4519	944	607	521	6591
1982	1355	2361	2787	589	7092
1983	1278	2568	2862	578	7286
1984	1302	2433	3040	537	7312
1985	1622	2700	3087	701	8110
1986	1730	2924	2770	772	8196
1987	2253	2933	2426	961	8473

Source: V.V.Divatia, op.cit.

Mill made cotton textile purchase has shown a sharp decline since 1981, from 4519 million metres in 1981 to 1355 million meters in 1982 which continued at a low level. Part of this decline could still be due to the difficulty of clearly distinguishing between mill made and powerloom cloth. However, more importantly this appears to be due to the growth of powerlooms during that period which coincided with the long drawn out Bombay Mill Strike

<sup>9</sup> See V.V. Divatia, op.cit.

<sup>10</sup> V.V. Divatia, op.cit.



resulting in a decrease in the production of mill made cotton. The Bombay Mill Strike of 1982 led to the closing down of 60 mills for 18 months which accounted for almost 30 per cent of the total production<sup>11</sup>. From 1985, the mill sector showed signs of recovery, growing at an annual average rate of 9.3 per cent per year. However, the aggregate cotton textile purchase has grown only at an annual rate of 1.9 per cent (1985-87)<sup>12</sup>.

The decline in mill made cotton textile purchase in the initial years, was taken up largely by the powerloom sector, purchases from the latter increased from 187 million meters in 1980 to 2361 million meters in 1982. However, part of this as said earlier was due to the Strike and errors in classification. Since 1985, it is possible to see a relative slowdown in its purchase.

Handloom textiles also witnessed a sharp increase in purchase in 1982, the increase being more than four fold; and remained stagnant for the next three years and subsequently declined. However estimates of handloom purchases / production are not very reliable given the method of estimating its production/purchases. Other textiles showed a lower growth rate till 1984 and increased sharply there after at an annual average growth rate of 14.8 per cent.

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<sup>11</sup> EPW - 'Bombay Textile Strike - What lies Ahead?', June 5 1982, Vol.XVII, No. 23.

<sup>12</sup> It is surprising to note that the household purchase of mill made cotton textiles has increased whereas the production of cotton textiles by mills showed a declining trend (see Chapter 4) . This might be due to some errors in classification between different varieties of in estimating purchase of textiles.

From the above analysis it can be seen that 1982 was a year which witnessed a sharp change in the sector wise consumption of cotton textiles, with a relative decline in the mill sector purchases vis a vis the powerlooms and the handlooms. This was largely due to the Textile Strike of 1982, which resulted in the closure of a number of mills. However since 1984, purchases of millmade cloth increased at a higher rate, much above that of powerlooms and handlooms.

To take into account differences in the quality of the cotton textiles produced between the three sectors their unit values are examined (Table 2.5).

**Table 2.5**  
**Unit Values of Textiles By Sector of Manufacture**  
**Unit Value in Rs per metre**

YEAR	MILL	P.L	H.L	OTHERS	TOTAL
1976	5.02		4.37	3.59	4.91
1977	5.56		4.55	4.94	5.34
1978	6.22		5.59	7.07	6.02
1979	6.53		6.12	7.52	6.28
1980	8.1	6.95	7.44	9.38	7.79
1981	8.81	7.51	8.18	7.77	8.26
1982	10.94	8.70	8.61	8.95	8.82
1983	11.25	9.08	8.98	9.66	9.15
1984	11.72	9.14	9.57	10.29	9.54
1985	12.03	9.56	10.18	11.79	10.03
1986	13.07	10.51	10.75	12.29	10.80
1987	13.96	11.04	11.5	11.84	11.69

Source: V.V.Divatia, op. cit.

The unit values of all textiles increased almost steadily during the period 1980 to 1987, though at different rates of growth. The unit value of mill made textiles is above that of powerlooms and handlooms and the rate of increase in unit value of fabrics was the highest for millmade followed by powerloom fabrics.

In 1982 during which there was a steep fall in mill made cloth demand, unit value of cotton textiles increased sharply, perhaps due to the shortfall in production. Subsequently, with a continued increase in unit values at a rate higher than of other fabrics one infer that there was a sharper shift towards finer varieties within mill made fabrics after the strike, eliminating low quality, low priced varieties for which the competition from powerlooms was high.

The high unit value of mill made cotton textiles induced some shift in purchases between the different sectors during the early period - a shift from mill made fabrics to fabrics produced by powerlooms and handlooms. However since 1984, purchase of mill made cotton cloth picked up despite the increase in unit values, suggesting a shift in purchases towards finer varieties.

Relative trends in the sector wise purchases can be appreciated better by observing per capita purchase (Table 2.6). A graphical presentation of the trends in per capita sector wise purchase is given in Figure 3.

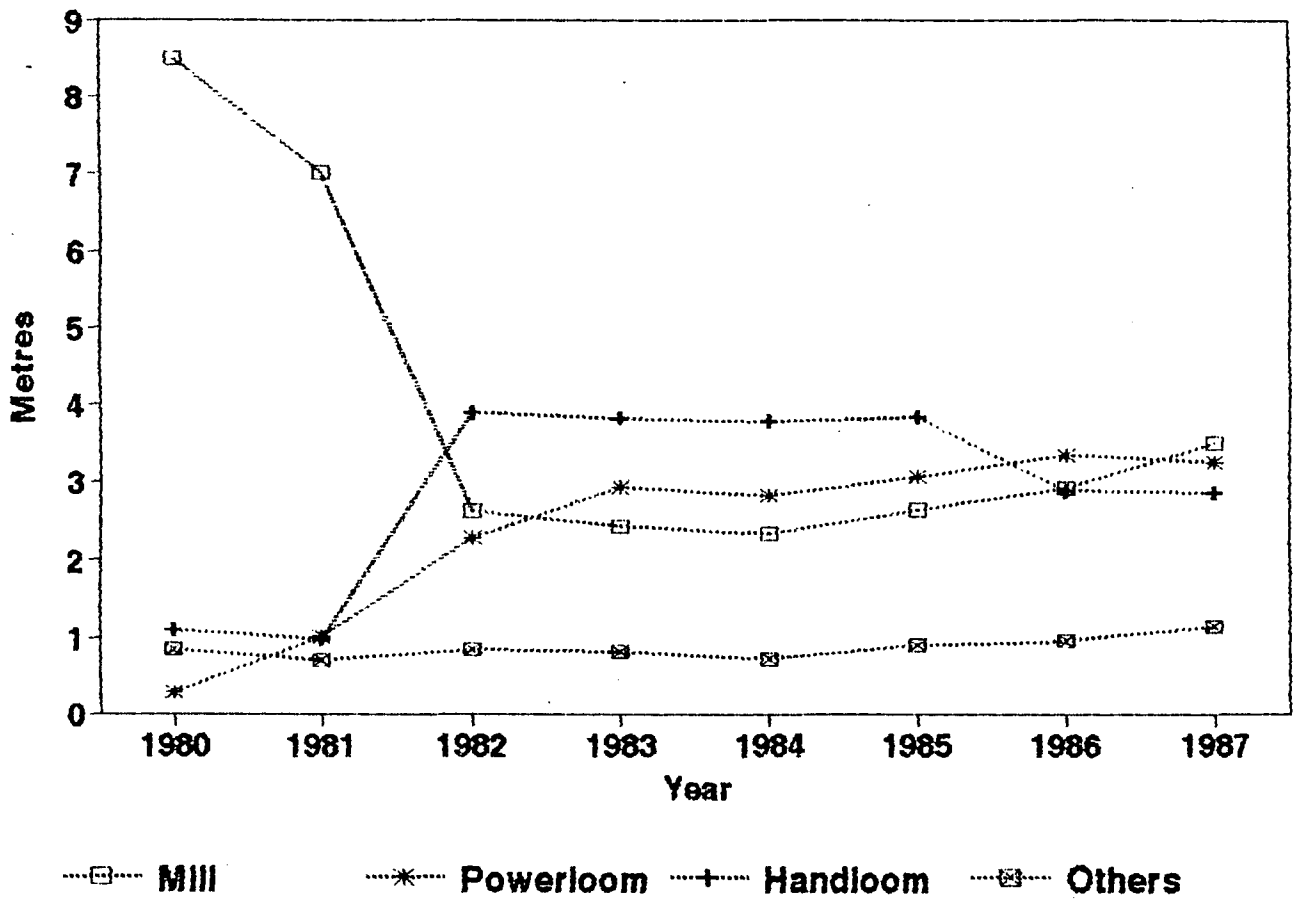
**Table 2.6**  
**Per Capita Purchase of Cotton Textiles By Sector of Manufacture**  
**Quantity in Metres**

	MILL	P.L	H.L	OTHERS	TOTAL
1980	8.48	0.27	1.09	0.83	10.67
1981	7.03	1.01	0.98	0.71	9.73
1982	2.64	2.28	3.90	0.84	9.66
1983	2.44	2.93	3.83	0.82	10.02
1984	2.35	2.83	3.78	0.73	9.69
1985	2.65	3.07	3.84	0.91	10.47
1986	2.93	3.36	2.90	0.98	10.17
1987	3.51	3.27	2.88	1.17	10.83

Source: V.V.Divatia, op. cit.

FIG: 3

### Per-Capita Purchase Sectorwise



The per capita purchase of millmade cotton textiles declined drastically from 8.48 meters in 1980 to 2.64 meters in 1982, and further to 2.3 metres in 1984. During this period per capita purchase of both powerlooms as well as handlooms increased sharply. This is in tune with the trends in aggregate sector wise purchase and the reasons have been discussed earlier. However, the overwhelming decline in per-capita purchase of mill made cotton textiles was not compensated by the increased purchase of powerloom and handloom cotton cloths which resulted in a reduction in the total per capita purchase during this period.

After 1984 the per-capita purchase of millmade cotton cloths started increasing steadily, the average annual rate of growth being about 14 per cent between 1985-87. For powerlooms it was around 5 per cent. Thus, it can be inferred that after a sharp fall in eighties the per capita purchase of millmade cotton cloth started increased since 1984. This despite a high unit value, suggests that the pattern of demand for mill made textiles shifted even further towards the fine / superfine varieties in the eighties. And, in the last year of our analysis, per capita purchase of mill made cloth increased sharply and made up for the decline in purchase of powerloom and handloom cloth resulting in an overall increase in per capita purchase of cotton textiles.

#### ***4. Rural - urban differences:***

The rural / urban difference in purchases represents yet another issue of importance since this would influence future trends in demand. With economic development the proportion of urban population to the total tends to increase and hence the trends in

urban demand are an important determinant of future demand. Urbanization brings larger numbers of people, within as well as beyond these areas into contact with new dress patterns and renders it possible to direct the use of various media of publicity. The generally higher level of per capita incomes and expenditures in urban sector as compared to rural sector makes this trend more significant. Likewise, the growth of new urban areas also extends the degree of urban influence on the demand in proximate rural regions. The data for urban and rural areas classified by broad type into cotton, non cotton and mixed/blended is given in the Table 2.7.

**Table 2.7**  
**Aggregate Quantities of Different Types of**  
**Textiles in Urban & Rural Areas**  
**Urban**

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Aggregate Quantities (million metres)

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Year	Cotton	Non Cotton	Mixed	Total
1974	1184 (77.4)	158 (10.33)	188 (12.29)	1530
1975	1342 (79.08)	146 (8.60)	209 (12.32)	1697
1976	1285 (79.52)	133 (8.23)	198 (12.25)	1616
1977	1530 (76.69)	240 (12.03)	225 (11.28)	1995
1978	1696 (73.32)	313 (13.53)	304 (13.14)	2313
1979	1600 (70.61)	332 (14.65)	334 (14.74)	2266
1980	1670 (66.51)	414 (16.49)	427 (17.01)	2511
1981	1612 (64.56)	421 (16.86)	464 (18.58)	2497
1982	1737 (63.07)	471 (17.10)	546 (19.83)	2754
1983	1687 (61.55)	507 (18.50)	547 (19.96)	2741
1984	1673 (59.10)	635 (22.43)	523 (18.47)	2831
1985	1839 (56.50)	765 (23.50)	651 (20.00)	3255
1986	2049 (56.96)	814 (22.63)	734 (20.41)	3597
1987	2301 (55.89)	898 (21.81)	918 (22.30)	4117

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Rural

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Aggregate Quantities (million metres)

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Year	Cotton	Non Cotton	Mixed	Total
1974	5731 (89.31)	291 (4.53)	395 (6.16)	6417
1975	5668 (90.54)	222 (3.55)	370 (5.91)	6260
1976	5295 (93.17)	124 (2.18)	264 (4.65)	5683
1977	5732 (90.96)	206 (3.27)	364 (5.78)	6302
1978	5662 (89.21)	232 (3.66)	453 (7.14)	6347
1979	5864 (88.61)	264 (3.99)	490 (7.40)	6618
1980	5437 (83.10)	408 (6.24)	691 (10.57)	6536
1981	4980 (83.26)	276 (4.61)	725 (12.12)	5981
1982	5355 (78.82)	386 (5.68)	1053 (15.50)	6794
1983	5600 (78.64)	530 (7.44)	991 (13.92)	7121
1984	5640 (76.77)	717 (9.76)	990 (13.47)	7347
1985	6270 (75.00)	905 (10.83)	1185 (14.17)	8360
1986	6147 (72.42)	990 (11.66)	1351 (15.92)	8488
1987	6110 (70.43)	982 (11.32)	1583 (18.25)	8675

Note : Figures in brackets gives percentage to the total.  
Source: V.V.Divatia, op. cit.

From the Table it can be seen that cotton textiles form a smaller proportion of the total purchases in urban area compared to rural area. What is more striking is that, when in urban areas cotton

textile consumption dropped by about 24 percentage points, it was about 23 percentage points in rural areas as well. Consequently, the share of non-cotton and mixed textiles increased which points to a shift towards mixed and non-cotton varieties in both urban and rural areas. However the share of mixed textiles increased sharply in rural areas compared to urban areas. After 1984, in urban area it is possible to see a decline in the share of non-cotton textiles, while the share of cotton textiles remained almost constant .

A comparison of the relative growth rates of different types of cloth reveals that while growth in aggregate purchase of cotton cloth was 5.24 per cent , of non-cotton 14.3 per cent, and of mixed 12.9 per cent in urban areas over the period it was 0.49 per cent, 9.81 per cent and 11.27 per cent respectively in rural areas. Thus all the different varieties showed a higher growth rate in urban areas compared to its rural areas. Part of this is due to the higher rate of growth of population in urban areas which led to an increased aggregate demand. During 1971-81, while the rate of growth of urban population for the country was 2.25 per cent, it was 1.6 per cent for rural areas, between 1981-91 it was 2.7 per cent and 1.2 per cent respectively. Though cotton textiles showed the lowest rate of growth in both urban and rural areas it was negligible (0.49 per cent) in rural area while it showed a higher growth rate (5.24 per cent) in urban areas.

Thus, on the whole, it can be inferred that there was a shift in the relative shares of cotton and non cotton textiles, a shift in favour of the latter in both urban and rural areas, more



prominently in rural areas, contrary to the popular belief that people in rural areas have a greater preference for cotton textiles. We now examine per capita purchase of textiles in urban and rural areas (Table 2.8).

**Table 2.8**  
**Per Capita Purchase of Different Types of Textiles**  
**in Urban & Rural Areas**  
**Urban**

-----				
Per Capita Purchase (Quantities in Metres)				
Year	Cotton	Non Cotton	Mixed	Total
-----				
1974	10.2	1.36	1.62	13.18
1975	11.23	1.22	1.74	14.19
1976	10.21	1.07	1.57	12.85
1977	11.41	1.78	1.68	14.87
1978	12.47	2.25	2.19	16.91
1979	11.35	2.35	2.37	16.07
1980	10.82	2.65	2.76	16.23
1981	10.02	2.61	2.89	15.52
1982	10.37	2.81	3.26	16.44
1983	9.73	2.92	3.15	15.80
1984	9.29	3.52	2.90	15.71
1985	9.83	3.09	3.48	16.40
1986	10.57	4.20	3.79	18.56
1987	11.42	4.46	4.56	20.44

-----				
Rural				
-----				
Per Capita Purchase (Quantities in Metres)				
Year	Cotton	Non Cotton	Mixed	Total
-----				
1974	12.23	0.63	0.87	13.73
1975	11.79	0.45	0.77	13.01
1976	10.95	0.26	0.55	11.76
1977	11.65	0.42	0.74	12.81
1978	11.37	0.45	0.86	12.68
1979	11.5	0.52	0.96	12.98
1980	10.49	0.77	1.33	12.59
1981	9.43	0.52	1.37	11.32
1982	9.94	0.72	1.95	12.61
1983	10.24	0.97	1.81	13.02
1984	10.15	1.29	1.78	13.22
1985	11.11	1.60	2.10	14.81
1986	10.76	1.73	2.36	14.85
1987	10.56	1.69	2.73	14.98

Source: V.V. Divatia, op.cit.

What strikes one immediately is the near stagnancy in per capita purchase of all textiles in rural areas, while in urban areas there was a considerable growth. Fibre wise, trends in per capita purchase of textiles, in the urban and rural areas are similar to aggregate trends; there is a relative shift away from cotton upto the first half of 80's. Since then, the demand for cotton textiles picked up in urban areas and declined marginally in rural areas. The significant increase in per capita purchase of textiles in urban areas despite, a faster growth in urban population reflects a stagnation in rural incomes which would reduce per capita consumption (Dandekar 1986)<sup>13</sup>.

We now analyze urban/rural purchase, sector wise, data being available only for cotton textiles (Table 2.9). Since the separation between mill made and powerloom prior to 1982 is unreliable the analysis is limited to 1982 to 1987.

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<sup>13</sup> Agriculture, Employment and Poverty - V.M. Dandekar, EPW, Vol.XXI, Nos 38 & 39 September 20-27, 1986.

Table 2.9  
Aggregate Quantities of Household Purchase of Cotton Textiles  
in Urban & Rural Areas (Sectorwise)  
Urban

Aggregate Quantities (million meters)					
Year	Mill	P.L	H.L	Others	Total
1982	667.91(38.45)	284.73(16.39)	642.98(37.02)	141.36	1737
1983	646.91(38.35)	295.12(17.49)	597.83(35.44)	147.14	1687
1984	624.62(37.34)	336.2 (20.10)	582.7 (34.83)	129.48	1673
1985	672.82(36.59)	380.38(20.68)	620.23(33.73)	165.57	1839
1986	827.85(40.40)	468.61(22.87)	571.59(27.90)	180.94	2049
1987	1003.4(43.61)	513.82(22.33)	517.83(22.51)	265.87	2301

Rural					
Aggregate Quantities (million meters)					
Year	Mill	P.L	H.L	Others	Total
1982	687.02(12.83)	2077.2(38.79)	2142.7(40.02)	447.78	5355
1983	631.06(11.27)	2273.1(40.59)	2264.7(40.44)	431.04	5600
1984	677.65(12.02)	2097.3(37.19)	2457.4(43.57)	407.61	5640
1985	948.66(15.13)	2319.2(36.99)	2466.2(39.33)	535.78	6270
1986	908.43(14.76)	2455.4(39.91)	2198.0(35.72)	591.07	6153
1987	1248.7(20.75)	2323.1(38.61)	1858.5(30.89)	586.61	6017

Source: V.V.Divatia, op.cit.

Both urban as well as rural purchase of mill made fabrics showed a sharp decline in 1982 similar to the trends in aggregate demand and showed signs of recovery after 1984. The real difference is perceived in the purchase of powerloom cloth. In the urban sector purchase of powerloom cloth was less than one fourth of that in rural areas. Hence the share of mill made cloth was higher in urban areas while in rural areas it was of powerloom cloth. In 1987, while 44 per cent of the total urban cotton textile purchase was from the mills it was only 20 per cent in the rural sector. The rate of increase of cloth supplied by the powerlooms was much

faster (compound rate of growth of 12.71 per cent) in the rural sector than that in the urban sector (2.26 per cent).

Thus, the decline in per capita purchase of cotton cloth has been more rapid in the rural than in the urban areas. While the per capita consumption of cotton textiles in urban areas has grown marginally in contrast to rural consumption which declined both urban and rural population have shown a manifest preference for man-made and blended fabrics. Further the trend in urban purchase is favourable towards mill made cloth. This trend in urban / rural purchase patterns have significant implications for trends in future purchase of textiles; the mill sector appears to be on growth path.

#### ***5. Income wise purchase patterns:***

In order to understand the purchase behaviour of various income classes, per capita purchase of textiles for the different income classes are taken (Table 2.10). The CPT data on cloth purchase for different groups are given in current prices and hence a given income group does not mean the same in real terms in 1974 and 1980. To cope with this limitation CPT changed the income ranges from 1981 onwards<sup>14</sup>. In the present analysis we have taken data from 1974 to 1986, making income classes comparable. Nevertheless, despite a modification of the income ranges, the extent to which this can take into account the changes in prices is questionable.

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<sup>14</sup> Between 1974 and 80 the income groups distinguished were Rs < 1500, 1500-, 3000-, 6000-, 10000- and 20000+. In 1981 the first two ranges were combined into one namely Rs.<3000, and the last range was split into 20000- and 40000+. In 1987 again some changes were made in the income groupings.

Hence a comparison of textile purchase by households in different income ranges should be interpreted with care.

**Table 2.10**  
**Per Capita Purchase of All Textiles by Households**  
**in Different Income Groups**  
**Quantities in Metres**

Year	Income Groups							Total
	3000 5999	3000_ 9999	6000_ 9999	10000_ 19999	20000- 40000	40000+ 20000+	15.32	
1974	9.13	15.74	17.80	19.78				13.62
1975	8.36	15.42	17.90	22.22	15.32		15.32	13.31
1976	8.24	12.92	18.25	20.18	16.93		16.93	11.97
1977	10.12	13.30	15.63	18.21	17.64		17.64	13.25
1978	9.60	12.05	14.73	18.61	19.51		19.51	13.59
1979	9.83	11.75	14.03	27.56	16.20		16.20	13.65
1980	9.16	11.57	14.09	15.83	19.05		19.05	13.43
1981	8.86	10.36	12.15	15.74	18.03		18.03	12.31
1982	8.42	10.71	14.00	16.79	19.78	18.23	19.01	13.52
1983	8.87	10.60	13.05	17.76	17.18	21.13	19.16	13.69
1984	8.80	11.56	13.59	16.01	17.02	19.83	18.43	13.83
1985	9.86	12.49	14.79	17.88	18.02	24.07	21.05	15.45
1986	9.85	12.22	14.37	16.25	20.31	25.44	22.88	15.79

Source: V.V.Divatia, op.cit.

The Table shows that while the per capita purchase of the lowest income group (in quantity) increased marginally at the rate of 0.63 per cent during the period, the purchase of the next three income groups declined at a rate of -2.09 per cent, -1.77 per cent and -1.62 per cent respectively. However, the highest income group showed a steady increase in per capita purchase increasing at an annual compound rate of growth of 3.06 percent. However, when trends in unit values are taken we observe a steady increase across all income classes (Table 2.11). This shows a shift across all income classes from low priced, low quality cloths to higher valued higher quality cloths.

**Table 2.11**  
**Per Capita Purchase of All Textiles by Household**  
**in Different Income Groups**  
**Unit Value in Rs per metre**

Year	Income Groups							Total
	3000_5999	3000_9999	6000_19999	10000_39999	20000-40000	+20000+		
1974	5.03	5.91	6.79	7.54				6.12
1975	5.09	6.46	7.58	8.57	12.39		12.39	6.78
1976	4.91	6.39	8.07	9.72	12.42		12.42	6.63
1977	5.34	7.39	9.55	12.69	19.39		19.39	7.63
1978	6.09	8.12	9.90	12.30	16.15		16.15	8.72
1979	6.56	8.61	10.62	8.15	17.30		17.30	9.06
1980	7.59	9.94	11.62	13.84	18.18		18.10	12.33
1981	8.76	10.39	12.96	14.88	20.60		20.60	13.54
1982	9.07	11.64	13.86	16.41	19.37	26.58	22.98	15.18
1983	10.20	12.20	14.24	17.03	20.28	25.16	22.72	15.91
1984	10.59	12.67	14.94	18.47	23.23	26.81	25.02	17.03
1985	10.95	13.19	15.88	19.00	23.80	32.69	28.25	18.59
1986	12.15	13.88	16.45	20.55	24.10	30.98	27.54	20.01

Source: V.V. Divatia, op.cit.

Apart from the trends in demand of the different income groups, the relative per capita purchases of various income groups becomes important as it provides an insight into the relative purchase behaviour of different income groups. The following trends can be deduced from the data (Table 2.11):

In all the years the per capita purchase of textiles in the highest income group was double of that in the lowest income group in terms of unit values while in terms of quantities it was less than double. Thus the difference in the per capita unit value of purchase between the highest income group and the rest of the income groups showed significant difference. The households in the highest income groups purchase larger quantities and high quality cloth than the lower income groups.

A further disaggregate analysis based on income groups between cotton, non cotton and mixed textiles by households showed that the trends in per capita purchase fibre wise more or less confirm to that of textiles as a whole. (appendix Tables 2.1, 2.2 and 2.3). Even among the lowest income group a shift has occurred in favour of non cotton and mixed fabrics. The following Table gives compound growth rates for various income classes for cotton, non-cotton and mixed textiles.

Table 2.12  
Growth Rates of Per capita Consumption of Textiles  
According to Income Groups (1974-1987)

Group	Cotton	Non-cotton	Mixed	Total
1. Less than 3000	-0.20	7.79	6.14	0.63
2. 3000-5999	-3.17	3.84	2.94	-2.09
3. 5999-9999	-2.87	2.70	2.35	-1.77
4. 10000-19999	-3.27	4.98	1.92	-1.62
5. More than 20000	2.03	7.23	6.84	3.06

Source: Calculated from the data given in appendix (5.1).

From the Table 2.12 it is evident that, with the exception of Group 5 all income classes have reduced their purchase of cotton textiles. Equally, all income classes without exception have increased their purchase of pure non-cottons and blended textiles. This points to a secular decline in the relative importance of cotton and a concomitant growth in the share of synthetic and blended textiles.

**Conclusion:**

From the above analysis on the trends in demand the following conclusions can be arrived at:

1. A recent uptrend in the demand for textiles in terms of both aggregate as well as per capita.
2. Though there has been a marked shift from cotton to non-cotton and mixed textiles till the early 80's this trend seem to have changed to some extent in the later years with an increase in the demand for cotton textiles.
3. The shift towards non cotton and mixed textiles has occurred in both rural as well as in urban areas and across all income classes.
4. An increase in both aggregate and per capita demand for mill made cotton fabrics.
5. The above trend has occurred in both urban and rural areas, but higher in the former and among all income classes particularly among higher income groups.

Thus the trends in domestic demand for textiles can to some extent viewed as favourable to the mills. These changes in the domestic demand side must have evoked some response from the mills which would get reflected in their performance. In the next Chapter we review the evidence on exports.



## Chapter 3

### *TRENDS IN TEXTILE EXPORTS*

The textile industry in India has remained by and large domestic oriented in the sixties and seventies, although it was one of the world's leading exporters in the 1950's with a market share of 13 per cent. The deterioration in the export market started in the late fifties when Japan rebuilt its textile industry and other producers in Hongkong and Pakistan emerged as significant suppliers of textiles in the world market. Added to this was the emergence of the Multi Fibre Agreement and its precursor the Long Term Agreement resulting in quantitative trade restrictions.

Apart from the developments in the international market the comparatively profitable domestic market acted as a stumbling block to exports. This could not be overcome even by the policies of export promotion adopted by the government<sup>1</sup>. Though there had been some increase in exports during the seventies it did not change the position of the industry as the international market became so demanding that only few firms were able to exploit the market. However, recently many mills seem to have realized exports as an area of major thrust. The present chapter examines the trends in the exports with a view to explain the observed behaviour of the mills.

The chapter is organized into two sections. Section 1 examines the trends in international trade in textiles. Here an examination is made of the structural changes in terms of product and market composition of exports. Section 2 discusses trends in Indian

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<sup>1</sup> Chandrasekhar C.P (1983)

exports, changes in products and markets as well as trends in the emerging thrust areas of exports.

**1. Trends in international textiles market:**

During the last three decades several fundamental changes have taken place in the international trade flows in textiles. There has been a rapid change in the product and market composition of exports with exporters turning into importers, importers turning into exporters, the entry of new participants and the emergence and changing importance of various textile traders.

The changing world shares of different countries and the changing product compositions of world trade in textiles between 1965 and 1985 is shown in Table 3.1.

**Table 3.1**  
**Share of World Exports of Selected Textiles and Clothing**  
**Goods 1965 - 85 (%)**

Item	1965	1970	1975	1980	1985
Yarn	20.7	22.7	19	16	13.6
a. Cotton	7.2	5.2	4.7	4.7	4.2
b. Synthetic	13.5	17.5	14.3	11.3	9.4
Woven fabric	36.4	29.4	28.4	26.9	24.0
a. Cotton	26.8	14.4	12.8	12.7	11.5
b. Synthetic	9.6	14.9	15.6	14.2	12.5
Clothing \ Accessories \ Knitwear	42.9	47.9	52.6	57.1	62.4
Total	100	100	100	100	100

Source: UNIDO, Reproduced from Misra, op.cit, (1993)

The Table 3.1 shows a rapidly growing share of clothing as against yarn and fabrics. It can also be seen that the decline in the share of fabrics was entirely on account of the steep fall in the share of cotton fabric exports, while synthetic fabric export remained more or less stagnant.

The changes in the product composition have been accompanied by a rapid growth in the share of developing countries and a corresponding erosion in the share of the developed market economies (Table 3.2). The share of the latter in the world exports of textiles and clothing fell from 82 percent in 1965 to 55.8 per cent in 1985, whereas the developing countries (which include both Other Developing Countries and Advanced Textile Exporters) more than doubled their share from 16.5 to 42.1 per cent.

**Table 3.2**  
Share of Selected Country Groups in the World Trade of  
Textiles and Clothing Trade

	1960	1970	1975	1980	1985
<b>Exports</b>					
1. Developed Market Economies	82.0	80.3	72.0	66.6	55.8
2. Advanced Textile Exporters*	9.6	12.0	17.3	18.0	21.2
3. Other Developing Countries	6.8	5.7	7.8	13.4	20.9
4. Centrally Planned Economies	1.6	2.0	2.9	2.6	2.1
<b>Imports</b>					
1. Developed Market Economies	70.3	75.6	78	77.5	80.1
2. Advanced Textile Exporters	5.0	7.5	5.3	6.0	8.2
3. Other Developing Countries	21.5	12.5	11.9	13.1	9.1
4. Centrally Planned Economies	3.2	4.3	4.7	3.4	2.6

Based on data in the UN Yearbook of International Trade Statistics.  
Source: Misra, op.cit, Table 9.8

Note: \* Advanced Textile Exporters are countries like Hongkong, Taiwan, Korea etc.

These structural changes indicate certain important trends in international division of labour and changing comparative advantage among various trading countries. The most important factor behind

the shifts in comparative advantage is the rising cost of labour in the developed market economies. Due to the high labour cost in the developed countries the developing countries enjoy a comparative advantage in clothing which is the most labour intensive among all textile products<sup>2</sup>.

## 2. India's performance:

The shifts in international comparative advantage have presented substantial opportunities for expanding trade which many countries have exploited. But India's performance remained poor compared to other Asian competitors, as she could not even maintain her already low market share of 1971. This deterioration in the share of Indian exports was attributed to the Multi Fibre Agreement and its precursor the Long Term Agreement<sup>3</sup>. However, comparative studies of Indian trade performance in textiles and its Asian competitors has shown that quota restrictions did not prevent countries from increasing their market share, as during this period Indian competitors rapidly increased their market share. A comparative analysis of the performance of India with that of the Asian competitors is presented in Table 3.3.

<sup>2</sup> Cost Structure of Textile Commodities (%)

	Spinning	Weaving	Clothing
Raw materials	37	19	33
Labour	17	29	52
Amortization	21	22	5
Energy	3	4	2
General	22	26	8
Total	100	100	100

Source: World Bank, reproduced from Misra (1993).

<sup>3</sup> Jethanandani: Trade in Textiles - How restrictive is MFA ?  
The Economic Times January 24, 1990

**Table 3.3**  
**World Market Shares in Textile and Clothing of Selected**  
**Asian Competitors**

Country	1971 - 74	1975 - 78	1979 -82	1983 - 86
China				
a. Textiles	2.22	2.38	3.99	6.18
b. Clothing	2.24	1.49	4.31	8.37
Pakistan				
a. Textiles	1.69	1.53	1.81	2.15
b. Clothing	—	0.16	0.09	0.50
Japan				
a. Textiles	13.08	11.39	10.38	9.99
b. Clothing	3.93	2.00	1.31	1.51
Hongkong				
a. Textiles	2.78	2.68	3.72	5.58
b. Clothing	12.49	13.40	13.60	13.88
Korea				
a. Textiles	1.66	3.50	4.51	5.11
b. Clothing	6.00	8.7	8.33	8.47
Thailand				
a. Textiles	0.27	0.55	0.70	0.73
b. Clothing	—	0.44	0.83	1.21
India				
a. Textiles	3.57	2.5	2.29	2.16
b. Clothing	0.93	1.51	1.56	1.68

Note: Market shares are in value terms and have been derived from the UN Year Book of International Trade Statistics.

Source: Misra (1993).

The Table 3.3 shows that India's competitors except Japan were able to increase their share in world textile trade over the fifteen year period despite the MFA. When textiles alone were taken countries which made significant progress were Korea, China and Hongkong which have more than doubled their share over the period, Pakistan improved its share marginally. As far as clothing is concerned no country except China, could show a significant improvement in share. If we look at the sub-periods it can be inferred that drastic changes took place since 1982, a period during which trade restrictions happened to be the highest<sup>4</sup>.

<sup>4</sup> Khanna: International Trade in Textiles : MFA and a Developing Economy.

Despite the restrictive MFA, India's competitors were able to increase their exports at a considerable rate<sup>5</sup>. The basic strategies followed by these countries can be grouped into three<sup>6</sup>.

- a. Maximum utilization of quota levels
- b. Accelerated non - quota exports and
- c. Increased unit value realisation.

Though India stands behind all the Asian competitors there have been several changes in her export performance in terms of the total quantum, product and market composition. These structural changes in Indian textile exports will be analyzed under two subsections; subsection (a) dealing with trends in product composition and subsection (b) with market composition. Under trends in product composition along with the general trend an attempt is made to analyze the change in sectoral composition of exports as we are concerned with the response of the mill sector.

***Changes in the commodity composition of Indian exports:***

India began her export of textiles with cotton textiles produced in the handlooms. As far back as 1950 she accounted for more than 11 per cent of the world trade in cotton textiles. In the years that followed the Indian textile industry was unable to maintain its level of exports as a result of which its share of world market registered a decline. The share of cotton textiles in export

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<sup>5</sup> A study done by Jethmalini has shown that MFA is not the reason for the very low performance of Indian textile exports

<sup>6</sup> Parameswaran (1992)

earnings fell from 7.7 per cent 1960-62 to 6.3 per cent during 1968-70. In terms of aggregate foreign exchange earnings exports of cotton textiles from India were stagnant throughout the decade and export receipts barely changed from an annual average of \$121 million in the period 1960-62 to \$127 million in 1968-70<sup>1</sup>.

However, in the 1970's this trend began to change with a diversified and changing product base. The change in the product composition of Indian textile exports is evident from Table 3.4. There has been a decline in the share of textiles and a corresponding rise in the share of clothing. While share of textiles declined from around 88 per cent in 1971 - 74 to 51 per cent in 1983 - 86 the share of clothing has increased from 12 per cent to 49% percent. . The table shows a rapid growth in the share of clothing as against yarn and fabrics. It can also be seen that the declining share of fabrics was entirely on account of the steep fall in the share of cotton fabric exports. To some extent the shift in favour of clothing vis.a vis. textiles in Indian exports was in line with the changes in the world composition of textile trade.

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<sup>1</sup> Nayyar - An Analysis of the Stagnation in India's Cotton Textile Exports During the Sixties, Oxford Bulletin of Economics and Statistics, Vol.35, No.1, Feb. 1973.

**Table 3.4**  
**Commodity Composition of Indian Textile Exports 1971 - 1986**

	Textile yarn	Cotton fabrics	Woven man made fabrics	Made ups	Floor cover	All textile fabrics	All cloth- ing
1971-74 value	172.28	688.39	48.7	574.3	158.2	2664.6	375.1
(% share)	5.67	22.65	1.6	18.99	5.21	87.66	12.34
1975-78 value	184.00	977.45	117.7	647.9	382.8	3028.5	1239.6
(% share)	4.31	22.9	2.76	15.18	8.97	70.96	29.04
1979-82 value	220.6	1205.7	148.5	897.5	817.1	4186.1	2266.7
(% share)	3.42	18.69	2.3	13.91	12.66	64.87	35.13
1983-86 value	318.6	777.4	75.89	388.5	1290.4	3432.9	3298.9
(% share)	4.73	11.55	1.13	5.77	19.17	51	49

Note: Values are in million US dollars and have been derived from the UN Yearbook of International Trade Statistics.

Having examined the change in product composition of exports an analysis of the trends in individual product categories based on the sector of manufacture is attempted in the following sections. However, detailed individual product wise data is available only for cotton textiles except garments for which data is available for all textiles. Since we are interested in the trends after 1970's the period covered is limited to 1971-72 to 1989-90.

***Trends in total cotton textile exports:***

Before going into the detailed product wise trend an analysis of the total cotton textile export is made.



**Table 3.5**  
**Total Cotton Textile Exports**

Year	Value in Rs Crores Total Textiles Value (Rs.Crores) (Constant prices)	Excluding Garments Value (Rs.Crores) (Constant prices)	Share of Garments in Total Textile Exports
1971-72	133.19	118.72	10.86
1973-74	319.71	253.05	20.85
1977-78	575.95	313.42	45.58
1981-82	944.95	407.33	56.89
1984-85	1459.99	638.4	56.27
1986-87	1919.69	726.24	62.17
1987-88	2880.63	1283.46	55.45
1988-89	3037.03	1345.05	55.71
1989-90	4108.06	1813.18	55.86
1990-91	5475.84	2408.33	56.02

Source: Handbook of Statistics on Cotton Textile Industry, ICMF 23rd Edition (1991).

Total cotton textile exports in constant 1970-71 rupee value (Table 3.5) showed an upward trend with an annual rate of growth of 55 per cent. Total exports in value terms more than doubled during the period 1971-72 to 1973-74. It increased at a more or less constant rate subsequently with some fluctuations. If we exclude garments from the total, though the trend shows an upward movement the annual rate of growth of textiles excluding garments (40 per cent) becomes lower than that of the total. The share of garments in the total textile export increased from 10 per cent in 1971-72 to 56.02 per cent in 1990-91 with a peak level (62.17) in 1986-87. Thus, the increase in India's cotton textile export in a period when world trade in cotton textiles showed a declining trend, is largely due to the increased demand for cotton garments.

***Trends in cotton yarn exports:***

Firstly, the trends in yarn exports is examined and the data is given in Table 3.6. Since the mill sector is the only sector which

caters to the demand for yarn, trends in yarn exports becomes very important.

**Table 3.6**  
**Exports of Cotton Yarn**

Year	Qty ml. tonnes (Constant prices)	Value Crores	Unit Rs Per kg.
1971-72	14.82	16.99	10.66
1972-73	21.4	22.49	10.67
1973-74	10.3	10.76	10.91
1974-75	9.87	17.43	18.52
1975-76	4.69	6.099	13.6
1976-77	18.52	28.23	16.74
1977-78	10.42	21.44	21.62
1978-79	6.25	13.09	24.3
1979-80	5.8	12.70	25.95
1980-81	8.96	19.62	26.85
1981-82	4.7	12.1	35.6
1982-83	6.68	24.81	43.78
1983-84	7.06	19.07	33.28
1984-85	9.06	26.91	40.26
1985-86	10.9	31.44	41.78
1986-87	27.98	68.07	36.15
1987-88	85.63	209.72	39.96
1988-89	40.38	130.29	58.14
1989-90	62.12	177.08	58.46

Source: Same as Table 3.5

There were considerable fluctuations in yarn exports which to some extent was on account of the ad hoc changes in government policy. No marked trend can be seen in exports of yarn during the period 1971-72 to 1985-86; it increased in the following two years but declined again and then there was a sharp increase since the late 80's. The trend in value terms is commensurate with the trends in quantity. This sudden spurt in yarn exports in recent years can be explained by two factors:

1. The first and the most important is the relaxation of the government control on yarn exports. Till 1985, exports of

yarn were strictly controlled by the government with a view to ensure supply of yarn to the decentralized sector. With the announcement of the New Textile Policy of 1985 the government relaxed some of these restrictions, which resulted in an increase in yarn exports. A sudden drop in yarn exports during 1988-89 can be explained by the government announcement of a ceiling of 40 million kilograms for export of yarn below 60 counts.

The unit value of yarn exports shows an upward trend with fluctuations. It almost stagnated during the first three years since 1971-72 and showed a steep increase in 1974-75. However it declined in the next year and then increased till 1982-83 and remained almost stagnant till 1987-88. In 1988-89, there was a steep increase in unit value though aggregate quantity decreased which might be due to the increased export of yarn above 60 counts because of government ceiling on export of yarn below 60 counts.

2. The second reason for a growing yarn export market is the observed trends in the international market. For a long time countries like Hongkong, Japan, Germany, Italy, the U.K. and the former Chekoslovakia were the bulk exporters of cotton yarn. But the sharp increase in wage cost and shortage of labour have forced these countries to reduce their spinning capacity and consequently they changed into small exporters. Countries like Greece, Portugal and Spain which were small exporters have now turned into importers of cotton yarn. The rate of growth in exports of yarn by South Korea and Taiwan has slowed down since the mid eighties, and the rate of growth of imports increased rapidly. By the end of

eighties Thailand also had emerged as a yarn importing country.<sup>8</sup> This shift in the roles has gone in favour of labour surplus economies like China, Pakistan, India etc. which to some extent did increase their share of yarn exports.

**Trends in cotton fabrics export:**

Since our interest is to find out how far the trends in international market for textiles explains the behavioural response of the mills in terms of increased exports the disaggregate sector wise data is examined (Table 3.7).

**Table 3.7**  
**Exports of Cotton Fabrics**

Year	Mill		P.L		H.L		Total	
	Qty	Val	Qty	Val	Qty	Val	Qty	Val
1971-72	387.14	71.55	6.47	0.90	28.68	10.55	422.29	83.00
1972-73	453.26	83.53	10.28	1.39	47.12	16.21	510.66	101.14
1973-74	649.68	156.46	19.69	4.12	67.63	31.11	737.00	191.68
1974-75	373.11	124.63	13.62	3.43	49.36	27.71	436.09	155.76
1975-76	417.90	116.94	10.58	2.77	58.15	38.28	486.63	157.99
1976-77	563.31	191.42	32.02	8.51	74.56	50.59	669.89	250.51
1977-78	266.32	106.04	24.85	7.48	104.36	80.46	395.53	193.97
1978-79	310.99	123.80	62.43	19.95	84.60	57.93	458.02	201.69
1979-80	393.72	172.70	65.62	22.06	80.88	63.49	540.22	258.26
1980-81	311.75	145.60	44.95	17.42	86.55	75.77	443.25	238.79
1981-82	225.42	140.01	49.64	22.18	89.32	73.74	364.38	235.93
1982-83	225.12	156.16	54.65	24.30	50.60	65.66	330.37	246.13
1983-84	304.01	169.90	86.08	29.76	49.84	54.75	439.93	254.41
1984-85	410.79	255.13	112.56	52.29	83.90	91.42	607.25	398.84
1985-86	347.58	231.84	119.71	55.53	68.62	76.03	535.91	363.41
1986-87	371.96	240.14	184.24	83.17	62.95	71.74	619.15	395.06
1987-88	433.63	302.22	314.48	162.89	73.96	83.02	822.07	548.15
1988-89	371.24	262.56	381.28	187.90	79.56	81.30	832.08	531.78
1989-90	418.87	287.77	421.58	227.29	68.19	69.75	908.64	584.82

Note: Quantities are in million square metres and values in Rs. Crores (Constant Prices)

Source: Op.cit.

<sup>8</sup> The Economic Times February 15, 1991.

No marked trend can be seen in the export of mill fabrics till 1976-77. It showed a steep fall in 1976-77, with a sharp increase in the export of handloom fabrics and remained at a low level upto 1983-84. Though mill exports showed an increasing trend since then, it can be seen that it failed to reach the level of the early 1970's. However, in value terms the trend has been generally upwards.

Quantity wise powerloom exports have grown phenomenally over the years though it declined during 1980-81. In value terms powerloom exports showed an increasing trend over the period, the rate of increase being the highest during 1986-87 to 1989-90 (31.71 per cent). No clear trend can be seen in the export of handloom fabrics over this period. Though the export of handloom cloths had increased at a faster rate till 1977-78 both in quantity as well as in value terms it started declining till 1983-84 and almost stagnated thereafter.

Value of total fabric export increased over the period with some fluctuations. Quantity wise, the trend was almost stagnant till 1983-84 due to fluctuations in millmade and handloom fabrics but, later it showed an increasing trend.

From a comparison of the value of mill and powerloom fabric exports

three sectors (Table 3.8) are taken into account mills and handlooms seem to have an advantage over powerlooms. This is on account of the finer quality of cloth produced by them. The table

shows that the unit value realized by the mill sector is much above that of powerlooms though handlooms tend to have the highest which could be on account of exports of speciality fabrics.

**Table 3.8**  
Average Unit Value Realisation on  
Exports of Cotton Textiles  
(constant 1970-71 rupee value)

	Mill Cloth	P.L Cloth	H.1 Cloth
	Rs per Sq.Mtr		
1971-72	1.74	1.31	3.47
1972-73	1.88	1.38	3.5
1973-74	2.48	2.15	4.74
1974-75	3.5	2.64	5.88
1975-76	2.88	2.9	6.77
1976-77	3.57	2.79	7.13
1977-78	4.04	3.05	7.82
1978-79	4.32	3.46	7.42
1979-80	4.76	3.65	8.52
1980-81	5.18	4.3	9.72
1981-82	6.01	3.91	9.99
1982-83	6.74	4.31	12.6
1983-84	6.27	3.88	12.24
1984-85	6.91	5.17	12.13
1985-86	7.72	5.37	12.82
1986-87	7.52	5.25	13.27
1987-88	8.45	6.06	13.61
1988-89	9.99	6.6	14.44
1989-90	11.05	7.84	16.45

Source: Same as Table 3.5

Trends in unit value realized by the different sectors shows that for both millmade and handloom cloth the unit values increased over the period. However, the unit values of the powerloom cloths remained more or less stagnant till 1983-84 and increased thereafter. If we compare the rate at which the unit values have increased over the period it can be seen that millmade cloth has the highest growth rate (10.82 per cent) compared to handlooms (9.45 per cent) and powerlooms (8.6 per cent). This trend will have much implication on the future export demand as the trend in international fabric trade is towards high quality, fabrics.

### *Trends in made up items:*

When exports of made up items are taken into consideration between mill, powerloom and handlooms all the three showed an increasing trend over the period with some fluctuations (Table 3.9). The rate of increase was higher for powerlooms (30.2 per cent) followed by handlooms (18.3 per cent) and of mills (9.83 per cent). Since, exports from all the three sectors have increased total exports of made ups increased steadily over the period.

**Table 3.9**  
**Exports of Cotton Made ups**

Year	Mill	P.L	H.L	Total
	Value in Rupee Crores constant prices			
1971-72	18.43(78.65)	0.65 (2.63)	5.59 (19.71)	24.67
1972-73	19.29(73.36)	0.43 (1.64)	6.58 (25.00)	26.30
1973-74	33.43(75.36)	1.38 (3.11)	9.55 (21.53)	44.36
1974-75	44.57(76.17)	1.28 (2.19)	12.6 (21.64)	58.51
1975-76	40.82(73.13)	1.95 (3.49)	13.05(23.39)	55.82
1976-77	50.13(64.81)	6.08 (7.86)	21.14(27.33)	77.35
1977-78	56.14(59.60)	3.52 (3.74)	34.54(36.67)	94.20
1978-79	53.47(65.26)	1.80 (2.20)	26.67(32.55)	81.94
1979-80	59.34(62.98)	3.18 (3.37)	31.71(33.65)	94.22
1980-81	63.56(61.52)	4.24 (3.96)	36.24(35.52)	107.05
1981-82	61.03(47.65)	20.33(15.87)	40.72(31.79)	128.08
1982-83	85.56(47.37)	27.46(15.20)	67.59(37.42)	180.61
1983-84	44.96(37.12)	18.72(15.45)	57.45(47.43)	121.12
1984-85	68.24(40.16)	23.21(14.68)	66.61(43.13)	158.12
1985-86	55.50(39.03)	23.30(16.39)	63.41(44.59)	142.20
1986-87	50.95(30.87)	31.93(19.35)	82.16(49.78)	165.04
1987-88	73.27(27.65)	55.5(20.95)	137.19(52.77)	265.00
1988-89	99.34(28.22)	84.3(23.95)	168.14(47.77)	352.00
1989-90	160.69(30.99)	128.1(24.71)	229.71(44.30)	518.53
1990-91	255.36(34.25)	205.5(27.57)	284.56(38.17)	745.48

Note: The figure in brackets show percentage share.

Source: Op.cit.

Trends in the shares of different sectors showed that millmade made-ups accounted for the largest share till 1983. However, its share decreased from a peak level of 78.65 per cent in 1971-72 to 34.25 per cent in 1990-91. However, its share was overtaken by

powerlooms and handlooms whose share increased over the period. Since 1987-88 it is possible to notice an uptrend in its export share. The share of powerlooms increased steadily with a steep increase in 1981-82. Though the rate of increase of handloom share was lower than that of powerlooms, handlooms accounted for the largest share of made ups since 1983. However, its share started declining since 1987-88.

Thus, trends in made-up export show that, it is the powerlooms and handlooms which have an advantage over the mills. However, given the recent trend (since 1987-88) in export demand there is enough scope for the mills to increase its share.

*Trends in garment exports<sup>9</sup>:*

Segment wise Indian garment exports is given in the (Table 3.10). Here the data includes both cotton as well as non cotton and other fabrics.

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<sup>9</sup> For a detailed discussion of trends in garment exports see Somnath Chaterjee & Rakesh Mohan 'India's Garment Exports' EPW August 28, 1993.



**Table 3.10**  
**Segmentwise Composition of Indian Garment Exports**

Year	H.L Garments		Knitted Garments		Millmade Garments		Total Value
	Value	Share	Value	Share	Value	Share	
1983	44	6.9	108	16.9	487	76.2	640
1984	41	4.9	144	17	664	78.1	850
1985	37	3.5	166	15.6	863	80.9	1067
1986	25	1.9	232	17.6	1064	80.5	1323
1987	20	1.1	362	19.5	1474	79.4	1857
1988	20	0.9	456	21.2	1672	77.8	2148
1989	18	0.6	679	22	2392	77.4	3091
1990	11	0.3	985	22.5	3379	77.2	4378
1991	16	0.3	1218	22.7	4123	77	5358

Notes: Values in Rupees crore and shares in percentages.

Source: Reproduced from Somnath Chatterjee & Rakesh Mohan 'India's Garment Exports', EPW August 28, 1993.

If we look at the comparative share of handloom, knitted<sup>10</sup> and millmade garments it can be seen that the millmade garments account for the highest share and this has remained constant almost throughout the period. The shares of the other two were comparatively low, whereas the share of handloom garments had decreased while knitted garments showed an increasing trend since 1985.

Exports of mill made and knitted garments showed an upward trend in value terms while that of handloom garments declined. A comparatively better performance of the mill sector in garment exports points out that the mills do enjoy a comparative advantage over other sectors in garment exports. This advantage of the mills is important as regards its future performance since garment

<sup>10</sup> Constitutes garments mostly from powerlooms.

exports constitute the fastest growing area of exports and accounts for more than 17 per cent of India's manufactured exports<sup>11</sup>.

***Market composition:***

About 80 per cent of Indian textile exports in 1980 was to the Developed Market Economies of Western Europe, around 10 to 15 per cent to the Eastern Bloc and only a small part was directed towards the other markets. The shift in the direction of India's textile and clothing exports between 1971 and 1986 is given (Table 3.11) along with the growth of import demand for textiles and clothing in different regions over the same period Table (3.12).

The market distribution of India's textile exports can be argued as one of the factors accounting for its relatively poor export performance. The direction of its exports has been to areas where the import demand grew at a relatively lower rate<sup>12</sup> like Western Europe rather than to areas like East Asian Countries, Oceania etc.

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<sup>11</sup> Ibid.

<sup>12</sup> America is an exception which reported a growth rate of 10.62%. Export of clothing to America increased from 8.5 per cent to 43.63 per cent, while textiles showed a slight decline.

**Table 3.11**  
**Market Distribution of Indian Textile Exports (%)**

	Average 1971 & 1972	Average 1985 & 1986
<b>Textiles</b>		
1.America (Developed)	35.81	29.13
2.Europe (Developed)	15.19	46.46
3.Rest of world	49.00	24.41
4.Total	100	100
<b>Clothing</b>		
1.America (Developed)	8.51	43.63
2.Europe (Developed)	34.55	49.95
3.Rest of World	56.94	6.42
4.Total	100	100

Note: Based on data in the UN Yearbook of International Trade Statistics.

Source: Misra, op.cit. Table 9.8

**Table 3.12**  
**Growth of World Demand for Textiles  
and Clothing, 1971-86**

	World	America	Europe	Rest of World
Clothing	7.93	10.62	5.95	10.44
Textiles	4.68	4.1	3.97	5.88
Textiles & Clothing	5.94	7.97	4.78	6.81
Textile Yarn	4.48	1.01	4.15	5.87
Cotton Fabrics	4.59	3.98	4.83	4.53
Man made Fabrics	5.82	7.11	3.11	7.74

Note: Growth rates are based on semi-log trends.

Source: Misra op.cit

The Tables show that while Indian textile exports to the developed market of Europe increased almost three times during the period, Europe had the slowest import demand growth over the period (3.97 per cent). This is significantly lower than the import demand growth of the rest of the world (5.88 per cent). Only a very small part of Indian exports was directed towards the growing non quota markets of Hongkong and Japan during this period which had a higher

growth of import demand.' The focus on the quota markets to some extent is because of the product composition of India's exports where cotton textiles account for a relatively larger share, for which Western Europe is the largest market.

An increase in India's clothing exports during the period is because of a five fold increase in the share of America from 8.5 per cent in 1971 to 43.6 per cent in 1985-86. The share of clothing exports to Eastern Europe also increased while there has been a fall in its share to the rest of the world particularly to the Eastern block.

However, the data on cotton textile exports in recent years, after 1986 show an interesting trend in terms of its market distribution.

Table 3.13

Percentage Share of Different Regions in the Exports of Cotton Textiles

Regions	1986-87 %	1987-88 %	1988-89 %	1989-90 %
Quota countries	47.28	58.28	43.99	43.1
Non quota countries	25.71	30.67	40.65	42.96
Rupee Payment Area	27.01	11.05	15.36	13.94

Source: ICMF Journal, Vol. XXVIII, 1991.

The Table shows that India's share to non quota markets has shown an increase while its share to quota markets and Rupee Payment Area decreased in recent years contradictory to the trend in the seventies and early eighties. It has been reported that exports to non quota markets like Dubai, Bangladesh, Mauritius, Australia, Hongkong, South Korea, Singapore, Thailand etc have increased at a faster rate. Bangladesh has in fact emerged as the single largest

market for Indian cotton textiles during 1989, with an export growth of more than 30 per cent<sup>13</sup>. It should be borne in mind that this has happened in the case of cotton textiles for which the quota markets happen to be the largest importer.

From the above Table 3.13, it can be inferred that the importance of traditional quota markets as a major source of Indian textile export has declined as a result of the increased and growing importance of non quota markets.

Though India accounts for only a small fraction of the world trade in textiles and clothing, it forms a very important group among various items of her exports. With the changed product as well as market composition, within a span of five years the foreign exchange earnings from textile products rose by 3.3 times while it rose only by 2.6 times through the exports of all goods. Substantial increases have been observed in most categories like yarn, fabrics, made ups and garments.

Trends in the value of textile exported show that the value of textiles had almost doubled over the four year period of 1986-87 to 1989-90 (Table 3.14).

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<sup>13</sup> The Economic Times, February 24, 1990.

**Table 3.14**  
**Value of Textile Products Exported (1986-87 to 1990-91)**  
 (Rs Crores)  
 (in constant 1970-71 Rupee value)

Items	1986-87	1987-88	1988-89	1989-90	1990-91
Cotton items other than Garments	626.61	1000.36	951.71	1138.78	2458.33
Cotton Garments	1029.7	1386.7	1465.04	1971.4	3017.51
Total Cotton	1656.3	2485.4	2620.4	3544.5	5475.84
Non cotton Garments	294.89	372.97	552.81	1052.2	1622.93
Man made Items	65.5	149.9	240.2	461.8	630.96
Woollen Items	155.5	215.2	237.0	274.97	592.8
Silk Items	182.5	238.7	292.5	316.9	440.53
Total	2316.9	3210.90	3293.9	4395.73	8762.21

Source: ICMF Journal Vol.XXV111 (1991)

The share of cotton textile products including cotton garments fell from 72 per cent of the total textile exports in 1986-87 to about 62.5 per cent of the total textile exports of 1989-90, with a corresponding increase in the share of non-cotton and mixed textiles. This is inspite of the fact that the value of cotton textiles increased by more than two fold over the period.

**Conclusion:**

From an analysis of the trends in exports in the international market as well as for Indian exports it is evident that the composition of exports is an important factor affecting the direction of trade. The relatively poor performance of Indian exports during the seventies and early eighties can be attributed to the export of relatively stagnant items (cotton textiles instead of man-mades) to relatively stagnant markets (quota markets instead of non quota markets). However recently there has been an

improvement in its product composition as well as market composition; a shift towards non cottons, garments and value added items and non quota markets has been taking place.

Regarding sectorwise performance the mill sector enjoys an advantage over all other sectors both in quantity (except fabrics) as well as in value terms especially in the case of garments which is the fastest growing item in the Indian export basket.

## Chapter 4

### *MAJOR CHANGES IN THE COMPOSITE MILLS*

From the analysis of the trends in domestic demand as well as exports it was seen that a number of changes have taken place in recent years. The main conclusions in this regard can be summarized as follows:

1. An increased demand for textiles - both per capita and aggregate.
2. A shift away from cotton towards non-cotton and mixed fabrics.
3. A slight increase in the demand for cotton textiles of the finer varieties.
4. A rise in demand for mill made cloth particularly in urban areas and among all income classes.
5. A sharp increase in textile exports, particularly of garments.
6. A superiority of the mills over the other sectors in the international market both in terms of quantity as well as quality of fabrics.

With these trends in demand, the mills seem to have responded as a strategy for survival and growth. How did the mills respond to the changes in demand or What were the strategies followed by the mills so as to take advantage of the trends in demand? In this chapter an attempt is made to analyze the responses of the mills to these trends in demand which in general can be identified in terms of changes in output, product mix, level of modernisation, improvement in quality and promotion of exports. In the following section each of these factors is discussed in detail.



### 1. Changes in output composition:

As a result of increased competition the mills seem to have decreased the production of cloth and increased the output of yarn. Table 4.1 shows the production of mill made cloth and its share in total production over the period 1980-1989.

Table 4.1

Production of Mill Made Cloth  
(million metres)

Year	Mill Made cloth	Total Cloth Production	% share of mill made cloth in the total
1980	4176	10873	38.4
1981	4073	11145	36.5
1982	3035	10514	29
1983	3528	11534	30.5
1984	3366	11835	28.4
1985	3411	12427	27.4
1986	3337	12775	26
1987	3114	13117	23.7
1988	2859	13188	21.7
1989	2674	13452	19.9

Source: Handbook of Statistics on Cotton Textile Industry, ICMF 1991.

The cloth output of the composite mills has declined steadily from 4176 million meters in 1980 to 3411 million meters in 1985 to 2674 million meters in 1989, reducing its share in the total cloth production from 38.4 per cent in 1980 to 19.87 per cent in 1989. Correspondingly the share of the decentralized sector has showed an increase. A sudden steep fall in total production of cloth by the mills from 4073 million meters in 1981 to 3035 million meters in 1982 is on account of the Bombay Mill Strike which led to the closure of a number of mills. Production picked up in 1983 and did not show much of a trend till 1985. Since 1985, there has been a steady decline when in fact, the total cloth production has begun showing a small increase.

As regards yarn production separate data for the composite mills are available only till 1984 (Table 4.2).

**Table 4.2**  
**Production of Yarn By Mills**  
(million kg)

Year	Comp. Mills	% share in total	Spg. Mills	Total
1980	647	53.43	411	1058
1981	578	51.24	437	1015
1982	447	48.34	511	958
1983	525	55.07	567	1092
1984	541	58.01	610	1151

Source: SITRA Annual Report, 1986

From the Table 4.2 it can be seen that, composite mills increased their share in the total yarn output over the period, by about 5 per cent. Here also it is possible to see a fall during 1982 because of the Strike. However, the fall (13 percentage points) was not as steep as was with cloth output (17 percentage points) (see Table 4.1). This increased emphasis of mills on yarn production becomes evident when the recent trend among composite mills towards modernizing their spinning department is analyzed as we see later.

The proportion of total yarn consumed by the composite mills decreased substantially due to the reduction in their cloth output; consequently there has been an increase in the share of free yarn which is available for the decentralized sector and exports (Table 4.3). As is evident, yarn consumption of the mills declined sharply, from 45.18 per cent in 1980 to 29.4 per cent in 1985 to 18.56 per cent in 1990. As with the production of cloth by the mills, two distinct trends are observable with the consumption of

yarn. Yarn consumption by the mills showed a substantial fall of over 100 million kilograms in 1982. It picked up in 1983 and did not show much of a trend till 1985. Since 1985, there has been a steady fall in the consumption of yarn by the mills.

**Table 4.3**  
**Production Consumption and Deliveries of Cotton Yarn**  
(million kg)

Year	Spindle point Production	Consumption	Free yarn Availability
1980	1058	478 (45.18)	580
1981	1015	426 (41.97)	589
1982	958	317 (33.09)	641
1983	1092	364 (33.33)	728
1984	1151	358 (31.10)	793
1985	1261	371 (29.42)	890
1986	1257	342 (27.21)	915
1987	1348	321 (23.81)	1027
1988	1297	289 (22.28)	1008
1989	1337	277 (20.72)	1060
1990	1447	267 (18.45)	1180

Note: Figures in brackets show share of consumption in total spindle production.

Source: Handbook of Statistics on Cotton Textile Industry, ICMF 1991.

The increase in the production of yarn and a decline in cloth production is because the mills have to compete with the decentralized sector in the production of cloth in which the powerlooms have an advantage. This distinct advantage arises owing to their lower cost of production resulting from low wage rates, in the production of low and medium varieties of cloth. However, the domestic yarn market is comparatively less competitive as the organized sector (the mills) is the only supplier. This was further favoured by the increased demand for yarn from the decentralized sector and the international market (the reasons for increased yarn export were discussed in detail in Chapter 3).

### *Changes in product mix:*

To take advantage of the changes in the environment many mills opted for a change in their product mix. This can be seen from the fibre wise composition of production as well as from the types of product produced by the mills. In 1980, in terms of fibre, 83.24 per cent of the total production of the composite mills was cotton fabrics and that of blended and mixed fabrics was only 16.67 per cent. By 1985, the fibre mix changed to 78.2 per cent of cotton fabrics 21.5 per cent of blended /mixed fabrics and 0.3 per cent of non cotton fabrics. In 1989, the share of non cotton blended and mixed fabrics was 26 per cent (Table 4.4). The shift towards non-cotton and mixed textiles is in agreement with the trend in consumer demand for blended and mixed cloths. While the product mix is changing in favour of blended and non-cotton fabrics, the absolute quantity of production show a trend of their own. Whereas, the cotton fabric production showed a dip in 1982, recovery in 1983 and a steady fall since 1985, the blended fabrics showed significant fluctuations in production since 1983.

Table 4.4  
Production of Fabrics by the Mill Sector  
(million metres)

Year	Cotton	% share in total	Blended	% share in total	100% non Cotton	% share in total	Total
1980	3476	83.24	696	16.67	4	0.10	4176
1981	3147	77.26	919	22.56	7	0.17	4073
1982	2347	77.33	680	22.41	8	0.26	3035
1983	2704	76.64	819	23.21	5	0.14	3528
1984	2573	76.44	786	23.35	7	0.21	3366
1985	2667	78.19	734	21.52	10	0.29	3411
1986	2460	73.72	868	26.01	9	0.27	3337
1987	2308	74.12	801	25.72	5	0.16	3114
1988	2073	72.51	781	27.32	5	0.17	2859
1989	1991	74.46	679	25.39	4	0.15	2674

Source: Handbook of Statistics on Cotton Textile Industry, ICMF 1991.

As far as yarn output is concerned, the proportion of blended and non-cotton yarn in the total yarn output showed a decreasing trend since 1982, but started increasing after 1987 (Table 4.5).

**Table 4.5**  
**Production of Different Types of Yarn**  
(million kg)

Year	Cotton Yarn	% share in total	Blended & 100% Non-cotton Yarn	% share in total	Total
1980	1058	82.27	228	17.73	1286
1981	1015	79.11	268	20.89	1283
1982	958	81.53	217	18.47	1175
1983	1092	83.42	217	16.58	1309
1984	1151	85.32	198	14.68	1349
1985	1261	87.33	183	12.67	1444
1986	1257	84.48	231	15.52	1488
1987	1348	85.37	231	14.63	1579
1988	1297	83.57	255	16.43	1552
1989	1337	83.46	265	16.54	1602
1990	1447	82.12	315	17.88	1762

Source: Handbook of Statistics on Cotton Textile Industry, ICMF 1991.

Thus, the shift towards non-cotton and mixed fibre was much less in yarn production than in cloth. In the cloth market, where the mills have to compete with the decentralised sector particularly the powerlooms, they have switched over to non-cotton and blended fabrics. However, in the yarn market, where there was a growing demand for cotton yarn from the decentralized sector and export the shift was less prominent.

Apart from the changed fibre share, within cotton textiles mills decreased the production of coarse varieties and increased the production of higher and medium quality fabrics (Table 4.6). It is evident that the share of coarse varieties decreased in the total cotton cloth production from 12.11 per cent in 1980 to 10.21 per

cent in 1991; however, the share of lower medium (17s-25s) increased while the share of super and fine increased that of higher medium (medium 26s-40s) decreased. On the whole it is possible to notice a shift in production in favour of high quality fabrics. This is due to competition from the powerlooms with respect to coarse and medium cloth.

**Table 4.6**  
**Production of Different Categories of Cotton Cloth**  
(million metres)

Year	Coarse Below 17s	Medium 17s-25s	Category Medium 26s-40s	Fine 41s- 60s	Superfine 61& above	Total
1980-81	416(12.11)	879(25.59)	1948(56.71)	64(1.86)	128(3.73)	3435
1981-82	320(10.95)	685(23.43)	1769(60.52)	43(1.47)	106(3.63)	2923
1982-83	249(11.27)	549(24.85)	1333(60.34)	23(1.04)	55(2.49)	2209
1983-84	286(10.58)	669(24.74)	1559(57.66)	79(2.92)	114(4.2)	2704
1984-85	277(10.58)	647(24.70)	1510(57.66)	77(2.94)	108(4.12)	2619
1985-86	274(10.59)	639(24.70)	1492(57.67)	76(2.94)	106(4.10)	2587
1986-87	261(10.57)	610(24.70)	1424(57.65)	73(2.96)	102(4.13)	2470
1987-88	236(10.56)	552(24.71)	1288(57.65)	66(2.95)	92(4.12)	2234
1988-89	230(11.50)	541(27.05)	1066(53.30)	75(3.75)	88(4.40)	2000
1989-90	228(10.30)	518(27.79)	965(53.70)	81(4.35)	72(3.86)	1864
1990-91	212(10.21)	523(29.55)	868(50.91)	73(4.12)	94(5.31)	1770

Note : Figures in bracket shows percentage to total cloth.  
Source: Calculated from Indian Textile Bulletin Various Issues.

Among the blended varieties the mills are increasingly concentrating on the production of cotton viscose, cotton polyester, and polyester viscose which was facilitated through large scale modernisation by the installation of automatic looms (Kantilal 1992).

Along with changes in fibre mix the mills tended to focus on a product portfolio comprising of high value added products eliminating product groups where the decentralized sector has a

strong presence. The mills seem to focus increasingly on products like speciality yarns, terry - towels, denim, industrial fabrics and high quality cotton fabrics. (Financial Express, Economic Times, Various Issues). This has been attributed to the difficulty in marketing certain varieties in the face of stiff competition from powerlooms.

#### *4. Search for new markets:*

Edged out from the domestic market by the decentralized sector the composite mills as a part of their strategy of survival have sought new avenues. Besides specializing in high priced cotton and blended varieties for the domestic market, the new avenues sought by the mills were the export market and ready made garments.

##### *A. Ready made garment industry*

The ready made garment industry both in the domestic and export markets has shown a boom in recent years. The total production value of the garment industry has increased from Rs.275 crores in 1982 to Rs. 2470 crores in 1986. The share of readymade garments in total cloth production has increased from 7.1 per cent in 1983 - 84 to 11.4 per cent in 1988 - 89 to 18.3 per cent in 1991-92. (Kantilal 1992).

In 1987, the domestic ready made garment industry was not worth more than Rs. 300 crore. However, in 1992 it was valued at over Rs. 1200 crore and is growing at a phenomenal rate of 30 per cent per year<sup>1</sup>. Equally impressive was its export performance. Within

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<sup>1</sup> Business World May 1993

a span of three years exports have more than doubled from Rs. 3000 crore in 1989 to a hefty Rs. 6252 crore in 1992.<sup>2</sup>

The quantity amount of fabrics supplied by the mills to the ready made garment industry is not known since the industry is predominantly a decentralized one and data availability is meagre. Estimates of mill made fabrics used by them ranged between 20% to 40% (Kantilal 1991). An increasing number of mills have taken to direct sales of fabric to garment manufacturers.

Apart from this, a number of composite mills such as DCM, Morarjee Goculdas, Mafatlal Groups, Bombay Dyeing etc have already integrated forward into the readymades. Many of them have in fact gone in for foreign tie ups [Arvind Mills (USA), Mafatalals (U.K), DCM (Italy) etc]. This rush into ready made can be explained by the fierce competition from the powerlooms, pushing mills to focus on branded wear where they compete by creating brand loyalties. Apart from this, the trends in the export market also enabled the mills to go in for ready made.

### ***B. Exports***

Since trends in exports by mills have already been discussed in Chapter 3 no detailed discussion is attempted in this section. As far as the exports are concerned, exports (excluding yarn) by mills have increased during 1980 - 1990 both in quantity and in value terms. No separate data is available for the exports of yarn by the composite mills. However, the data on yarn exports for the organized sector as a whole has shown an increasing trend during

<sup>2</sup> Ibid.



this period, particularly after 1989. The government ceiling on yarn exports so as to protect the decentralized sector to a large extent has affected the total yarn exports.

Recently there has been a big rush for setting up 100% export oriented units by many of these mills. The annual report published from the Office of the Textile Commissioner reveals that about 18 units were referred to the Section of Industrial Approvals for setting up 100 per cent export oriented units in 1990. By 1992 the number of units increased to 70. Some of the composite mills which have set up 100 per cent export oriented units, the type of product to be manufactured and the total investment is shown in Table 4.7.

**Table 4.7**  
**Mills with 100% Export Oriented Unit**

Name	Product	Capital Outlay (Rs crores)
1. Arlington Spg & Wvg Mills Ltd	Cotton Fabrics	82.72
2. Arvind Mills	Shirtings/Denim	107
3. Century Textiles	Cotton and Blended Yarn	65
4. Cheslind Textiles	Cotton Yarn	46.89
5. DCM Ltd.	Carded and Combed Yarn	35.94
6. Madura Coats	Yarn	80
7. Mafatalal Fine	Knitted Cotton Fabrics	25
8. Mafatalal Industries	Knitted Garments	23.5
9. Reghu Spg & Wvg Mills	Cotton Terry Towels	6.32

Source: The Economic Times, Various Issues.

### **5. Large scale modernisation**

To respond to changes in consumer demand and to produce fabrics which could compete with the decentralized sector in the domestic market and producers in the international market, the mills have sought to introduce advanced production technologies. The mills

have introduced machineries of various types with a view to reorganize the product structure. Some processes have received preferential treatment. The ring frames, spooling/ winding and sizing machines to name a few, have undergone a rapid change / conversion to superior types of machinery (Ela Kantilal 1992). This has been mainly due to the fact that capital expenditure in these areas have yielded faster returns in terms of quantity and or quality, a major concern under circumstances of scarce and costly capital.

Data on Census of Machinery in textile mills and amounts spent on expansion and modernisation is available for the years 1975-80 and is given in Table 4.8. It is evident that the mills had spent large amounts in modernising their machines with the spinning department followed by weaving, processing and engineering. This confirms the earlier observation that the mills have increasingly moved into the production of finer counts of yarn.

**Table 4.8**  
**Capital Expenditure by the Composite Mills of India**  
(Rs.Crores)

Year	Spg	Wvg	Pro.	Eng.& Others	Total
1975	NA	NA	NA	NA	353
1976	NA	NA	NA	NA	375
1977	175	105	142	NA	421
1978	271	217	168	46	702
1979	314	261	217	92	884
1980	484	317	272	189	1263
1975- 1980	36.9	26.7	26.7	9.7	100

(% share in total expenditure)

Source: Ela Kantilal, Ph.d Thesis.

A study conducted by the Indian Institute of Management reported

that in the years 1978-1982, 56.15 per cent of the available resources of the mills was invested in capital expenditure (ATMA 1985). The composite mill industry spent approximately 37 per cent of the total expenses on expansion and modernisation of spinning machinery, 27 per cent on weaving machinery and 27 per cent on processing machinery in the period 1974-1980.

An ICMF study (1990) on mill modernisation based on a sample of 50 mills 25 each from spinning mills and composite mills, representing 31 per cent of the total sales turnover of the organized sector found that the addition to installed capacity of spindles and looms by these mills after 1982-83 has been quite insignificant. This signifies that fresh investments of the selected mills has been mostly towards modernisation of their plant and machinery. The annual rate of modernisation was worked out by relating fresh investments in plant and machinery during a year to gross fixed assets of the previous year (Table 4.9).

**Table 4.9**  
**Rate of Modernisation in Textile Mills**

Gross Fixed Assets (Rs.Crores)						
	1982-83	1983-84	1984-85	1985-86	1886-87	1987-88
25 comp. mills	510.62	610.85	660.9	733.24	802.68	920.14
25 spg. mills	112.26	141.65	158.11	177.14	204.9	226.32
Total	622.88	752.5	819.01	910.38	1007.6	1146.5

Fresh Investment in Plant and Machinery (Rs. Crores)						
	1982-83	1983-84	1984-85	1985-86	1886-87	1987-88
25 comp. mills	79.5	98.37	61.34	87.37	110.81	99.6
25 spg. mills	25.25	17.43	17.75	22.32	30.44	28.52
Total	104.75	115.80	79.09	109.69	141.28	128.12

Fresh Investment as a % of GFA (Rate of Modernisation)						
	1982-83	1983-84	1984-85	1985-86	1886-87	1987-88
25 comp. mills	___	19.3	10	13.2	15.1	12.4
25 spg. mills	___	15.5	12.5	14.1	17.2	13.9
Total	___	18.6	10.5	13.4	17.2	13.9

Rate of Modernisation as a % of Total Annual Turnover						
	1982-83	1983-84	1984-85	1985-86	1886-87	1987-88
25 comp. mills	8.0	8.5	4.7	5.8	7.2	5.8
25 spg. mills	7.2	4.7	4.1	4.8	7.4	4.5
Total	7.8	7.5	4.5	5.6	7.3	5.4

Source: ICMF Journal, Vol 6, 1990

The Table 4.9 shows that the pace of modernisation has slightly slowed down in 1984-85 and again in 1987-88 and was higher among the spinning mills since 1984-85. The annual average rate of modernisation came to over 14 per cent per annum. A modernisation rate of 7.5 per cent of the annual turnover is prescribed for a unit to remain competitive (Dr. Herwig Sholtz, Director ITMF). During three out of six years total annual outlay for modernisation was the prescribed minimum rate. The average rate of modernisation has been higher for the composite mills at 6.7 per cent of the turnover compared to 5.3 per cent for the spinning mills over the period 1982 - 83 to 1987 - 88. The study pointed out that a few years ago, spinning departments used to account for about 51 per cent of the industry's total expenditure on modernisation, weaving and processing / finishing/ engineering had a share of 22-24 per cent and 25-27 per cent respectively. This is to be expected since any upgradation in weaving technology has to be preceded by the employment of superior spinning techniques because of the need for strong and superior yarn to withstand the increased speeds on looms.

Table 4.10 gives some information regarding the extent of modernisation that is taking place in the composite mills in the recent past. The table shows that most of the composite mills which had gone for modernisation focused on the spinning department. Of the thirteen mills which went for modernisation ten mills focused on modernizing spindles. This trend towards modernisation of spindles can be explained by the following factors: (1) The increased demand for yarn in the domestic as well as export market (2) A comparatively less competitive domestic yarn

market compared to cloth (3) Focus of the mills on high quality high valued cloth. The quality of cloth produced by the mill depends upon the quality of yarn. Hence, production of high quality yarn is a precondition for the mills to concentrate on the production of high valued cloth.

**Table 4.10**  
**Recent Trends In Modernisation**

Name	Process	Product	Capital Outlay (Rs crores)
1. Arvind Polycot	Spinning	Yarn	54
2. Bharat Vijay Mills	Spinning	Yarn	10
3. DCM Ltd.	Spinning	Cotton Yarn	26.66
4. Jam Shri Ranjithsinghji Spg & Wvg Mills	Weaving	Cotton Textiles	28.02
5. JCT	Weaving	Cloth	30
6. Khatau Makanji Spg & Wvg Mills Ltd.	Spinning	Yarn	35
7. Lakshmi Vishnu Textile Mills	Spinning	Yarn	13
8. Mafatalal Fine	Spinning	Yarn	22.5
9. Mafatalal Industries	Spinning	Yarn	21.5
10. Morarjee Goculdas	Spinning	Yarn	72
11. Pasupati Spg &Wvg Mills	Spinning	Polyester Viscose Yarn	10
12. Rajasthan Spg & Wvg Mills	Spinning	Polyester Viscose Yarn	22.93
13. Standard Industries	Weaving	Cloth	48.53

Source: Economic Times, Various Issues

This trend towards modernisation was favoured by the liberalized policy of the government. The technological obsolescence that existed in the industry brought forth a policy regime which it was argued would correct the bias towards outdated technology ( Khanna 1990).

The government assistance for modernisation started with the introduction of the Soft Loan Scheme (SLS) in 1976 which provided

concessional finance to the mills. The total sanction under the scheme till the end of June 1985 amounted to Rs. 576 crores of which roughly 80 per cent was absorbed by the composite mills (Misra 1992). To assist mills in undertaking large scale modernisation the Textile Policy of 1985 recommended the introduction of a Textile Modernisation Fund with a corpus of Rs.750 crores. Accordingly, the fund was introduced in June 1985 and has disbursed an amount of 771.19 crore rupees till 1993 for 307 mills (Textile Commissioners Report, Various Issues)

### *Subcontracting*

Subcontracting in textiles which is referred to as activity subcontracting<sup>3</sup> (Nagaraj, 1984) gained momentum after the Bombay labour strike in 1982, when the mills remained closed during the prolonged strike many of them subcontracted the work to powerlooms and sold the cloth in their own name. Till then this was chiefly used as a means to save labour costs for unreeling the leftover yarn from used bobbins. Faced with the combined problem of severe competition from the powerloom sector, recessionary trends in demand for its cloth and inflation, the organized sector used subcontracting as a way out. The economic instability of the period thus forced many mills to reorganize and restructure, through subcontracting. Subcontracting would not only be cheaper for the mills but would also help to impart flexibility in its product mix and production programme and obviate high costs of

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<sup>3</sup> Production of cloth consists of three activities. Spinning of yarn, weaving of cloth and finishing or processing of the fabric. Since the textile industry can operate at a very low level of technology it is possible for large firms to produce and procure yarn, get it woven in the powerlooms and process it in specialized printing firms.

stocks, unutilized labour and capital. A joint study by four Cotton Textile Industry Research Associations (ATIRA 1985 ) revealed that conversion cost of yarn into fabrics was lower for the powerloom sector by 25-30 per cent, mainly due to low wage costs. The cost of production of grey fabrics inspite of higher yarn cost for the powerloom sector, would be lower by about 5 per cent compared to the mill sector.

Many mills provide their own yarn and contracted for conversion to fabric on powerlooms paying only conversion charges or purchased grey cloth and processed and sold it as their own product. Lately more and more composite mills have been reducing their weaving capacity and concentrating on spinning and processing relying on powerlooms to augment their regular fabric production.

From the above analysis it is clear that major restructuring has taken place in the mills as a response to changes in the environment. The composite mills seem to focus on the elitist segment of the domestic market, the international market and the readymade garment industry which are economically more viable. This was facilitated by large scale modernisation which enabled the mills to have a diversified product mix. The strategies followed by the mills can be understood from the quotations which represents the views of mill managers in this regard. "A heavy modernisation spree emphasized on changes in traditional techniques needed to bring about flawless quality to meet international standards". "A move towards a product portfolio comprising of high value added items eliminating product groups in which powerlooms have a strong preference". " A shift from manufacture of grey fabrics to



finished fabrics and made ups". " The focus will be on the international market. That is where we plan to make a name for ourselves" (Economic Times, Financial Express: Various Issues).

### *Conclusion*

The analysis of the responses of the mills showed that the mills responded to the changes in the environment, through changes in output, product mix, increased exports and emphasis on ready made industry which was facilitated through large scale modernisation. The changed priorities of the mills seem to be more or less in line with the trends in demand. Have these changed priorities of the mills helped them to improve their performance? In the next chapter an attempt is made to assess this through an analysis of the performance of a sample of mills.

## Chapter 5

### *ANALYSIS OF THE MILLS*

A number of trends in the environment which are favourable for the mills were pointed out in the analysis on demand. What we have seen from the overall response of the mills is that the mills did respond to the changes in the environment. However, the question is did all the mills respond? If not, which section of the mills responded? Which are the mills that have taken advantage of the trends in demand? What are the characteristic features of these mills? These are the questions that are taken up for discussion in this chapter.

An analysis of the performance of the mills for the period 1980-1990 is attempted through an analysis of their financial performance which is taken as an indicator of the overall performance. The logic behind such an analysis is that, if the mills have responded to the changes in the environment then this should get reflected in the financial variables which are used to diagnose the economic health of the mills.

The chapter is divided into four Sections. Section 1 discusses the limitations of the data and defines the various concepts used in the analysis. Section 2 analysis the financial performance of the mills stratified into different size classes within which we examine both inter class and intra class differences. Of the intra class groups what becomes important is a group of mills which have performed well remaining apart from the trends in the industry A detailed analysis of these mills is attempted in Section 3. Section 4 summaries the whole analysis.

**1. Limitations of the data and various concepts:**

The analysis is based on the data for 59 mills taken from the Bombay Stock Exchange Directory (Volume 8). The logic behind the selection of 59 mills was explained in Chapter 1. The focus of our analysis is to identify certain broad group of mills and the characteristic features which helps one to have a better understanding of the industry. As this involves measuring the relative performance of the mills it becomes important that the measure that is used enables inter firm comparison to the maximum extent possible. Since the analysis is based on the financial data the following limitations should be taken into account.<sup>1</sup>

1. All the mills do not follow the same accounting standards and conventions for instance in respect of depreciation. If one mill is following straight line method and another diminishing balance method the reported profits of the two mills for the same period may be substantially different even though their underlying profitability is the same.

2. The past profitability of a mill's assets may be very different from the present and prospective profitability of its assets, because of replacement cost. The average age of the assets differs widely among mills hence, profitability of capital measured on the basis of book value of assets will be different from current profitability. A highly profitable old mill has to replace its assets at current prices which renders it no different from a new low profit making mill.

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<sup>1</sup> For a detailed discussion of the limitations of the data see 'Financial Ratios and Corporate Sickness' L.C. Gupta 1983.

3. The financial structure of mills will be different, with a relatively varied reliance placed on different methods of financing. Because of this, profitability measured in relation to total assets (gross or net) or total capital employed will make a difference even if the underlying business profitability is the same.

4. Finally, the practice of window dressing for the purpose of published accounts hides the real state of affairs. This tendency is likely to be stronger in the case of mills which are in distress. And it is not generally easy to uncover this difficulty from the published accounting information and hence one has to be aware of this while interpreting the data.

Of the various tools that are used in analyzing the performance of the mills we confine ourselves to ratio analysis since the use of ratios provides an insight into the relative financial condition and performance of the mills i.e, intermill comparisons.

Keeping in mind the limitations of the data the analysis is carried out using profitability as well as other measures which attempt to overcome at least some of the limitations. The following section gives a brief introduction to the various concepts used in the analysis.

#### *Size of the mill*

The balance sheet or the book value of assets is used as the measure of size of the mill in this analysis. Net assets of the mill represents its share capital, plus reserves plus long term

liabilities. Alternatively, it can be defined as total fixed assets minus depreciation plus current assets net of current liabilities.

### ***Profitability***

Profitability or the rate of return on investment is considered to be the key ratio in judging overall performance. The most widely used ratio to measure profitability are 1. gross profitability ratio (earnings before depreciation, interest and taxation) and 2. net profitability ratio (earnings after depreciation but before interest and taxation). Of the two measures of profitability, gross profitability has been found to provide a sounder basis for relative ordering of firms than net profitability<sup>2</sup>. Hence in the analysis we limit ourselves to the gross profitability ratio.

### **Gross profitability (GP/TA)**

Gross profitability ratio, i.e., gross profits as a percentage of total assets unifies the two concepts of gross profit margin and total asset turnover and is considered to be a concrete ratio in judging the overall rate of return on investment. A smaller value of the ratio indicates a lower degree of efficiency in the utilization of the total resources invested.

### **Profit sales ratio**

The profit sales ratio or the profit margin is an important indicator of the general profitability of the business. Two ratios are generally used to measure the profit margin, 1. the gross

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<sup>2</sup> See L.C.Gupta op.cit.

profit sales ratio and 2. the net profit sales ratio. Here too the gross ratio has been found to be superior to the net ratio and hence again we limit the analysis to gross profit sales ratio.

#### **Gross profit sales ratio**

Gross profit sales ratio indicates the surplus after meeting the cost of production. This margin should be adequate to meet fixed interest charges dividends and reserves for future expansion. A higher value of the ratio reflects a higher efficiency in the production system as a higher value of this ratio results in higher gross profitability of total funds invested in business.

#### ***Modernization related ratios***

Modernization includes both purchase of machinery of a high technical order as well as replacement and renovation of machinery. The two ratios that throw light on the modernization behaviour of the mills are (1) ratio between net fixed asset and gross block (NFA/GB) and (2) ratio between plant and machinery and gross block ratio (PM/GB). The PM/GB ratio is found to be a better indicator of the amount spent on modernization than NFA/GB as the later takes into consideration all assets including land.

#### ***2. Analysis of the performance of the mills:***

Analysis of the mills is carried out on the basis of a size wise distribution of mills. The balance sheet or book value of assets at the beginning of the period is taken as the measure of the size of the mill. The distribution of mills on the basis of opening size is given in the following Table where the mills are numbered for convenience in analysis.

**Table 5.1**  
**Classification of Mills According to Size**  
**Net Assets**

Category	Class size (Crore Rs)	Mills in Numerical Terms	Total No. of Mills
Class 1	<10	11,17,18,23,24,34, 35,37,41,42,55	11
Class 2	10-50	1,12,14,16,22,27,29,33,36, 39,43,45,46,47,52,56,59	17
Class 3	50-100	3,4,6,7,8,10,19,26,28, 40,44,48,50,53,54,58	16
Class 4	100-200	20,38,49,51	4
Class 5	>200	2,5,9,13,15,21,25,30, 31,32,57	11

Source : Based on the data given in the Stock Exchange Directory (Vol.8).

The Table shows that about 47.5 per cent of the mills belong to the lower size class with assets less than 50 crores at current prices; 27.1 per cent to the medium size class with assets 50 to 100 crores. The upper size class consisted of 15 mills which account for about 25.4 per cent of the total sample. The distribution of mills on the basis of financial performance measured by the two indicators (gross profitability and gross profit ratio) for the different size classes for ten years is discussed below.

#### **Gross profitability (GP/TA)**

The mills in each category were further classified according to gross profitability ratio into profit groups <0 (less than zero group), 0-5 (low profit group), 5-10, 10-15 (medium profit group) and 15-20, >20 (high profit group). The distribution of mills among different profit groups on the basis of size is given in

Table 5.2 at the end of the Chapter. <sup>3</sup>

### The broad trends

A close examination of Table 5.2 shows that, it is possible to discern certain broad trends which can be termed as reflecting characteristic features of the industry irrespective of size class. Accordingly, three broad trends can be identified: (1) a generally high profit rate among mills in all size classes in the first two years 1980 and 1981 reflected in the distribution of mills in all classes towards the upper end compared to later years. There were very few mills which incurred loss during this period. In Class 1 while two mills (18,42) incurred losses in 1980, there was only one loss making mill (17) in 1981. In Class 2 one mill (27) incurred losses in 1981 and there was not a single mill in Class 3, Class 4, and Class 5 which incurred loss during this period.

The second is the impact of the Textile Strike of 1982 which has affected the profitability of all the classes in general though the intensity differed between various classes. In class 1 and class 2 a large number of mills incurred loss and the general scatter

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<sup>3</sup> The mills when classified on the basis of profit sales ratio showed profit groups <0 (less than zero profit group), 0-5 (low profit group), 5-10 (Medium profit group) and >10 (High profit group). Thus, this ratio showed a smaller value compared to the other ratio. The classification of the mills among various size classes based on the two different ratios showed almost a similar picture. However, differences can be seen among the distribution based on two ratios in terms of the scatter of mills between low and medium profit group. However when the general trend as well as intra class comparisons were done on the basis of this ratio it showed a similar picture as that of gross profitability. Hence no separate analysis will be done on the basis of the gross profit sales ratio. The distribution of mills in various size classes into various profit groups on the basis of this ratio is given in Appendix 5.1.



shifted to the lower end. This was particularly true with class 2 mills in which there was only one mill (56) which was not affected by the strike. However, in Class 1 there were four mills (11,23,24,35) which remained consistently profitable. In class 3 two mills incurred loss (10,54) while eight mills remained unaffected (3,6,7,8,19, 40,44,50), two mills improved (26,53) and the rest deteriorated. In class 4 and 5 there was only one mill each which incurred loss, mill 20 and 2 respectively. In this group the downward movement was relatively mild.

After the Strike, the general profitability of the industry remained on the lower side. Over the period 1983-86 some mills improved their performance 34 and 41 in Class 1 no mill in Class 2 and 3, 38 in Class 4 and 9 in Class 5. On the other hand, some mills showed deterioration in their performance.

The trend in profitability since 1987 marks the third phase- a definite shift towards the lower end among the first three classes. However, there was no noticeable change among mills in Class 4 and Class 5 which continued to remain at the upper end. In Class 1, the number of mills running in loss doubled from three to six. In Class 2 and Class 3 the situation deteriorated with a large number of mills incurring losses. In Class 2 the number of mills incurring losses came upto nine from four in 1986 while in Class 3 this rose to eleven from a mere two in 1986. This general downward shift among the first three classes can be viewed as the effect of the New Textile Policy of 1985, which led to an increased competition from powerlooms. According to the New Textile Policy : "The composite mills and powerlooms have their respective strengths

and weaknesses. For the purpose of the policy the powerlooms in the organized sector and the unorganized powerloom sector as far as possible can be treated at par and allowed to compete on the basis of their inherent strengths and capabilities" ( National Textile Policy of 1985, Loksabha Secretariat). Since mills in the two high size classes did not show any downward movement it can be concluded that the mills in these two classes managed to sustain profit levels perhaps due to their product mix and nature of market (as we see later).

Given the broad trends in the industry it becomes important to observe the differences among the various size classes during the period. For this the average profitability as well as coefficient of variation is calculated (Table 5.3).

**Table 5.3**  
**Average Profitability of Various Classes and**  
**Coefficient of Variation**  
**(Gross Profitability)**

Year	Class 1	Class 2	Class 3	Class 4	Class 5
1980	7.90	10.03	12.62	12.65	13.03
1981	4.88	10.43	10.04	11.54	12.33
1982	2.00	6.14	10.47	3.53	10.16
1983	1.64	8.58	11.87	6.32	8.37
1984	-2.87	2.39	6.40	9.83	7.84
1985	4.55	5.15	7.27	7.64	7.55
1986	3.70	6.89	7.77	10.04	8.74
1987	0.21	1.63	1.24	7.89	8.33
1988	-0.97	-3.08	-1.50	6.43	8.14
1989	-2.09	4.01	-0.57	7.28	9.55
1990	0.58	3.88	0.53	8.77	10.11

Year	(Coefficient of variation)				
	Class 1	Class 2	Class 3	Class 4	Class 5
1980	2.04	0.43	0.37	3.61	0.45
1981	4.06	0.77	0.58	6.64	0.50
1982	7.69	1.78	3.06	0.85	0.47
1983	14.85	0.97	1.24	1.35	0.75
1984	12.01	2.56	0.46	1.81	0.65
1985	5.37	1.80	0.65	1.43	0.51
1986	6.04	1.18	0.71	1.24	0.44
1987	2.29	6.44	5.38	1.64	0.62
1988	15.21	4.96	5.67	0.55	1.00
1989	10.04	3.86	17.40	0.50	0.61
1990	37.29	4.00	18.20	0.56	0.75

Source: Op.cit

It may be seen from the computed profitability ratios that average profitability increased with size. The exception to the pattern are the years 1982 and 1983. The fluctuation in profitability over the years is also significantly lower for the higher size classes. While, the average profitability showed a steadily declining trend for classes 2 and 3 the trend was entirely different for 4 and 5. The latter two classes showed some decline during the first three years and a remarkable stability beyond 1983.

The computed coefficients of variation show a steady fall with increasing size. They are very high for Class 1, but the difference between the other classes is not very wide. This would imply that the between mill variation in average profitability is considerably higher for lower size classes and lower for the mills within the higher classes. Further the between mill variation has gone up significantly for the mills within the lower two size classes. For size Class 3 it has fluctuated over the years and for the highest size classes it has fluctuated within narrow ranges.

It may be concluded that, size played an important role in determining the level and stability of profitability of firms. Lower size led to lower level of profitability with higher fluctuations and higher size led to higher profitability with lower fluctuations.

#### *Intra class differences*

Apart from the differences between different size classes in terms of distribution of mills into various profit groups differences can also be seen within each class of mills in terms of scatter among various profit groups. Accordingly, five broad groups can be identified: one, mills which are consistently poor profit makers; two, mills which have shown a steady deterioration in profits; three, mills which are consistently profitable four, mills which have improved their profits and five, mills which have not showed any specific trend in profits but have fluctuated among various profit groups. In this subsection mills in each category will be classified into these different groups and the characteristic feature of each group will be discussed in terms of their product

mix and markets.

### Class 1

The mills in this class when divided into five groups showed four mills in Group 1, three mills in Group 2, two in Group 3 and Group 4. Mill 35 which made profits before 1987 it incurred loss since 1987. Hence this mill will also be counted along with Group 2 mills. There were also no mills in Group 5. The following Table gives the general features of these various groups in terms of the type of output they produced and the market they catered to, which will help to understand each group better.

Table 5.4  
Distribution of Class 1 Mills ( 1990)

Mill No.	Product mix	Export
Group 1 (Consistently Poor)		
17*	C	NE
18	C	NE
37*	C	NE
42	C	NE
Group 2 (Steadily Deteriorating)		
24	C	NE
35	C	NE
55	NC	NE
Group 3 (Consistently Profitable)		
11	NC	E
23	NC	E
Group 4 (Steadily Improving)		
34	NC	E
41	NC	E

Note:\* - mills which are under the provision of Sick Industrial Companies (Sp. Provision) Act in 1990.

C - refers to mills producing only cotton textiles in 1990

NC -refers to mills producing cotton non-cotton as well as mixed cloths in 1990.

E - mills which exported in 1990.

NE - mills which were not exporting in 1990.

Source :Based on the information available in Stock Exchange Directory Vol.8,1990.

From the Table it can be seen that all the mills in Group 1 (consistently poor) were pure cotton textile mills catering only to the domestic market. Of this group two mills were referred to the BIFR (17 and 37) under the Provision of Sick Industrial Units Act. Group 2 mills also showed the same characteristic features as Group 1 except one mill (55) which was found to be a non-cotton, non exporting mill. Mills in Groups 3 and 4 without any exception were non-cotton exporting mills. Thus, higher and steady performance is related to non-cotton production and exports.

#### Class 2

Of the seventeen mills in this class, four mills belonged to Group 1, six mills to Group 2 and three mills to Group 3. Mills 16,43,46, 59 remained profit making but did not show any specific upward trend fluctuating among different profit groups. Hence these mills will be treated as Group 5 mills. There was not even a single mill in Group 4. Table 5.5 gives the distribution of mills in this class into profit groups along with their characteristic features.

**Table 5.5**  
**Distribution of Class 2 Mills**

Mill No.	Product mix	Export
<b>Group 1 (Consistently Poor)</b>		
27	C	NE
36	C	NE
45*	C	NE
52*	C	NE
<b>Group 2 (Steadily Deteriorating)</b>		
1	C	NE
12	C	NE
14	C	NE
29	NC	NE
33*	NC	NE
39	NC	NE
<b>Group 3 (Consistently Profitable)</b>		
22	NC	NE
47	NC	NE
56	NC	NE
<b>Group 5 (Fluctuating)</b>		
16	NC	NE
43	NC	NE
46*	C	NE
59	NC	NE

Source :Op.cit.

Note: Notations are same as in Table 5.4

In this class also all the Group 1 mills were pure cotton textile mills catering only to the domestic demand. Two mills were referred to the BIFR as sick units. All Group 2 mills were non exporting however, half of them were pure cotton textile mills while half produced both. One mill was referred to the BIFR. All Group 3 mills were non-cotton non exporting mills while one mill was a pure cotton exporting mill. In common, with Class 1 mills, the Class 2 mills showed that non-cotton has an important role to play in the steady profitability. However, export market are not essential for showing better performance; focusing on the domestic market can be good enough. The disadvantage of the domestic market is that fortunes could be fluctuating.

### Class 3

In Class 3 there was only one mill in Group 1 and a large number of mills belonged to Group 2. There was no mill in Group 3 and 4. Group 5 mills were five in number. The distribution of mills in this class on the basis of product produced and markets showed the following picture.

Table 5.6  
Distribution of Class 3 Mills

Mill No.	Product mix	Export
Group 1 (Consistently Poor)		
10*(1a)	C	NE
Group 2 (Steadily Deteriorating)		
3*	C	NE
4*	C	NE
7	NC	NE
28	C	NE
40*	C	E
44	C	NE
48	C	NE
50	NC	NE
53	C	NE
58	NC	NE
Group 5 (Fluctuating)		
6	NC	NE
8	NC	NE
19	NC	NE
26	NC	E
54	NC	NE

Source: Op.cit.

Note: The notations are same as in Table 5.4

The only mill in Group 1 was a non exporting pure cotton textile mill. Group 2 mills were cotton textile mills (except mill 50) and catered only to the domestic market (except 40). Of the Group 5 mills all were non exporting (except 26) non cotton mills. The presence of a large proportion of mills in Group 1 and 2 confirm the observation made regarding Class 1 mills, production of cotton



goods and focusing attention on the domestic market result in poor or deteriorating performance. Diversifying into non-cotton shows better performance but highly fluctuating if the market is domestic.

#### Class 4

Of the four mills in this class one mill belonged to Group 1 and Group 4 and two mills to Group 3. The following table gives the distribution of these mills into various groups and their features.

Table 5.7  
Distribution of Group 4 Mills

Mill No.	Product mix	Export
Group 1 (Consistently Poor)		
51*(1)	C	NE
Group 3 (Consistently Profitable)		
20	NC	E
49	NC	E
Group 4 (Steadily Improving)		
38	NC	NE

Source: Same as above

Note: The notations are same as in Table 5.4

The Group 1 mill was a pure cotton textile mill which catered only to the domestic market. Of the two Group 3 mills both were non cotton mills while one mill catered only to the domestic market the other was found to be exporting.

#### Class 5

The distribution of mills in this Class on the basis of the group they belong to, type of product they produce and the market they cater to is shown in the following Table.

Table 5.8  
Distribution of Class 5 Mills

Mill No.	Product mix	Export
-----		
Group 1 (Consistently Poor)		
2	NC	NE
Group 2 (Steadily Deteriorating)		
13	C	NE
Group 3 (Consistently Profitable)		
5!	NC	E
15!	NC	E
21	NC	E
25	NC	NE
30!	NC	E
31!	NC	E
32!	NC	E
57	NC	E
Group 4 (Steadily Improving)		
9!	NC	E
-----		

Source: Same as above

Note: ! - Mills which had 100% export oriented units.

Other notations are same as in Table 5.4

In this class one mill each belonged to Group 1, Group 2 and Group 3 while all the rest of the mills belonged to Group 3. While the Group 1 mill was a cotton non exporting mill, Group 2 mill was a non exporting mill. The mills in Group 3 and Group 4 were all non-cotton exporting mills. Five mills in Group 3 and the mill in Group 4 were found to be having 100 per cent export oriented units (EQU).

On the basis of the analysis, the general characteristics of each group irrespective of class size can be summarized as follows:

**Group 1 (Consistently Poor):** A large section of the mills in this group belonged to Class 1 and Class 2. Of the eleven mills, four mills each were from Class 1 (17,18,37,42) and Class 2

(27,36,45,52), one each from Class 3 ((10), Class 4 (51) and Class 5 (2). All the mills in this group were pure cotton textile mills which catered only to the domestic market.

**Group 2 (Steadily Deteriorating):** This group accounted for a number of mills from Class 3. Of the twenty mills in this group three mills belonged to Class 1 (24,35,55), six to Class 2 (1,12,14,29,33,39), ten to Class 3 (3,4,7,28,40,44,48,50,53,58) and one to Class 5 (13). There was not a single mill from Class 4 in this group. Mills in this group too were mostly pure cotton textile mills. While fifteen mills produced only cotton cloth five were engaged in the production of both cotton and as well as non-cotton fabrics. All the mills were found to be catering only to the domestic market.

**Group 3 (Consistently Profitable):** This group consisted of fifteen mills of which eight belonged to Class 5 (5,15,21,25,30,31,32,57) two to Class 4, (20,49), three to Class 2 (22,47,56) and two to Class 1 (11,23). Thus, higher classes accounted for about three fourth of the mills in this group. All the mills in this group produced cotton and non-cotton and most of them were found to be exporting except three mills in Class 2 (22,47,56) and one mill in Class 4.

**Group 4 (Steadily Improving):** In this group of four mills two were from Class 1 (34,41) and one each from Class 4 (38) and Class 5 (9). All the mills in this group were exporting, non cotton mills.

**Group 5 (Fluctuating):** This profit making group which has not shown

any specific trend consisted of nine mills four from Class 2 (16,43,46,59) and five from Class 3 (6,8,19,26,54). These mills except one in Class 2 (46) were all non-cotton mills. However, all mills except one (26) were found catering only to the domestic market.

Thus on the whole, two distinct trends can be seen among the profitable groups - one, non-cotton exporting mills which improved or remained consistently profitable and two non-cotton non exporting mills which were consistently profitable or fluctuated between various profit groups. The fluctuation in profitability shown by these mills can be explained by their dependency on the domestic market. The consistently poor or steadily deteriorating mills were cotton non exporting mills belonging to the lower size classes. While size appears to be positively associated with profitability, there are some mills which have performed well consistently in the lower size class.

### *3. The successful mills:*

Of the various groups what is of interest for our study is the group of mills which were able to make profits irrespective of the trends in the industry and hence can be termed as successful. This group consisted of 19 mills of which four belonged to Class 1 (11,23,34,41), three mills to Class 2 (22,47,56) three to Class 4 (20,38,49) and nine mills (5,9,15,21,25,30,31,32,57) to Class 5. There was not even a single mill from Class 3.

The general features of the mills were discussed earlier as: 1. they were all mills which produced both cotton as well as non-

cotton and 2. although a large proportion of them were found to be exporting there were a few exceptions. The characteristic features that differentiate these mills from the other mills can be viewed as the factors which accounted for their higher profits and better performance. An understanding of the specific features of this group thus, becomes important. In the following section the mills will be discussed in detail on the basis of the information available in the Stock Exchange Directories. Information from the Kothari's Industrial Directory is used wherever possible to provide additional information.

### *Product Mix*

As observed earlier all these mills were producing cotton as well as non cotton textiles. However, they were pure cotton textile mills when they were first set up with few exceptions. Later they changed their product mix to include blended and non cotton textiles in response to the trends in demand. This shift from cotton to non-cotton and mixed fabrics can also be explained by the increased competition from the powerlooms in cotton textiles. The exact period during which the shift was witnessed is not available and will be different for different mills. A few mills (5,9,32) were found to have shifted in the early 1970s itself as a result of the trends in domestic demand, while the other mills changed in the late seventies. Apart from the shift from cotton to non-cotton the mills seem to be changing their product mix every year so as to cater to the changes in demand, incorporating new products like mulls, voils, cambrics, twills, denim, high quality yarn, industrial fabrics and others.

## Exports

Though the export side remained comparatively less profitable to the mills till the 1970's (Chandrasekhar 1981)<sup>4</sup> by the end of the decade many mills started exporting. All the fifteen exporting mills were found to be exporting in 1980<sup>5</sup>. However, there has been a phenomenal increase in their exports in 1980's, which accounted for an increased share of its total sales. Exports did play a very important role that four mills (5,9,30,32) set up 100 per cent export oriented units. Many of the changes in the product mix of the mills were in tune with the trends in export demand. The share of exports in total sales for mills for which data is available is given in the Table 5.9.

Table 5.9  
Share of Export in the Total Sales

Mill No.	1980	1985	1990
Class 1			
34	1.2	3.4	7.7
41	1.3	2.5	6.2
Class 5			
5	0.5	1.7	10.9
11	1.5	4	8.92
30	0.9	1.25	9.45
31	0.07	0.9	7.5
32	-	2.1	12.4

Source: Based on the data given in CMIE and the Stock Exchange Directory.

The Table shows that for all the mills the share of exports to total sales has increased sharply. This is especially true since

<sup>4</sup> Chandrasekhar has pointed out that even the big textile mills which produced high quality value added fabrics did not export, since the domestic market was comparatively profitable for them.

<sup>5</sup> Kothari's Industrial Directory 1980.

1985. Also it can be seen that the mills which belonged to the large size class have increased their exports faster than other mills since 1985. If we look at trends in profitability of exporting and non exporting mills it can be seen that all the non exporting mills (22,47,56) belonged to the medium profit group while exporting mills except four (15,25,31,57) belonged to or have improved themselves to high profit group.

#### ***Foreign Collaboration***

Out of the 19 mills in this group 10 mills (5,9,11,21,23, 25,30,31,32,34) were found to have technical collaborations with the foreign firms ( Germany, Italy, Thailand, UK, USA, etc). Of this, three mills were having collaborations with more than one foreign firm (5,9,32), and one mill (30) had an exclusive selling right from a reputed international business house. This trend towards foreign collaboration a trend in the 1980,s can be viewed as an outcome of the increased emphasis on high quality fabrics and exports.

#### ***Brand Name***

All the nineteen mills were found to be dealing in branded products. Hence, brand image can be thought as one of the reasons behind their success.

#### ***Modernization***

The mills in this group have undertaken large scale modernization which helped them to change their product mix catering to the trends in domestic demand as well as exports. Through large scale modernization the mills were able to produce highly sophisticated

and high quality fabrics. All these mills were equipped with modern equipments for bleaching, dyeing, printing, mercerizing, tebilising, calendaring, furnishing etc. To provide an insight into the extent of modernization, the two modernization related ratios are taken into account for these mills.

**Table 5.10**  
**Trend in Plant & Machinery / Gross Block Ratio**

Mill No	1980	1985	1990
Class 1			
11	64.98	86.23	90.51
23	58.93	83.57	98.23
41	64.59	88.13	90.21
34	79.04	87.83	92.35
Class Average	66.89	86.44	92.83
Class 2			
22	69.34	68.34	73.49
47	65.87	68.46	70.34
56	64.78	66.98	67.89
Class Average	66.66	67.93	70.57
Class 4			
20	61.38	72.54	72.52
38	78.46	81	86.12
49	77.85	80.92	85.26
Class Average	72.56	78.15	81.30
Class 5			
5	82.01	88.06	98.76
9	84.39	89.53	96.85
15	72.45	76.32	76.8
21	79.12	83.2	90.68
25	73.64	75.12	79.30
30	80.04	85.51	96.63
31	73.25	72.47	77.48
32	82.42	85.02	93.45
57	73.27	76.34	76.47
Class Average	77.84	81.29	87.27

Source: Op.cit.

The above Table shows an increasing trend in the modernization ratio for all the mills. However the average rate of modernisation



was lowest for Class 2 throughout the period. Class 1 mills which had a low average modernisation ratio in 1980 showed a sharp rise between 1980 and 1985. Class 4 and Class 5 mills showed a higher ratio during the period. Interestingly, their modernisation ratio in 1985 and 1990 was much higher than mills in higher for Class 4 and Class 5 which had a high modernisation ratio in 1980.

If we look at profitability over the years of various mills in the successful group it can be seen that the mills which have shown a higher rate of modernization belonged to the higher profit group (5,9,11,23,21,30,32,34,38,41,57) compared to the other mills.

Thus, an analysis of the characteristic feature of the mills showed that the mills were highly modernized ones, producing high quality products catering to both the markets. Mills even entered into foreign collaboration and were trading in branded products.

#### **4. Conclusion:**

The analysis of the mills has shown that the composite mill industry cannot be treated as a homogenous group. It consists of different groups each having its own broad characteristics. Mills belonging to the lower size class were found to be more vulnerable to the adverse changes in the industry. The Textile Strike of 1982 and the New Textile Policy of 1985 adversely affected these mills. Average profitability showed wide variation between classes with the higher size classes showing higher profitability. The higher classes were also found to be reporting stable profits compared to the other classes. Thus the size of the mill can be thought of as an important factor which determines the performance of the mills.

On the basis of performance, the industry can be viewed as consisting of two segments. One segment consists of the unsuccessful mills which includes both the consistently poor mills and the steadily deteriorating ones. This segment accounted for a large section of the industry. It consisted of forty mills which accounted for 68 percent of the sample mills. Most of these mills were from the lower size classes. The successful mills which represent the other segment consist of mills from the high size class; 74 percent of the mills were from the highest two classes.

Differences can also be seen between the two segments as regards the market they cater to and the product they produce. The unsuccessful mills were engaged in the production of cotton textiles catering to demand in the domestic market. The successful mills were found to be producing both cotton as well as non cotton textiles and most of them catered to both the markets. Because of the competition from the decentralized sector and the other mills in the domestic market these mills were seen to be concentrating on the export market also, favoured by the trends in the export market.

Besides differences in the variety of cloths produced product heterogeneity arises due to the production of blends, the processing of cloths to varying degrees and product differentiation through brand names and massive sales promotion strategies. All these were facilitated by the large scale modernisation undertaken by these mills. As a result of huge investment this seems to be accessible only to a few mills. Thus, our study seem to confirm Chandrasekhar's findings that there exists a structural break in

the market for cloth stemming from the character of the technology and the nature of the market. However, while the mills were geared to the domestic market during the sixties and seventies the export market seem to be the leading one in the 1980's.

Table 5.2

## Distribution of Mills in Various Size Classes according to Gross Profitability

## A. Distribution of Class 1 Mills in Terms of Gross Profitability

Year	<0	0-5	5-10	10-15	15-20	>20	Total
1980	18,42	17,35,37	34	23, 24,41	55	11	11
1981	17	34,37	24,35,41, 42	18,23	55	11	11
1982	17,18,34 37,41,42, 55		24,35	23		11	11
1983	17,18,37, 42	34,35	24,41	23,55		11	11
1984	17,18,37, 42		34,35, 41,55	23,24		11	11
1985	17,18,42	37	24,34,35, 55	23,41		11	11
1986	17,18,42	24,37	34,35,55	23	41	11	11
1987	17,18,24, 35,37,42	55	34	23	41	11	11
1988	17,18,24, 35,37,42	55	34	23	41	11	11
1989	17,18,24 35,37,42	55		34	23,41	11	11
1990	17,18,24, 35,37,42	55		34	23,41	11	11

Source : Based on the data given in the Stock Exchange Directory (Vol.8).

**B. Distribution of Class 2 Mills in Terms of Gross Profitability**

Year	<0	0-5	5-10	10-15	15-20	>20	Total
1980		27	16,45,46	1,22,36, 52	12,14 29,33,43	39,47, 56,59	17
1981	27	52	22,36, 45,46	1,12,14, 16,29,39, 43,56	33,47	59	17
1982	22,27,29 36,52,59	12,16,43	1,45,46	14,33,39 47	56		17
1983	36,47,52	16,22,29, 43,45	1,12,33, 46	14,27, 39, 59		56	17
1984	36,45,52	1,12,27, 33,47,59	14,22,29, 39,43,46	16,56			17
1985	12,14,36, 39,45,52	27,43,33,	22,29, 46,59	16,47,56	1		17
1986	12,36,39, 45,52	16,27,33, 43	29,46,47	1,14, 56,59	22		17
1987	12,14,33, 36,39,45, 46,52	1,16,27	43,22,29 47,59	56			17
1988	1,12,14, 27,33,36, 39,45,46, 52	16,29,43	22,47,59	56			17
1989	1,12,14, 27,33,36, 39,45,46, 52	29	16,22,59	43,47,56			17
1990	1,12,14, 27,33,36, 39,45,46, 52	29	16,22,47, 59	43,56			17

Source : Op.cit.

**C. Distribution of Class 3 Mills in Terms of Gross Profitability**

Year	<0	0-5	5-10	10-15	15-20	>20	Total
1980		19	6,8,10 26	7,40,44, 53,58	3,4,48, 50,54	28	16
1981		10,19	6,7,8 26	3,4,40, 44,48,50, 53,54,58	28		16
1982	10,54	19	4,6,7,8 48,58	3,28,40, 44,50	26,53		16
1983	10	19,54	3,4,6,7, 8,40,50	28,44, 48,58	26,53		16
1984		54	3,10,19, 40,50	4,6,7,8, 26,44,54, 58	28,53		16
1985	10	6,8,48	3,4,7,19, 26,44,53, 54,58	28,40,50			16
1986	10,28	6,44,54	3,4,7,8, 26,48,50, 53,58	19,40			16
1987	3,4,7,10, 28,40,44, 48,50,53, 58	6,26	19	8,54			16
1988	3,4,7,10, 26,28,40, 44,48,50, 53,58	6	8,19	54			16
1989	3,4,7,10, 26,28,40, 44,48,50, 53,58	19	6,8,54				16
1990	3,4,7,10, 26,28,40, 44,48,50, 53,58	8	6,19,54				16

Source : Op.cit.

D. Distribution of Class 4 Mills in Terms of Gross Profitability

Year	<0	0-5	5-10	10-15	15-20	>20	Total
1980			38	49,51	20		4
1981			51	20,38,49			4
1982	20	51,38	49				4
1983	20		38	49,51			4
1984		20	38	49	51		4
1985	51	20	38	49			4
1986	51		20	49	38		4
1987	51		20	49	38		4
1988	51		20	38	49		4
1989	51		20		38,49		4
1990	51		20		38,49		4

Source : Op.cit.

**E. Distribution of Class 5 Mills in Terms of Gross Profitability**

Year	<0	0-5	5-10	10-15	15-20	>20	Total
1980			15,21,32	2,5,9, 30,31	13,25,57		11
1981			25,32	2,5,9,13, 31	15,21,30, 57		11
1982	2	21	9,25,57, 31,32	5,13	15,30		11
1983	2	9,21	25,31,32, 57	5,13,15	30		11
1984	2	9,13	15,25,31, 32,57	5	21,30		11
1985	2	9,13	15,25,31, 57	5,32	21,30		11
1986	2,13		15,25,31, 57	5,9,32	21,30		11
1987	2,13		15,25, 31,57	9,32	5,21,30		11
1988	2,13		15,25,57	9,31	5,21,30, 32		11
1989	2,13		31,57	15,25	5,9,21, 30,32,		11
1990	2,13		15,25,31, 57		5,9,32	21,30	11

Source : Op.cit.



## Chapter 6

### *SUMMARY AND CONCLUSION*

The textile industry which laid the foundation for industrialization in the country was in the grip of sickness since the sixties. The organised sector of the industry especially the composite mills were the ones which were mostly affected by this. However the eighties was found to be a comparatively better decade for the composite mills. This was because of the favourable trends in the environment. The focus of the study was on analyzing the recent trends in demand and the responses of the mills to these trends. On the basis of the response of the industry a sample of 59 mills were analyzed to see whether the trends in demand have resulted in improved performance of the mills.

The demand for textiles was a matter of considerable debate and in fact a large section of the literature on sickness in the textile industry pointed the stagnation in demand as the main factor behind sickness. As far as exports are concerned, it constituted only an insignificant share of the total production during the sixties and seventies, leading to a decline in the share of Indian textile world exports. However, in the 1980's a number of favourable trends were reported in the demand side with increase in domestic demand and exports. In this context the trends in domestic demand and exports were analyzed in detail.

The analysis of the trends in domestic demand showed the following:

1. A recent increase in the demand for textiles in both aggregate as well as per capita terms. While aggregate demand has shown an

increasing trend from the late 70's per capita demand for textiles showed an increase from 1981 onwards.

2. There was a marked shift towards the consumption of mixed and blended textiles from cotton textiles. This trend was seen among all income classes in both urban as well as rural areas.

3. There has been a sectoral shift in the purchase of textiles in favour of mill made cloths from powerlooms and handlooms. The demand for mill made fabrics increased both in aggregate as well as per capita terms since 1984. This increased demand for mill made cotton fabrics occurred in both urban and rural areas. However, the increase was higher in the urban area. This trend was also seen among all income classes, particularly among the upper income groups.

Thus, the trends in domestic demand, an increase in the per capita and aggregate demand for textiles and a shift towards blended and mixed fabrics combined with a sectoral shift in the demand for cloth, were favourable for the mills.

The Indian textile industry during the sixties and seventies was largely domestic oriented with an insignificant export. However, during the eighties exports emerged as a major thrust area of growth. Consequently, there has been a significant increase in India's textile export. Along with this several structural changes have taken place in Indian exports in terms of market and product composition. There has been a shift from cotton to non-cotton and blends and towards ready made garments and highly value added

items. Regarding market composition, the importance of non quota markets has increased significantly, while that of quota markets decreased. This shift in product and market composition becomes important as the relatively poor performance of the Indian textile exports during the sixties and seventies was attributed to the export of relatively stagnant items (cotton textiles) to relatively stagnant markets (non quota markets).

The trends in exports showed that the mills enjoyed an advantage over the other sectors in exports both in quantity as well as value terms. This was found to be especially true in the case of garment exports. Thus the trends in exports were also favourable for the mills.

The responses of the mills to these trends in demand were identified in terms of changed output composition, product mix, entry into new markets, modernization and subcontracting.

*1. Output Composition:* The mills have increased the production of yarn and have decreased the production of cloth. This was because in the yarn market there was no competition from the decentralised sector contrary to the cloth market.

*2. Product Mix:* To cope up with the trends in demand the mills have increased the production of non cotton, blended and mixed fabrics and decreased the production of cotton fabrics. The shift towards non-cotton and blends was seen both in yarn and cloth production. However, the shift was more in cloth output than in yarn. Apart from this shift in fibre wise share, within cotton

textiles, mills decreased the production of coarse variety fabrics while the production of higher and medium quality fabrics increased. This was because of the fact that in the market for coarse variety, the competition from the powerlooms was very high compared to that of medium and high quality fabrics. Among blends, mills increasingly concentrated on the production of cotton viscose and cotton polyester.

*3. Search for new markets:* In line with the trends in demand, the mills started looking for new avenues of demand for its products. Thus the ready made garment industry and the export market were realized as the new sources of demand. Supply of mill made fabrics to both these markets have increased tremendously. Many mills have gone towards setting up of 100 per cent export oriented units. Large textile mills such as DCM, Morarjee Goculdas, Arvind mills have integrated forward into the higher margin market for ready makes reducing their dependence on the lower end of the market where competition was high.

*4. Modernization:* To meet the changed consumer demand in the domestic market and the trends in export market the mills turned to modernization on a large scale. In the modernization process the spinning department received the highest importance followed by weaving. This was due to three factors: (1) the increased demand for yarn in the domestic and the export market, (2) The less competitive market for yarn compared to cloth and (3) the increased emphasis of mills on the production of high quality, high valued cloth which required the production of high quality yarn.

**5. Subcontracting:** Composite mills have increasingly reduced their weaving capacity concentrating on spinning and processing by depending on powerlooms for their regular fabric production. Mills by providing their own yarn paid conversion charges to the powerlooms and sold the cloths produced by the powerlooms as their product using their brand name.

With these responses it is logical to expect that the mills would have improved their performance. The analysis of the sample mills showed that the response was limited to a section of the industry. The mills which responded consisted mainly of textile mills belonging to higher size classes. However, there were a few mills belonging to the lower size classes. The main strategies followed by the responded mills were identified as changed product mix, concentration on the export market and the high valued fabrics particularly blends in the domestic market, sale of branded products, foreign collaboration etc. All these were facilitated through large scale modernization undertaken by these mills.

Thus, the composite mill industry consists of two broad groups. The first consisting of the successful mills are engaged in the production of highly sophisticated cloth for the upper section of the domestic market and exports where the competition from the decentralized sector was very low. This segment by producing blends and mixed cloths and fine processing was able to retain brand name. The other segment consists of a large section of the industry mostly mills from the lower class size, catering to the domestic market producing low and medium quality cotton cloth where the competition from the decentralized sector was very high. Since

they were dealing in unbranded products, the price elasticity of demand for their products tend to be very high. This section was more vulnerable to the adverse changes in the industry. For example, the Textile Strike of 1982 and the Textile Policy of 1985 affected this segment adversely.

On the whole, the analysis revealed that though there were favourable changes in the environment only a few mills could take advantage of them. The performance of the industry at large seemed to have improved with the improved performance of a number of mills both from the higher and lower size class. However, a major section of the industry is still under the grip of sickness incurring large losses especially those belonging to lower size classes.

Appendix: 2.1

Per Capita Purchase of Cotton Fabrics by Households in Different  
Income Groups  
Quantities in Metres

Year	Income Groups							Total
	3000	3000_5999	6000_9999	10000_19999	20000_39999	40000+	20000+	
1974	8.36	13.84	14.96	15.97				11.85
1975	7.825	13.66	15.19	18.67	16.4		16.4	11.72
1976	7.86	11.77	15.73	16.6	12.68		12.68	10.79
1977	9.44	11.78	12.93	13.75	11.27		11.27	11.6
1978	8.88	10.53	12.17	14.12	13.09		13.09	11.6
1979	9.195	10.24	11.39	13.28	10.89		10.89	11.46
1980	8.435	9.79	11.08	11.64	12.85		12.85	10.57
1981	7.86	8.77	9.39	11.54	11.89		11.89	9.57
1982	7.42	8.79	10.67	11.69	12.86	10.43	11.65	10.04
1983	7.67	8.56	9.98	12.42	11.13	13.18	12.15	10.12
1984	7.47	9.3	10.18	10.81	10.37	11.45	10.91	9.94
1985	8.41	9.92	10.98	11.77	10.8	12.76	11.78	10.79
1986	8.16	9.4	10.55	10.72	11.84	14.38	13.11	10.71

Source: V.V.Divatia: ' Household Purchase of Textiles -1974-86', in Journal of Indian School of Political Economy, Vol.2, No.2, May-Aug 1990.

Appendix: 2.2

Per Capita Purchase of NonCotton Fabrics by Households in Different Income Groups  
Quantities in Metres

Year	Income Groups							Total
	3000	3000_5999	6000_9999	10000_19999	20000_39999	40000+	20000+	
1974	0.31	0.84	1.22	1.39				0.76
1975	0.21	0.66	1.08	1.44	2.3		2.3	0.62
1976	0.13	0.42	0.84	1.31	2.03		2.03	0.42
1977	0.31	0.6	1.05	2.07	4.08		4.08	0.71
1978	0.25	0.66	1.04	2.2	3.37		3.37	0.84
1979	0.23	0.55	1.06	1.98	2.76		2.76	0.92
1980	0.39	0.74	1.28	1.65	2.7		2.7	1.2
1981	0.37	0.54	0.96	1.39	2.64		2.64	1.01
1982	0.36	0.6	1.13	1.62	2.21	3.85	3.03	1.22
1983	0.52	0.86	1.18	2.06	2.64	3.3	2.97	1.44
1984	0.67	1.14	1.48	2.22	3.37	4.64	4.01	1.84
1985	0.7	1.24	1.67	2.72	3.26	6.76	5.01	2.22
1986	0.75	1.32	1.68	2.49	3.83	5.88	4.86	2.36

Source: Op.cit

Appendix: 2.3

Per Capita Purchase of Mixed Fabrics by Households in Different Income Groups  
Quantities in Metres

Year	Income Groups							Total
	3000	3000_5999	6000_9999	10000_19999	20000_39999	40000+	20000+	
1974	0.46	1.06	1.62	2.42				1.01
1975	0.33	1.1	1.63	2.11	3.34		3.34	0.97
1976	25.5	0.73	1.68	2.27	2.22		2.22	0.76
1977	0.32	0.92	1.65	2.39	2.29		2.29	0.94
1978	0.47	0.92	1.52	2.29	3.05		3.05	1.15
1979	0.4	0.96	1.58	2.3	2.56		2.56	1.27
1980	0.34	1.04	1.73	2.54	3.5		3.50	1.66
1981	0.63	1.05	1.8	2.81	3.47		3.47	1.73
1982	0.64	1.32	2.21	3.48	4.71	3.95	4.33	2.26
1983	0.68	1.18	1.89	3.28	3.41	4.65	4.03	2.14
1984	0.66	1.12	1.93	2.98	3.28	3.74	3.51	2.05
1985	0.75	1.33	2.14	3.39	3.96	4.55	4.26	2.44
1986	0.94	1.5	2.14	3.04	4.64	5.18	4.91	2.72

Source: Op.cit.



Appendix 5.1

Distribution of Mills in Terms of Size and Gross Profit/Sales Ratio

A. Distribution of Class 1 Mills in Terms of Gross Profit/Sales Ratio

Year	<0	0-5	5-10	10-15	>15	Total
1980	18,42	17,35,37	24,23,34, 41	55,11		11
1981	17	37,24,35, 41,42	18,34,23, 55	11		11
1982	17,18,34, 37,41,42, 55		23,24,35	11		11
1983	17,18,37, 42	34,35	23,24,41, 55	11		11
1984	17,18,37, 42	23,34,	24,35,41, 55	11		11
1985	17,18,42	37,35,55	23,24,34,	41,11		11
1986	17,18,42	55	23,24,34, 35,37	41,11		11
1987	17,18,37, 42	24,55	23,34,35	41,11		11
1988	17,18,24, 35,37,42	55	34,23	41,11		11
1989	17,18,24 35,37,42	55	34	11,23,41		11
1990	17,18,24, 35,37,42	55	34	11,23,41		11

Source : Bombay Stock Exchange Directory, Volume 8, Various Issues.

B. Distribution of Class 2 Mills in Terms of Gross Profit/Sales Ratio

Year	<0	0-5	5-10	10-15	>15	Total
1980		27,45,46	1,12,14, 16,22,36, 52	29,33,39, 43,56,	47,59	17
1981	27	22,36,45, 46,52	1,12,14,16 29,33,39, 43,56	47,59		17
1982	22,27,36, 52,59	12,16,29, 43,46,	1,14,33,39 45,47	56		17
1983	36,47,52	22,29,44, 43,45	1,12,14,27, 33,39,46, 59	56		17
1984	36,45, 52	1,12,27, 33,47,59	14,16,22, 29,39,43, 46,56			17
1985	12,14,36, 39,45,52	27,33,43	16,22,29, 33,46,47, 56,59	1		17
1986	12,36,39, 45,52	16,27,33 43	1,14,29, 46,47, 56,59	22		17
1987	12,14,33, 36,39,45, 46,52	1,16,27	22,29,43, 47,56,59			17
1988	1,12,14, 27,33,36, 39,45,46, 52	16,29,43,	22,47, 56,59			17
1989	1,12,14, 27,33,36 39,45,46, 52	16,29,43	22,47, 56,59			17
1990	1,12,14, 27,33,36, 39,45,46, 52	16,29,43	22,47, 56,59,			17

Source : Op.cit.

C. Distribution of Class 3 Mills in Terms of Gross Profit/Sales Ratio

Year	<0	0-5	5-10	10-15	>15	Total
1980		19	6,7,8,10, 40,44,53, 58	3,4,26, 48,50,54	28	16
1981	10	19	3,4,6,7,8, 40,44,48, 50,53,54, 58	26,28		16
1982	10	19	3,4,6,7,8, 28,40,44, 48,50,54, 58	26,53		16
1983	10	19,54	3,4,6,7,8, 28,40,44,50	26,53 48,58		16
1984		54	3,4,6,7,8, 10,19,26, 40,44,48 50	28,53 58		16
1985	10	6,8,48	3,4,7,19, 26,28,40, 44,50,53, 54,58			16
1986	10,28	6,44	3,4,7,8, 19,26,40, 48,50,53, 58	54		16
1987	3,4,7,10, 28,40,44, 48,50,53, 58	6,26	8,19,54			16
1988	3,4,7, 10,26,28, 40,44,48, 50,53,58	6	8,19,54			16
1989	3,4,7, 10,26,28, 40,44,48, 50,53,58	6,19	8,54			16
1990	3,4,7, 10,26,28, 40,44,48, 50,53,58	6,8	19,54			16

Source : Op.cit.

D. Distribution of Class 4 Mills in Terms of Gross Profit/Sales Ratio

Year	<0	0-5	5-10	10-15	>15	Total
1980			38, 39, 51		20	4
1981			51, 20, 38, 49			4
1982	20	51, 38	49			4
1983	20		38, 49, 51			4
1984		20	38, 49	51		4
1985	51	20	38, 49			4
1986	51		20, 49	38		4
1987	51		20, 49	38		4
1988	51		20	38, 49		4
1989	51		20,	38, 49		4
1990	51		20,	38, 49		4

Source : Op.cit.

**E. Distribution of Group 5 Mills in Terms of Gross Profit/Sales Ratio**

Year	<0	0-5	5-10	10-15	>15	Total
1980			2,5,9,15	13,25,57 21,31,32	30	11
1981			2,5,9,13, 31,32	15,21,30, 57	25	11
1982	2	21	5,9,13,25, 31,32,57	15,30		11
1983	2	9,21	5,13,15,25, 31,32,57	30		11
1984	2	9,13	5,15,25, 31,32,57	21,30		11
1985	2	9,13	5,15,25, 31,32,57	21,30		11
1986	2,13		15,25,31, 57	5,9,21, 30,32		11
1987	2,13		15,25,31, 57	5,9,21, 30,32		11
1988	2,13		15,25,31, 57	5,9,21, 30,32		11
1989	2,13		15,25,31, 57	5,9,21, 30,32		11
1990	2,13		15,25,31, 57	5,9,21, 30,32		11

Source: Op.cit

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