Evasion of Excise Duties in India: Study of Cotton Textile Fabrics

PREPARED BY :

M. Govinda Rao
Gopinath Pradhan

RESEARCH ASSISTANCE BY :
Satya Pal

Preface

THE National Institute of Public Finance and Policy is an autonomous, non-profit organisation whose major functions are to carry out research, do consultancy work and undertake training in the area of public finance and policy.

The study of Excise Duty Evasion on Cotton Textile Fabrics was entrusted to the Institute by the Central Board of Excise and Customs, Ministry of Finance, Government of India. This report which is being submitted to the Board was prepared by a staff team under the leadership of Dr. M Govinda Rao who took over from Dr. D K Srivastava who started the study. Dr. Rao planned and organised the study, and drafted it jointly with Dr. Gopinath Pradhan.

It is earnestly hoped that the painstaking work undertaken by the study team and the comprehensive analysis of various issues presented in the report would be found useful for the work of the Board.

The Governing Body of the Institute does not take responsibility for any of the views expressed by the authors in the research publications of the Institute. The responsibility for the views expressed belongs to the Director and the staff of the Institute and more particularly to the authors of the concerned report.

R.J. CHELLIAH

Introduction

COUNTERING evasion of excise duties with suitable policy measures necessitates understanding of the *modus operandi* and quantification of the extent of evasion in respect of important commodities. Therefore, the 28th Report of the Estimates Committee (1978-79: 6th Lok Sabha, para 7.25) stated ". . .that evolution of some empiric, though loose, yardsticks to attempt a guess, if not an estimate, about the extent of excise evasion is very necessary and that a fresh determined bid may be made for the purpose." Keeping this in view, the Central Board of Excise and Customs entrusted a study to the National Institute of Public Finance and Policy to undertake empirical studies on the evasion of excise duty in respect of some important commodities. The Institute has already completed the studies and submitted reports on two important commodities, namely Copper and Copper Alloys, and Plastics. The present study is concerned with the evasion of excise duty in respect of another important commodity—cotton textile fabrics.

We adopted a broad strategy to understand the *modus operandi* of evasion and to evolve a suitable approach to quantify it by holding discussions with academic economists, concerned Government officials, textile technologists and representatives of textile manufacturers' associations. Among the officials with whom we held useful discussions were the officials of the Collectorate of Central Excise, Bombay; Office of the Textile Commissioner, Bombay; Bureau of Industrial Costs and Prices, New Delhi; Mill Owners' Association, Bombay and Powerloom Industries Association, Bombay. Besides, we visited some textile mills and held extensive discussions with the officials there. These discussions have been extremely useful in identifying the issues and evolving a methodology to estimate the extent of evasion.

It is necessary to recall the help we have received from various persons in conducting this study. Our principal debt is to Dr. R J Chelliah, who was a constant source of encouragement throughout. Besides a number of useful discussions we have had with him, he went through the draft of the Report with meticulous care and suggested numerous improvements. The project was initially started by Dr. D K Srivastava; we have had the benefit of referring to the elaborate notes prepared and a wealth of information gathered by him, particularly the information collected from the mills through a special survey. He also prepared three draft chapters of the report which, because of the different methodology adopted by us, could not be utilised. Meaningful comments on the draft by Dr. Shankar N Acharya and Dr. Arun Kumar have resulted in vast improvement in the methodology and presentation of the study. We are indebted also to Prof. D U Sastry of the Institute of Economic Growth, New Delhi, Mr. P R V Ramanan, Additional Collector of Excise, New Delhi, Mr. R L N Vijayanagar, Secretary General, Mill Owners' Association, Bombay, and Dr. K R Salhota and Dr. V K Aggarwal, Department of Textile Technology, Indian Institute of Technology, New Delhi, for sparing time for discussion at various stages of the study. Editorial assistance was received from Mr. Christopher Cecil. Research assistance to the project was rendered by Mr. Satya Pal and the Report was typed by Mr. Perianna and Mr. R S Tyagi while final typing was done by Mr. Jagdish Arya. We are thankful to all of them.

M. Govinda Rao
Gopinath Pradhan

Contents

1

Excise Duty on Cotton Textile Fabrics: Revenue Yield and Evasion

Overview

ALTHOUGH tax evasion is a universal phenomenon, it is of particular concern to policy makers in developing countries. In these countries, the pressing need for mobilising savings and attempts to combine multiple objectives in the tax laws have enormously complicated the tax structure. The resulting high and differential tax rates with varied exemptions and deductions open up numerous avenues of evasion; the existence of large unorganised factor and product markets and low levels of monetisation render evasion easier, thereby making the problem more serious. As in other developing countries, in India too the issue is of immense relevance to the larger task of socio-economic development.

In spite of the importance of the subject in policy-making, very few studies have been conducted in India on tax evasion. Further, the few studies that exist have been largely confined to the evasion of direct taxes, particularly the personal income tax, and there is hardly any important empirical study on the evasion of commodity taxes[1]. Given that the yield of

[1] The studies on the evasion of sales tax conducted by the Commodity Taxes Enquiry Committee (1976) in Kerala and by the National Institute of Public Finance and Policy (NIPFP, 1981) in Bihar are exceptions to this.

commodity taxes predominates in the tax revenues of the developing countries, this is an obvious lacuna and the present study attempts to fill the gap, at least partially. The purpose of the present study is to analyse and quantify the extent of evasion of excise duties in respect of an important commodity, namely, cotton textile fabrics[2].

Excise on Cotton Textile Fabrics: Trends and Issues

Cotton textile fabrics have been subject to excise duty since 1949. Being one of the oldest levies, it has not only been used to mobilise substantial revenues over the years, but has also served as an important tool in regulating the growth of the cotton textile industry.

The revenue contribution of cotton fabrics through basic, special and additional duties of excise has by no means been small. These duties on fabrics contributed as much as Rs 168.3 crore in 1981-82. Together with the duties on cotton yarn, the contribution in the year amounted to Rs 271.7 crore. Of the total tax yield from cotton fabrics, almost 70 per cent was contributed by the composite mills and the rest was collected from powerlooms and handlooms.

Although in absolute terms the yield seems impressive, as a proportion of total excise revenue, the contribution from cotton textile fabrics is not only small but has also been declining over time. The proportion of excise revenue from cotton fabrics to total excise revenue declined from 4.2 per cent in 1970-71 to a mere 2.3 per cent in 1981-82. During the period, the rate of growth of excise revenue from cotton fabrics (7.39 per cent) was almost half of the growth of excise revenue in the aggregate (13.8 per cent).

The relative stagnancy in the yield of excise on cotton fabrics should truly be of great concern to the policy-makers. There are reasons to believe that the limitations placed on the output and the discriminatory taxation of the composite mill

[2] Similar studies in respect of two other commodities, namely, copper (Srivastava, 1982) and plastics (Sinha, Bagchi and Sud, 1983), form the preceding sections of this publication.

sector *vis-a-vis* the decentralised sector are important factors contributing to this sluggishness. To examine this, we have related the excise yield of cotton fabrics with the output index and the price indices in log-linear regression model. The information on output has been taken from the *Handbook of Statistics on Cotton Textile Industry* published by the Textile Commissioner and the information on the price variable relates to the wholesale price index of Cotton Textiles given the *Reserve Bank of India Bulletin.* The period of analysis is from 1970-71 to 1981-82. The results are given below:

1. $\text{Log } T = 0.87238 - 0.2012 \text{ Log } O_t + 1.0011^{*} \text{ Log } P$
   $\qquad - (1.2081) \qquad (24.1157)$

   $\bar{R}^2 = 0.9797 \quad F = 290.85 \quad \text{D.W. Stat.} = 2.2501$

2. $\text{Log } T = 0.5252 - 0.0703 \text{ Log } O_m - 0.1339 \text{ Log } O_d +$
   $\qquad - (05811 \qquad - (0.7486)$

   $1.0191^{*} \text{ Log } P$
   (10.9230)

   $\bar{R}^2 = 0.9761 \quad F = 164.08 \quad \text{D.W. Stat.} = 2.1708$

where

T	=	Excise revenue from cotton textile fabrics,
O_t	=	Total textile production index,
O_m	=	Textile production index of composite mills,
O_d	=	Textile production index of the decentralised sector,
P	=	Wholesale price index of cotton textiles,
*	=	Significant at 1 per cent level. Figures in brackets represent t statistics.

These regression equations provide interesting insights. It may be seen that increases in revenue from the excise duty on cotton fabrics are almost entirely explained by price increases having the elasticity value of around unity. Increases in output, both when taken in the aggregate as well as when composite mill output and decentralised sector output are taken separately, do not affect the revenue from excises at all. In fact, the negative signs of the output variable, although insignificant, show a tendency of inverse relationship between revenue from excise duty and the output variables.

The lack of relationship between changes in aggregate output of textiles and changes in the excise yield could be sought to be explained by two causes. First, the proportion of the output of the decentralised sector having higher exemption and lower tax rates might have increased over time so that the yield has remained rather stagnant although output in the aggregate has shown increases over time. But, although the proportion of the output of decentralised sector has increased over time, this explanation would not be entirely satisfactory, for, the revenue from excise duties does not show any significant relationship with the output index even when the mill sector and decentralised sector indices are taken separately. Secondly, the absence of relationship is possible if the tax rates have fallen over time, but as we do not discern such a tendency this explanation too cannot hold.

The absence of relationship between revenue from excise duties and output index of the mill sector, too, cannot be easily explained. The proportion of mill output exempted from excise duties, that is, exports, in fact fell from 9.72 per cent in 1970-71 to 7.29 per cent in 1981-82[3]. Similarly, the proportion of controlled cloth produced in the mill sector on which lower tax rates are applicable, fell from 18.48 per cent in 1974-75 to 11.39 per cent in 1981-82. As the rates of tax did not fall over time, there does not seem to be a satisfactory explanation. The only plausible explanation is that the degree of evasion of excise duties on mill sector cloth has increased over time.

Another point of interest is that the revenue from excise duties and production of cloth in the decentralised sector are also unrelated. Given the tax rate, such lack of relationship can occur when (i) the proportion of items subject to lower tax rates has increased over time or (ii) items on which higher rates of duty are leviable are increasingly misclassified as those subject to lower rates of duty. Broadly speaking, the proportion of powerloom output which is subject to higher

[3] With effect from 1.4.1980, full exemption has been granted also to controlled cloth as against 50 per cent reduction in rates that prevailed earlier.

rates of taxation than the handloom output has been increasing over time and, therefore, the hypothesis at (i) above is not helpful in explaining the lack of relationship. However, there does exist independent evidence of powerloom output being misclassified as the output of the handloom sector and the extent of this misclassification could indeed have been increasing over time. Similarly, evidence of misclassifying power-processed fabrics as hand-processed also exists. These will be explored further in Chapter 3.

Model of Tax Evasion—Some Obvious Lessons

The theoretical models of tax evasion, generally, have been built on the basis of the experiences of personal income taxes. On the assumption that utility is a function of income only, it can be said that the taxpayer in order to maximise his utility chooses to declare only a portion of his income (Allingham and Sandmo, 1972; Srinivasan, 1973). The proportion of income declared for tax purposes would depend upon the changes in the level of his income, the tax rate, the probability of investigation and detection and the penalty rate that would be imposed.

In this model the effect of changes in the level of income and tax rates on the declared income is not clear. When the actual income varies the proportion of income declared increases, stays constant or decreases, depending upon whether the tendency towards risk aversion increases, remains constant or decreases with income. Similarly, although increases in the tax rates make it more profitable to evade taxes on the margin (substitution effect), they also make the taxpayer less wealthy and hence act in the opposite direction to reduce evasion (income effect).[4]

The other two parameters of the model, namely, the penalty rate and probability of detection, however, show unambiguous results. Both an increase in the penalty rate as well as higher probability of detection have a deterrent effect

[4] This, however, requires an additional assumption of decreasing absolute risk aversion on the income scale.

on evasion. Besides, they are inter-related in their effects on tax evasion and the policy-makers do have the option of choosing the appropriate policy mix of penal rate and strengthening the enforcement machinery to check tax evasion.

It should be noted that the probability of detection has an important bearing on the methods of evasion. It is logical to presume that the taxpayer assigns different probabilities to different methods of evasion and chooses those having the lowest probabilities. Thus, a person can take recourse to more than one method of evasion if he assigns equally low probabilities to these methods. Similarly, in an economy, there can exist several methods of evasion as the probabilities assigned to the alternative methods may differ among different taxpayers.

Though these models of tax evasion are pertinent to the personal income taxes, the generalisations can also be applied to the evasion of commodity taxes with equal validity, and the extent and methods of tax evasion would indeed depend upon the factors mentioned above.

The methods adopted to evade taxes depend upon the avenues of tax evasion which arise from the nature of the tax structure itself. The evolution of the tax structure is determined by the objectives of tax policy and the importance of various pressure groups in influencing it. Levying of *ad valorem* taxes to raise revenues which would keep pace with the price situation gives rise to the possibility of evasion by understating the value of output either by suppressing the quantity or undervaluing the goods. Imposition of a rate structure differentiated according to different qualities of a commodity in the pursuit of equity could give rise to misclassification of the product. Levying taxes at higher rates on the products of the capital-intensive sector than on the labour-intensive sector to promote employment generation may lead to evasion of the tax through inter-sectoral misclassification of the commodity.

Plan of the study

Thus, the methods employed to evade taxes could arise

from the tax structure itself. But attempts to evade and avoid taxes influence the pattern of production in terms of the quality and type of goods produced, the processes of production adopted and the type of technology employed. Sometimes, it may be possible to infer the nature and extent of tax evasion by examining the pattern of production of the concerned products in relation to the structure of taxation on these commodities.

Keeping the above fact in view, we devote the second chapter to an analysis of the profile of the cotton textile industry in India. Chapter 3 discusses the structure of the excise tax and relates it with the possible methods of evasion. Chapter 4 makes an attempt to quantify the revenue loss that could have occurred due to the adoption of different methods of evasion. The choice of a reference year, 1978- 79, for this purpose is largely guided by the availability of data. Finally, we have tried to address the broad issues of reform of the excise on cotton textile fabrics in Chapter 5.

2

Anatomy of Cotton Textile Industry: Some Important Features

Introduction

As mentioned in the previous chapter, there is a two-way relationship between the structure of excise duty and structure and growth of the cotton textile industry. The structure of excise duty through its impact on relative prices affects the demand pattern for cotton textiles in terms of different qualities of fabrics and fabrics of different sectors, besides affecting the relative demand for cotton cloth as a whole *vis-a-vis* the demand for other commodities. At the same time the changed production pattern due to both the changed demand pattern and the supply situation affects the excise revenue from cotton textile fabrics. Thus, the pattern of production of cotton textiles and the structure of excise levy are interconnected. An analysis of the pattern of growth over time of cotton textile production could therefore provide useful insights into the possibility and extent of excise evasion.

Unfortunately, we do not have adequate information on the number of looms and cloth produced in the powerloom and handloom sectors in the country. On the number of looms, whatever information we have is based on some surveys conducted for various study groups on these sectors appointed by the Commerce and Industry Ministries. As regards the cloth produced in the different sectors, the estimates are arrived at on the basis of yarn deliveries for civil

consumption. All yarn delivered in hank form is construed to have been used by the handlooms and the rest of the yarn delivered for the decentralised sector is presumed to have been used by the powerlooms. The estimates of cloth produced are arrived at by merely applying the conversion ratio of 10 metres of cloth for every kilogram of yarn used. While it is recognised that these estimates do have a systemic bias, a matter which will be discussed in detail in Chapter 4, we have to adopt such estimates for the purpose of analysing the growth of the cotton textile industry in India.

Growth of the Cotton Textile Industry: An Inter-Sectoral Analysis

An important feature of the growth of the textile industry during the last 30 years is the phenomenal growth of the decentralised sector in general and powerlooms in particular. The number of looms in the powerloom sector, as may be seen in Table 2.1, increased substantially from 23,800 in 1951 to 4,83,000 in 1982, thus registering a growth rate of 10.5 per cent per annum. The corresponding growth rates of looms in both the mill sector and the handloom sector were very low at 0.2 per cent and 1.1 per cent respectively. Thus, the powerloom sector which constituted only 0.8 per cent of the total looms in 1951 phenomenally increased its share to 10.3 per cent in 1982, at the expense of the share of both the mill and the handloom sectors. The share of the mill sector declined over the period by 1.8 percentage points from 6.3 to 4.5 and the decline in the handloom sector during the period was of a higher magnitude at 7.7 percentage points.

Although the above figures refer to all types of textiles, there is no reason to believe that the trend in cotton textiles has been different. In fact, the available information indicates that the growth of cotton looms in the powerloom sector has been even faster. For example, cotton looms in 1963 numbered around 80,000, forming only 54.8 per cent of the total number of looms, whereas in 1982, they numbered 3,07,000 and formed 63.6 per cent of the looms in the sector.

TABLE 2.1

Growth of Looms in Cotton Textile Industry

Year	Mills	Powerlooms*	Handlooms	Total
1951	1,94,400	23,800	28,50,000	30,68,000
	(6.3)	(0.8)	(92.9)	(100.0)
1963	2,00,000	1,46,000	20,00,000	23,46,000
	(8.5)	(6.2)	(85.3)	(100.0)
1982	2,10,000	4,83,000	40,00,000	46,93,000
	(4.5)	(10.3)	(85.2)	(100.0)
Compound growth rate of looms 0.2 (per cent per annum)		10.4	1.1	1.4

Note: * Includes non-cotton looms also.

Source: Mill Owner's Association, Bombay. Memorandum submitted to the Tripartite Committee on the conditions of workmen of the Textile Mill Industry and the Problems of the Textile Industry, December, 1982, p.79.

In terms of cotton cloth production also, the trend has been similar. Even if we take the official estimate, it is seen that the output of powerlooms increased at a phenomenal rate of about 11.9 per cent per annum from 151 million metres in 1956 to 2721 million metres in 1982, (Table 2.2) As against this, the output of the composite mill sector declined substantially even in absolute terms and that of handlooms increased at a much slower rate of 2.3 per cent. The powerloom output which in 1956 formed only 2.3 per cent of the total cloth output, increased by about 18 times over a quarter century to form about 35 per cent. It should be noted that official estimates understate the production of powerlooms significantly, for, it is believed that a large part of the hank yarn is consumed by powerlooms [1] (Desai, 1981;

[1] It is believed that the official estimates understate power loom output also for other reasons. First, on the basis of a survey, it is known that about 7-10 per cent of hank yarn is used by the powerlooms in the manufacture of certain categories of output like sarees. Second, a kilogram of yarn produces 15 metres of cloth for higher counts of yarn (more than 41s) as against 8 metres for lower counts. As the proportion of higher count yarn consumed by the powerlooms is larger, the official estimates are understated. (On this, see Mazumdar, 1984 and Jain, 1983.)

TABLE 2.2

Estimated Cotton Cloth Production in Different Sectors

(In million metres)

Year	Mills	Powerlooms	Handlooms	Total
	(1)	(2)	(3)	(4)
1956	4852	151	1483	6486
	(74.8)	(2.3)	(22.9)	(100.0)
1960	4616	491	1642	6749
	(68.4)	(7.3)	(24.3)	(100.0)
1971	3957	1419	1980	7356
	(53.8)	(19.3)	(26.9)	(100.0)
1976	3881	1734	2330	7945
	(48.8)	(21.8)	(29.3)	(100.0)
1977	3223	1638	2040	6901
	(46.7)	(23.7)	(29.6)	(100.0)
1978	3251	1884	2190	7325
	(44.4)	(25.7)	(29.8)	(100.0)
1979	3206	2014	2320	5740
	(42.5)	(26.7)	(30.8)	(100.0)
1980	3476	2268	2570	8314
	(47.8)	(27.3)	(30 9)	(100.0)
1981	3147	2453	2520	8120
	(38.5)	(30.2)	(31.0)	(100.0)
1982	2347	2721	2720	7788
	(30.2)	(34.9)	(34.9)	(100.0)

Notes : 1. Figures in parentheses indicate percentages of total.

2. Figures in Col. (2) are estimated by deducting volume of handloom cloth from that of total cotton cloth production in the decentralised sector.

Source : For Col. (1): Indian Cotton Mills Federation —*Handbook of Statistics on Cotton Textile Industry*, Bombay, 1983.
For Col. (2): *Ibid.* (Estimated on the basis of figures pertaining to delivery of hank yarn.)

Anand, 1979 and Jain, 1983). If this is taken account of, the proportion of powerloom output would be much larger and the growth of powerloom output would be much higher.

Thus, both in terms of number of looms and cloth manufactured, the powerloom sector has shown a phenomenal growth. It has increased its share in the output significantly

over the time period considered at the expense of the shares of both the mill and the handloom sectors. Thus, although the output per loom has shown a declining trend in all the three sectors, the decline over the period from 1963 to 1982 has been much slower in the case of powerlooms (16 per cent) than in the case of the mill sector (50 per cent) and the handloom sector (33 per cent). A part of this tremendous fall in the mill sector output can be explained by the heavy production losses incurred during the year 1982 due to the textile strike, but even the relevant figures for 1981 show that per loom output declined by about 40 per cent from the level existing in 1963.

Admittedly, this is the outcome of the Government policy translated in terms of banning the expansion of weaving capacity in the mill sector since 1956, and the discriminatory levy of excise duties on the output of the mill sector *vis-a-vis* those of the powerlooms and the handlooms. Coupled with this is the greater possibility of evasion of the duty in the powerloom sector than in the mill sector. As powerlooms of various sizes operate throughout the country and it is likely that a large number of them are unauthorised, the probability of detecting evasion in decentralised units is remote. Thus, the difficulties of monitoring the levy can give rise to widespread evasion of the duty on the output of the powerloom sector. The precise manner in which this could be done will be discussed in the next chapter.

Pattern of Production

As mentioned earlier, Government policy has been generally to restrict the expansion of the weaving capacity in the composite mill sector. Nevertheless, it was expected that the mills would produce sufficient yarn to cater to the needs of the decentralised sector—particularly the powerlooms. As a result, the expansion of mills was predominantly in their spindlage. The number of spindles over the last decade grew at the rate of 1.7 per cent per year although growth of cotton yarn output during the period was only 0.5 per cent.

An important feature of yarn production, however, is the

count-wise production of yarn in relation to the quality of cotton available for spinning. Till 1966, there was little indigenous production of long-staple cotton which was used to produce higher counts of yarn. But since then, the production of these varieties of cotton increased substantially and by 1980, more than 25 per cent of the cotton used was the long-staple variety produced indigenously. What is notable however is, that although the production pattern of yarn also did move towards higher counts during this period, it did not increase commensurately with the shift in the staple composition of cotton available for spinning. It thus seems that the new supplies of long-staple cotton are used largely in the production of yarn of medium counts occasioned by the demand pattern for cloth influenced, among other things, by the structure of excise duty on yarn and cloth. The implication of this to the economy is clearly lower total cloth output, for, the yarn-to-cloth conversion ratio for higher counts of yarn is higher.

An important feature of production of cloth in the country is the relative specialisation of the three different sectors. The examination of the production pattern reveals that while the mill and handloom sectors produce, in the main, fabrics of medium and coarse varieties. the production of the powerloom sector is largely confined to cloth of higher counts (Table 2.3). Thus, in 1978-79 while the proportion of cloth of less than 41 counts in the total cloth output of composite mills and handlooms was as high as 92 per cent and 86 per cent, respectively, the corresponding percentage for powerlooms was only 72. Similarly, while the share of cloth of more than 41 counts in the case of powerlooms was as much as 28 per cent, the shares of handlooms and the composite mills were much lower at 14 and 8 per cent, respectively. This relative specialisation of the three sectors indicates one important feature. As higher counts of cloth are charged excise duty at higher rates, the amount and the rate of tax saved by evading and avoiding the tax would be higher for cloth of higher counts. Given further that the powerloom output is a closer substitute to the mill output than the output of handlooms, and that the probability of detection of

TABLE 2.3

Variety-wise Production of Cotton Fabrics in Different Sectors in (1978-79)

(In million metres)

Variety	Yarn used (in count groups)	Mill Sector	Powerloom	Handloom	Total
Superfine	61s and above	167	195	103	465
		(5.23)	(11.03)	(5.04)	(6.64)
Fine	41s to below 61s	94	301	191	586
		(2.95)	(17.02)	(9.34)	(8.37)
Medium-A	26s to below 41s	1623	696	445	2764
		(50.86)	(39.27)	(21.76)	(36.46)
Medium-B	17s to below 26s	889	347	753	1989
		(27.86)	(19.63)	(36.82)	(28.40)
Coarse	Below 17s	418	229	553	1200
		(13.10)	(12.95)	(27.04)	(17.13)
TOTAL		3191	1768	2045	7004
		(100.00)	(100.00)	(100.00	(100.00)

Note: Figures in parentheses indicate percentage of production.

Source : Government of India, Ministry of Finance, Department of Revenue. *Report of the Expert Committee on Tax Measures to Promote Employment*, New Delhi, 1980.

evasion is low in this sector due to its decentralised nature, it is not surprising that it specialises in the production of these superior varieties of cloth.

The salient features of the textile industry noted above are, at least in part, due to the structure of excise duty on cotton textile fabrics and the industry's response to this by evolving a pattern in its attempt to avoid and evade the tax. It would, therefore, be interesting to analyse the structure of excise duty on cotton textile fabrics and identify the means of evasion of the tax. This, we attempt in the next chapter.

3

Structure of Excise Duty on Cotton Textiles

Introduction

THE structure of a tax is determined by, *inter alia*, the objectives of tax policy. In the case of excise duties on cotton textile fabrics, the objective of making revenue keep pace with inflation has resulted in the levy of *ad valorem* tax as against a specific levy. The intention to encourage labour-intensive production has resulted in the discriminatory taxation of yarn as well as fabrics produced in the different sectors—the rates of tax varying inversely with labour intensity. The objective of vertical equity has led to differential taxing of the fabrics produced within a sector, the rates differing according to the yarn counts used in the fabric as well as the price of the fabric. It should be noted that when the tax is made to serve these various objectives, the structure of the tax gets complicated. Consequently, avenues of evasion and avoidance open up and attempts to block these through further amendments complicate the structure further.

Evasion of a tax is influenced by, among other factors, the existing structure of the tax and its evolution over the years. Therefore, an understanding of the salient features of the tax and its evolution is important for identifying the avenues of evasion. The present chapter highlights the salient features of the tax structure.

The reference year chosen by us for the estimation of the

extent of evasion in 1978-79. The choice of this year is guided mainly by the consideration of the availability of data and detailed information on production and consumption at the required level of disaggregation. Besides, the structure of the excise duty which underwent a qualitative change by being switched over to graded telescopic *ad valorem* rates in 1977-78, did not undergo any significant qualitative changes thereafter and the degree of evasion estimated for this year would therefore be taken to be indicative of the relative magnitude of evasion in more recent years.

It is necessary to mention at the outset that our primary interest is to estimate the extent of evasion of excise duty on cotton cloth. Therefore, we intend in this chapter to highlight the salient features of the structure of excise duty on cotton cloth. Nevertheless, in the course of our analysis, we will identify certain obvious methods of evasion of the duty on cotton yarn and this evasion can be easily quantified. For this reason, it would be necessary to give a brief background of the duty structure in regard to cotton yarn also. Again, here we cover only the salient features of the tax structure in 1978-79 and its evolution thereto. A detailed account of the evolution of the excise duties on cotton cloth to date and their present structure is given in Appendix I.

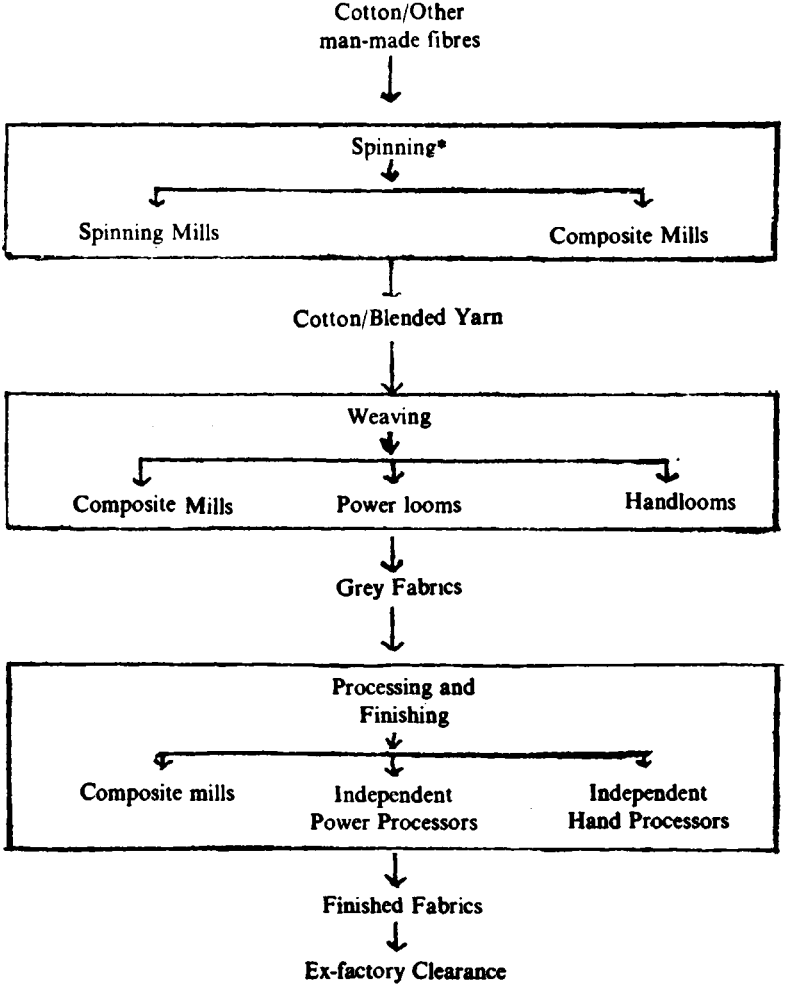
Inter-Flows between Different Sectors of the Textile Industry

In order to locate the major avenue of evasion, it is necessary to understand the inter-linkages among the different sectors of the textile industry and to identify the different points of levy. The manufacture of cotton cloth involves three main stages, namely, (i) spinning of yarn from cotton, (ii) weaving of the yarn into grey cloth and (iii) processing and finishing of the grey cloth. While spinning is done by spinning and composite mills, weaving into grey cloth is done by composite mills, powerlooms and handlooms. Processing and finishing of the fabrics is done by composite mills as well as independent processing units run either with the aid of power or steam or manually.

The direction of input-output flows according to types

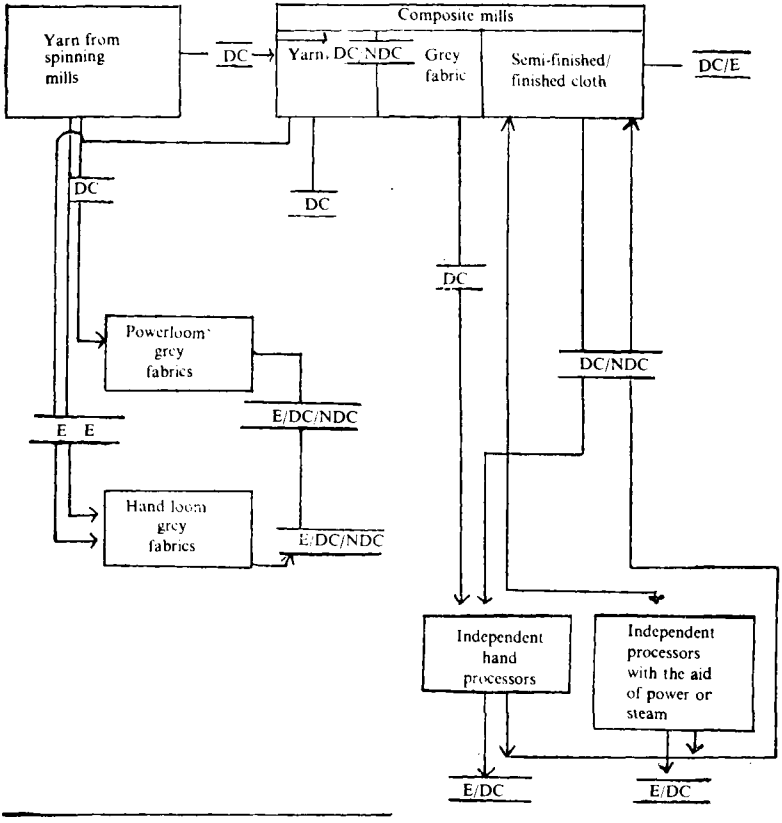
FLOW DIAGRAM I

Manufacturing Stages and Types of Units



*Handspinning done for the production of Khadi Cloth is ignored here.

FLOW DIAGRAM II



Key: DC = Duty-paid clearance
NDC = Non-duty clearance under bond
E = Exempted.

of mills and the interlinkages among the different sectors of the textiles industry alongwith the points of levy of excise duty are shown in the flow diagrams I and II. It is seen that the yarn produced in spinning mills is woven in composite mills, powerlooms as well as handlooms. Similarly, the yarn produced in the composite mills is woven in handlooms and powerlooms besides composite mills themselves. Again, all woven cloth can be processed in composite mills or independent processing units run either with the aid of power or steam or manually. It is thus seen that there is a two-way flow between the organised mill sector and the decentralised weaving and processing sector.

Evolution of Excise Duties on Yarn and Cotton Fabrics

The excise duty on yarn, introduced in 1961, was a simple levy. The yarn used in all sound fabrics was taxed at a single rate but the yarn used in fents was charged at two different rates[1], one rate (Rs 0.15/kg.) applicable to yarn used in the manufacture of superfine and fine fabrics and another (0.10/kg.) on the remaining. Yarn in hank form, however, was exempted. Since then several changes have taken place, increasing the differentiation in the tax rates.

Two features of the levy on cotton yarn as existing in 1978-79 are important from our point of view. First, the labour-intensive handloom sector was sought to be encouraged by exempting cotton yarn in hank form on the presumption that this is necessarily used only in the handlooms. However, the beneficiary of this policy has turned out to be largely the powerloom sector. It is known that the powerlooms do weave some items such as 'sarees' and 'dhotis' from yarn received in hank form (Anand, 1979). Besides, powerlooms are known to purchase sizeable quantities of hank yarn and rewind it into cones or pirns in order to evade excise duty on yarn (Jain, L.C., 1983).

The second important feature of the excise duty on yarn was its differentiated rates (Annexure I). The rate structure

[1] For the definition of Fents and Rags, see Appendix I.

prevailing in 1978-79 is summarised in Table A.1 in the Annexure. Progressivity in the structure was sought to be brought about by levying higher rates of tax on higher counts of yarn. As the conversion of yarn from hanks into cones or pirns, noted in the previous paragraph, involves a cost, it becomes economical to do so only for yarns of higher counts and, thus, diversion of the yarn and consequent evasion of the duty was beneficial only in respect of higher counts of yarn. Another important consequence of this was the tendency of the spinning mills, in order to avoid higher taxes, to spin lower counts of yarn even though they could spin higher counts from long-staple cotton. One important feature, noted in the previous chapter, that is, the yarn output of higher counts not increasing proportionately with the long-staple cotton used in their manufacture, can thus be attributed to the excise policy. It may be noted that this results in lower cloth output as the yield of cloth per kilogram of yarn is lower for lower counts of yarn.

In the post-1947 era the excise duty on cotton fabrics has been imposed since 1949 under the Tariff item No. 19. Initially, the tax applied only to superfine cloth, but soon, fine, medium and coarse cloth were also brought within the excise net, albeit at lower rates. The levy of handloom cess since 1953 and additional excise duties in lieu of sales tax from 1957 were other important developments in the field of excise policy on cotton fabrics. A number of changes in the rate structure were made since then, the most important one in 1976 when the basic duties were changed from specific to *ad valorem* rates. Another important change was introduced in 1977 when both the tariff description and duty structure were altered.

Another aspect of the evolution of the excise on cotton fabrics is the inter-sectoral discrimination. For example, from 1955, small powerloom units were subjected to only a compounded levy. Since then, the rate has been altered a number of times. With effect from 1977, even this was abolished on all authorised powerlooms and all grey fabrics produced on powerlooms were exempted. Again, grey fabrics produced on handlooms have continued to be exempt and

although the tariff description in 1960 was amended to include them, they were exempted through a separate notification.

As mentioned in the preceding paragraphs, notable changes in the tariff structure were made in 1977. The salient features of the structure of excise on cotton fabrics prevailing in 1978-79 are summarised below:

For the purpose of the Central Excise Tariff, 'cotton fabrics' were defined so as to include all varieties of fabrics where cotton predominated by weight and contained more than 40 per cent by weight of cotton and 50 per cent or more by weight of non-cellulosic fibres or yarn or both. In the case of fabrics such as embroidery in piece and fabrics impregnated and coated, these percentages referred to the base fabrics.

Cotton fabrics were divided into three categories, for which statutory rates were fixed. Accordingly, the basic rates ranged from 20 to 30 per cent [2]. However, these rates represented only the ceiling rates and the actual tax rates were governed by the effective rates notified by the Government from time to time.

The rate structure prevailing in 1978-79 in the mill, the powerloom and the handloom sectors is outlined in Table 3.1. Three important features of the tax structure are relevant for our purposes and hence, may be noted. First, discriminatory rates of taxation of the fabrics produced in different sectors were imposed. Second, differentiation in the rate structure was made to depend upon both the yarn counts used in the manufacture of the fabric as well as the price of the fabric. Third, differential rates of tax were levied on the fabrics termed as 'sounds', 'fents' and 'rags'. These features have important implications for the method and quantum of evasion and hence call for further elaboration.

The policy of encouraging labour-intensive technology has resulted in the levying of discriminatory rates of taxation on the products of mill, powerloom and handloom sectors.

[2] Since 1980, the number of categories has been increased to four.

The rates of tax levied were inversely related to the labour-intensity in production. Thus, while products of the mill sector were subjected to the highest tax rates, the output of the powerloom and handloom sectors processed by the composite mills or independent processors were subjected to lower rates, the rates being lower by 30 per cent subject to a maximum reduction of 3 percentage points and 60 per cent subject to maximum reduction of 6 percentage points, respectively. The grey fabrics produced in both authorised powerlooms and handlooms were completely exempted. Even the processed fabrics of these sectors were exempted if they were processed by independent hand processors not using electricity or steam.

TABLE 3.1

Rates of Excise Duty on Cotton Fabrics Sector-wise (1978-79)

(Per cent)

Sl. No.	Description	Mill made	Handloom Fabrics Processed by independent processors		Powerloom fabrics processed by independent processors
			Approved by Govt.	Not approved by Govt.	
1.	Cotton Fabrics (including fents and rags) in which the average count of yarn is 41s or more	15	5 without printing or dyeing or both	8**	8
			9 with printing or dyeing or both	12	12
2.	Cotton Fabrics (other than those in which the average count of yarn is 41s or more)* whose value per square metre:				
	(a) Does not exceed Rs 4	2	0.80	1.40	1.40
	(b) Exceeds Rs 4 but does not exceed Rs 6	3	1.20	2.10	2.10

(Table 3.1 Contd.)

(c) Exceeds Rs 6 but does not exceed Rs 7	4	1.60	2.80	2.80
(d) Exceeds Rs 7 but does not exceed Rs 8	6	2.40	4.20	4.20
(e) Exceeds Rs 8 but does not exceed Rs 9	8	3.20	5.60	5.60
(f) Exceeds Rs 9 but does not exceed Rs 10	10	4.00	7.00	7.00
(g) Exceeds Rs 10 but does not exceed Rs 11	12	6.00	9.00	9.00
(h) Exceeds Rs 11 but does not exceed Rs 12	14	8.00	11.00	11.00
(i) Exceeds Rs 12	15	9.00	12.00	12.00
3. Fents and rags with average count of yarn less than 41 s whose value per square metre:				
(a) Does not exceed Rs 4	2	0.80	1.40	
(b) Exceeds Rs 4 but does not exceed Rs 7	3	1.20	2.10	2.10
(c) Exceeds Rs 7 but does not exceed Rs. 9	6	2.40	4.20	4.20
(d) Exceeds Rs 9 but does not exceed Rs 12	10	4.20	7.00	7.00
(e) Exceeds Rs 12	15	9.00	12.00	12.00

Notes:

* Cotton fabrics of this group when classified under 'controlled cloth' variety, are subject to a tax rate reduced by 50 per cent.

** In the budget proposal effective from 1.3.1979 the duty was increased from 8 per cent to 12 per cent. It was subsequently reduced to 11 per cent with effect from 24.4.1979.

(i) The effective rate on further processing of duty-paid fabrics of composite mills (both for less than and more than 41 counts groups) is less of tax already paid.

(ii) Handloom fabrics processed by registered handloom cooperative societies and hand processors not using power or steam are exempted from paying duty.

(iii) The above effective rates of duty on cotton fabrics are composite ones representing basic and additional duty in lieu of sales tax. The allocation between basic and additional duty is 75 per cent and 25 per cent, respectively.

(iv) In addition to the above, there is a special excise duty of 5 per cent on basic duty effective from 1.3.1978 and additional excise duty at 10 per cent of basic duty effective from 4.10.1978.

(v) For handloom fabrics processed by independent power processors not approved by Government and powerloom fabrics processed by independent power processors, there was a concessional rate of duty on processing (i.e., bleaching) without printing or dyeing or both of 8 per cent *ad valorem* vide notification No. 226/77 dated 15.7.1977. This concession has been withdrawn through the 1979-80 budget vide notification No. 60/79 dated 1.3.1979.

Sources: 1. Government of India, Ministry of Finance, Department of Revenue, *Report of Expert Committee on tax measures to promote employment*, 1980, New Delhi.

2. Cencus Publications, *Cencus Central Excise Tariff, 1978-79*, New Delhi.

The pursuance of the objective of equity has resulted in the taxing of fabrics of different qualities at different rates. The quality differences in fabrics were measured through two different indicators, the yarn count and the price of the fabric. Different rates of tax were levied on fabrics of 41 counts and above, and below 41 counts [3]. On fabrics of below 41 counts, again, different tax rates were levied depending upon the price per sq. metre of the fabric. Thus, for example, mill fabrics of over 41 counts, irrespective of the price, were subjected to 15 per cent basic duty and those of less than 41 counts were subjected to varying rates of duty depending upon the price of the fabric, subject to a maximum basic rate of 15 per cent. This did indeed create an anomaly in that fabrics of higher counts were subjected to the highest rate of taxation, irrespective of the price of the fabric and the economic status of the consumer.

Another important feature of the tax structure is the differential taxation of 'sounds', fents' and 'rags'. The tax rates on fabrics of higher counts were the same for all the three categories. However, fents and rags of lower counts were charged at slightly lower rates, although the range of the tax rates was the same (2 per cent to 15 per cent).

[3] Since 15.7.1982, the distinction is made between 51 counts and above and below 51 counts.

Implications of the Structure of Excise— Possible Avenues of Evasion

The inter-sectoral and intra-sectoral differentiation in the exemptions and the rates of tax on yarn as well as fabrics have important implications for the method and quantum of evasion of excise duty. In this section, we attempt to explore this aspect.

We had mentioned in Chapter 1, that evasion of a tax is a function of, among other factors, the probability of detection. Thus, a taxpayer would employ those methods of evasion which have low probabilities of being detected. This would imply that there are no standard methods of evading taxes on all commodities and the methods employed in relation to each commodity would differ depending upon the structure of the tax, the production pattern and trade channels of the commodity in question.

The structure of excise on cotton textile fabrics and the production pattern of the commodity would indicate the following major methods of evasion: Evasion through (i) inter-sectoral misclassification of the output and (ii) intra-sectoral misclassification which also involves understatements of production and under-valuation.

The existence of inter-sectoral rate differences could provide avenues of evasion through inter-sectoral misclassification of the output. It may be difficult to misclassify the output of the mill sector, for, it being an organised sector, evasion by this means has a higher probability of being detected. On the other hand, misclassification of powerloom output as handloom output can be done with less fear of detection, for it is not possible to monitor production flows in units in the decentralised sector. Further, not much information is available even to the authorities on the output of powerlooms and handlooms; estimates of their production figures are based mainly on yarn deliveries, hank yarn being taken to be entirely used in the handlooms. Given that hank yarn is exempt from the excise duty, evasion of the tax by rewinding hank yarn into cones or pirns and using them in powerlooms would be beneficial so long as the duty evaded

exceeds the cost of rewinding. As higer rates of duty are levied on higher counts of yarn, this is specifically viable for yarn counts higher than 40[4]. Thus, in the process of evading the duty on yarn, powerloom output is misclassified as handloom output.

Another inter-sectoral avenue of evasion of the tax arises from the misclassification of powerloom fabrics processed by independent processors using power, as hand-processed fabric. It may be recalled that the hand-processed powerloom fabrics are exempted from the excise duty whereas those processed with use of power are required to pay the tax—the rates ranging from 1.4 per cent to 12 per cent. Given the unorganised nature of the industry, it may not be difficult to misdeclare the power-processed fabrics as hand-processed and claim exemptions. It should be noted that the hand-processing machinery is by no means unsophisticated—rather, it is identical to the power-processing machines and hence, the products would not be different. Each unit processes about 20,000 metres of cloth per day (Government of India, 1980b) It is common knowledge that in some places hand-processing and power-processing units do operate in adjacent sheds in *benami* names, making it easier to indulge in misdeclaration. We have also heard often that the same unit is run on power usually, but is manually operated at the time of inspection. Again, the structure of tax rates provides greater incentive for the evasion of tax on the fabrics of higher counts as the tax rates are higher on them.

Given the structure of excise duties, we can trace an optimal path of excise evasion wherein a producer can evade the tax, throughout the production flow, both on the yarn and on the cloth. A producer can purchase hank yarn which is exempted, rewind it into cones or pirns and weave it on the powerlooms. Grey cloth produced by the powerlooms is exempt. This grey cloth could be processed in independent

[4] The Mill Owners Association (1982) contends that the cost of rewinding hank yarn into cones is around Rs 1 to 2 per kg of yarn. As the excise duty on yarn of 40 counts is Rs 1.63 per kg., conversion becomes economical for yarn of counts higher than 40.

hand-processing units whereby the duty is avoided. However, when it is processed in power processing units and misclassified as hand-processed, duty is evaded. Now, the producer stamps a name and trade mark of a reputed mill, an inflated ex-mill price on the cloth and the excise duty payable and sells it to the consumers.

However, evading of the tax in the way mentioned above requires coordination of the activities of different sectors of the textile industry. In other words, the powerloom owners may not stand to gain directly from the evasion of the tax at the processing stage. Similarly, tax evasion at the spinning stage may not be directly beneficial to independent processors. It is in this context that we have to understand the role of the traders.

Traders occupy a prominent place in almost all the activities of textile manufacturing. Many a time, they are instrumental in coordinating all the activities subsequent to spinning. They buy the hank yarn, rewind it into cones or pirns by paying appropriate charges, weave it in powerlooms by paying a rental to the powerloom owner and process them in independent processing units. Subsequenty, they illicitly stamp an inflated price as well as the trade mark of a reputed mill on the cloth and sell it through wholesale and retail outlets.

Evasion arising out of the intra-sectoral tax rate differential can be classified under two categories, namely, (i) suppression of quantity of cloth produced in a sector and (ii) undervaluation of the cloth produced. Under the latter, we may include the misclassification of the higher priced categories as those belonging to lower price categories, misclassification of the count of yarn used, misclassification of sound fabrics as fents or rags, tie-in-sales and such other methods usually employed in the trade to evade taxes (Government of India, 1976).

Although it is possible, it may not be very probable that the mill sector evades taxes by suppressing the quantity of output. The organised nature of the mill sector and the constant monitoring of the production flows, from the cotton

used to the cloth produced, by the excise officials makes it difficult to evade taxes by suppressing the output without the connivance of the officials. In other words, the probability of getting detected by suppressing output would be high and therefore, use of this method to evade taxes may not be frequent. On the contrary, given the graded nature of the tax structure, the evasion of the tax through undervaluation could be sizeable. As the rates vary with the count of the fabric and its price if the fabric is of less than 41 counts, misclassification among the count groups is not difficult (because it may not be possible to subject all the fabrics to laboratory tests). Similarly, excise officials may not be able to monitor the evasion arising from the tie-in-sales and misclassification of higher priced items into lower priced categories. Even direct undervaluation may escape the attention of the officials as it may not be possible to monitor the entire distributive flows. In any case, the method and the quantum of tax evasion in relation to textile fabrics is basically an empirical issue which we deal with in the next chapter.

We have highlighted the salient features of the tax structure prevailing in 1978-79, which is the reference year for estimated evasion of the tax. Since 1978-79, there have not been any qualitative changes in the structure of the tax. The structure continues to be a graded one although the cut-off point for rate differentiation was changed from 41 counts to 51 counts in 1980-81. The fabrics of less than 51 counts again have a differential rate structure depending upon the the price. As there have not been significant qualitative changes in the tax structure, it need not be apprehended that the methods and the relative magnitude of evasion estimated by us for 1978-79 would be drastically different from what they are now.

4

Excise Duty Evasion—An Empirical Estimate

Introduction

In the previous chapter, we have explained that intersectoral and intra-sectoral differences in exemptions and the structure of rates lead to evasion of the excise duty on cotton textile fabrics. Inter-sectoral tax differences cause evasion of the yarn duty through misclassification of the yarn used by powerlooms as yarn used by handlooms. Besides, this causes evasion of the duty on cloth also, as the powerloom cloth processed using power can be misclassified as hand-processed. Intra-sectoral tax rate differences may cause evasion of the tax largely in the mill sector, when mills either understate or undervalue their output. To estimate the total evasion of the duty, therefore, we have to estimate the evasion caused by each of these methods and aggregate the individual estimates. In this chapter, we make such an attempt.

Evasion of Duty through Inter-Sectoral Misclassification

a. Evasion of the yarn duty

We have already mentioned that the exemption of hank yarn from excise duty leads to evasion of the yarn duty through illicit rewinding of hank yarn into cones or pirns and weaving them on powerlooms. As the rate of duty is higher on yarn of higher counts, tax evasion on such yarn becomes

specially tempting. Subsequently, as the official estimates of handloom and powerloom production depend on the yarn deliveries in hank and non-hank form, respectively, due to the diversion, the official estimate of handloom production is overstated and powerloom production estimates are understated. It is common knowledge that hank yarn is used for the warp when yarn-dyed fabrics are produced on powerlooms. Besides this, diversion of hank yarn to powerlooms takes place on a significant scale to take advantage of the excise rate differentials.

The existence of an upward bias in handloom production and the consequent downward bias in powerloom production in the official estimates is a well-known fact. A Planning Commission study (Anand, 1979) places the misclassification at 500 million metres for the year 1975. Jain (1983) similarly estimates that 840 million metres of powerloom cloth would have been misclassified as handloom cloth in 1981. The Mill Owner' Association places the misclassified quantity of cloth at 600 million metres in the year 1981. It thus seems that the diversion of hank yarn and the consequent evasion of yarn and the consequent evasion of yarn duty arising therefrom is considerable.

We can estimate the quantum of yarn diversion by independently estimating the consumption of yarn by the handlooms and comparing it with the hank yarn deliveries. In other words, if we can estimate the production of handlooms independently (not on the basis of yarn deliveries, as is done officially), we can arrive at the estimate of yarn diversion and the amount of cloth misclassified by comparing it with the officially estimated production figure.

We have attempted to estimate the amount of yarn diversion and cloth misclassification by independently estimating the production figures. An estimate of production can be arrived at by adding the consumption of handloom cloth to the exports of such cloth. Estimates of household consumption of handlooms are available in the *Consumer Purchases of Textiles*, an annual publication of the Textile Committee, Market Research Wing, Ministry of Commerce, Government of India. We have adjusted the calendar year data given in

this publication proportionately to correspond to the fiscal year 1978-79. Similarly, adjustments had to be made in the reported export figures also, for, although data on the export of handloom cloth are available in both quantities and values, data on the export of handloom manufactures are available only in value terms. Assuming the price per metre of the latter, we have estimated the quantity of handloom manufactures.

The estimated misclassification of yarn is presented in Table 4.1. It is seen that total household consumption of handloom cotton cloth in 1978-79 amounted to 962.59 million metres. *Consumer Purchases of Textiles* (Government of India, 1978, 1979) gives us the estimated non-household consumption of cotton fabrics, but the handloom component is not separately available. However, the Planning Commission's study (Anand, 1979) estimates non-household consumption of handloom for the year 1975 at 300 million metres which in that year formed 63.5 per cent of total non-household consumption (Institutional Purchases). Assuming the proportion to remain the same in 1978-79, we have estimated the non-household consumption of handloom in the year at 520.19 million metres. The estimated total consumption of handloom in 1978-79, thus, is placed at 1482.78 million metres.

TABLE 4.1

Estimated Production of Handloom Cloth (1978-79)

Household consumption	962.59 mn. metres
Non-household consumption	520.19 mn. metres
Export of handloom cloth	84.60 mn. metres
Export of handloom cloth manufactures (value of Rs 28.91 crore at the rate of Rs 7.42 per metre)	38.95 mn. metres
Total Estimated Production	1606.33 mn. metres

During the year, the export of handloom cotton cloth was 84.6 million metres having a value of Rs 628 million. Besides this, handloom manufactures worth Rs 289.1 million were also exported. If the price per metre of cloth of the former (Rs 7.42) is assumed, the exported quantity of cotton manufactures would amount to 38.95 million metres.

By adding the estimated consumption to estimated exports, we get an estimate of the production of cloth, which comes to 1606.33 million metres for the year 1978-79. Estimation made on the basis of hank yarn deliveries, however, places handloom production at 2119.23 million metres, as may be seen from Table 4.2. Thus, 512.91 million metres of powerloom cloth seem to have been misclassified as handloom cloth.

To arrive at the exact amount of duty loss due to yarn diversion, we have to estimate the diversion of cloth and yarn of various counts. However, certain assumptions are called for as the data in the required disaggregation are not available. We have assumed that there would be no misclassification of cloth through the diversion of yarn for cloth upto 20 counts because for such cloth, the cost of rewinding the yarn would far exceed the benefit from excise evasion. Further, it is assumed that the misclassification of cloth of the remaining count groups would be proportional to the estimated production of cloth (derived on the basis of yarn deliveries)[1]. By applying an appropriate cloth-yarn conversion ratio to the misclassified cloth production estimates we have obtained an estimate of yarn diversion in different count groups (Table 4.2). By applying appropriate rates of duty on the diverted yarn, the amount of duty evaded can easily be derived. As seen in the table, the duty thus evaded amounts to Rs 6.92 crore, about 8 per cent of the actual collections[2]. Collection

[1] It may be mentioned that this is an assumption which leads to a very conservative estimate of evasion, for, given the structure of excise duty the diversion of yarn would be disproportionately higher for higher count categories. But, as we do not have reliable estimates on this, we have made this conservative assumption.

[2] Here, it may be noted that the actual collection in a year consists of the duty paid for that year plus the previous year's arrears collected in the year. It does not include duty liability not discharged during the year.

TABLE 4.2

Estimate of Yarn Diversion and Evasion of Duty (1978-79)

Count groups	Hank yarn deliveries (in thousand kgs.)	Cloth produceable per kg. of yarn	Estimate of cloth production on the basis of yarn deliveries (million metres)	Our estimate of cloth production (million metres)	Misclassified production[1] (million metres)	Estimated yarn diversion (million kgs.)	Average basic duty (paise/kgs.)	*Amount of Evasion*		
								Basic	Special (Rs millions)	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1 — 10s	54673.50	8	437.39	437.39	0	0	—	0	0	0
11 — 20s	72994.25	8	583.95	583.95	0	0	—	0	0	0
21 — 30s	26991.75	10	269.92	143.82	126.10	12.61	43.25	5.45	0.27	5.72
31 — 40s	36633.75	10	366.34	195.20	171.14	17.11	88.00	15.06	0.75	15.81
41 — 60s	20061.75	15	300.9.	160.34	140.59	9.37	234.25	21.95	1.10	23.05

TABLE 4.2 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
61 — 80s	7649.75	15	114.75	61.14	53.61	3.57	387.75	13.84	0.69	14.53
Above 80s	3064.25	15	45.96	24.49	21.47	1.43	668.00	9.55	0.48	10.03
TOTAL	222069.00		2119.23	1606.33	512.91	44.09		65.86	3.29	69.15

Notes : 1 We have assumed that the yarn of upto 20 counts will not be diverted and hence our estimates and the estimates based on yarn deliveries do not differ for cloth of upto 20 counts. The remaining portion of our estimates has been distributed among the different count groups in proportion to the estimated production of clotb of different counts derived from yarn delivery figures.

2. Figures in column 2 which represent hank yarn delivery according to the fiscal year 1978-79 are adjusted from the calendar year data given in the Indian Cotton Mills Federation, *Handbook of Statistics on Cotton Textile Industry*, Bombay.

3. The information on cloth produceable per kg. of yarn given in column 3 is taken from Mazumdar (1984).

of this amount would have resulted in the total excise collection from yarn of Rs 94.79 crore and evasion on this account as a proportion of the total works out to 7.3 per cent.

b. Evasion of duty on cloth

As stated earlier, the diversion of hank yarn to evade yarn duty also results in the evasion of the duty on cloth. We have already estimated above that about 513 million metres of powerloom cloth were misclassified as handloom cloth in 1978-79. There is no reason to expect that excise duty would have been paid on this cloth.

Basically, evasion of the cloth duty can be included in a more general form of evasion-misclassifying power-processed fabrics as hand-processed. It should be noted that the grey fabrics produced on powerlooms were exempted from excise duty. Again, even on the processed fabrics, the duty was not leviable if the cloth was processed without the aid of power or steam. Duty on powerloom fabrics, thus, was leviable only if the cloth was processed in the power processors. This, as we have already mentioned in the previous chapter, leads to misclassification of very sizeable amounts of power-processed fabrics as hand-processed and hence, the evasion of the duty.

We do not have any reliable estimate of the misclassification of powerloom cloth processed by processors using power or steam as having been hand-processed. The Mill Owners Association feels that of about 4500 million metres of cloth produced in the powerloom sector, as much as 2000 million metres could have been thus misclassified. We do not know on what basis this estimate has been arrived at; hence it is not possible to judge its reliability. Nor are we able to present alternative estimates of misclassification of cloth and consequent loss of revenue for want of sufficient information on the unorganised cloth-processing industry. Nevertheless, we would like to emphasise that the quantum of misclassification could be substantial and the amount of duty thus evaded could be sizeable.

We have, in our analysis, assumed that excise duty on the

powerloom cloth misclassified as handloom cloth could be the minimum that would escape the tax net. It is not very obvious that excise duty would be necessarily evaded on all misclassified cloth. Also, it is not necessary that powerloom cloth misclassified as handloom cloth should be processed in independent processing units using power but misclassified as hand-processed. It is here that the crucial role of the trader comes to the fore. The trader coordinates the activities at all stages. Given the fact that the misclassified cloth is made of yarn of higher counts which basically is intended to compete with the mill fabrics, we may presume that this would be processed in mechanically operated units employing modern machinery which would necessarily use electricity. Further, given the relative ease of misclassifying power-processed fabrics as hand-processed, there is no reason why the trader-manufacturer would not resort to this. Thus, there is no reason to believe that excise duty would have been paid on the misclassified cloth even though it would have been processed with the aid of power or steam. This could at least be taken as the minimum that would escape the tax net, although in actuality, the amount of evasion on this account would surely be substantially higher.

To estimate the evasion arising from the misclassification of cloth, we require data on the value of cloth of more than 41 counts and less than 41 counts, the latter again disaggregated into relevant price ranges. To arrive at this, we need two sets of information, namely,

(i) prices of powerloom cloth of various count groups; and

(ii) distribution of the powerloom cloth of less than 41 counts in terms of price ranges matching with the tax rate categories.

We have some information on the prices of powerloom cloth averaged for coarse, medium A, medium B, fine and superfine fabrics, obtained from the Report of the Committee on Tax Measures to Promote Employment (Government of India, 1980). The latter four groups correspond to the count groups of 21 to 30, 31 to 40, 41 to 60 and above 60 and,

therefore, the value of fabrics in different count groups can be estimated. But information on the distribution in terms of price ranges of powerloom cloth of less than 41 counts is not available. We have, therefore, used the information contained in the memorandum submitted by the Mill Owners Association to the Tripartite Committee (1981) on the price range-wise break-up of mill fabrics of less than 41 counts. Applying the relevant tax rates applicable to powerloom fabrics on the value of fabrics of over and less than 41 counts disaggregated into different price ranges, we have estimated the loss of revenue arising from the misclassification.

The computations are detailed in Table 4.3. The aggregate loss of duty on account of misclassification of the cloth amounts to Rs 12.66 crore, the basic duty amounting to Rs 11.00 crore and special and additional duties amounting to Rs 1.65 crore. These form 8.71 per cent of the actual collection of excise duty on cotton textile fabrics.

Intra-sectoral Tax Differences and Evasion of Duty

Basically, evasion of excise duty arising from the intra-sectoral tax differences is confined to the composite mill sector. As mentioned earlier, we can identify two broad types of evasion under this category, namely,

(i) evasion through suppression or understatement of the quantity of cloth produced; and

(ii) evasion through undervaluation of fabrics; under this, we may include, besides direct undervaluation, methods such as misclassification of count groups, price groups and sounds into fents and rags, tie-in-sales and such other methods usually employed to understate the value of the cloth.

a. *Suppression of production and evasion of duty*

In order to examine whether the composite mills, in fact, indulge in large-scale suppression of output to evade the excise duty, we have attempted to independently estimate the yarn and cloth production on the basis of the availability of

TABLE 4.3

Evasion of Excise Duty on Misclassified Cloth

Variety	Quantity of misclassified cloth (in million metres)		Ex-factory price per sq. metre (Rs)	Value of misclassified* cloth (Rs. million)	Total tax payable*		
	Linear metres	Sq. metres@			Basic	Additional plus special (Rs million)	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Medium B	126.10	132.38	3.15	417.00	21.18	3.18	24.36
Medium A	171.14	179.66	4.05	727.62			
Fine	140.59	147.59	5.55	819.13	88.86	13.33	102.19
Superfine	75.08	78.82	3.70	291.63			
TOTAL	512.91	538.45		2255.38	110.04	16.51	126.55

Notes: @ On the basis of a survey, we have found that the average width of the cloth is 1.0498 metres. Using this information column 2 is derived from column 1.

* Distribution of the quantity of cloth according to relevant price ranges, the corresponding tax rates and tax payable are shown in Table 4.4.

Sources: 1. For Col. (1): Table 4.2.

2. For Col. (3): Government of India, Ministry of Finance, Department of Revenue, *Report of the Expert Committee on Tax Measures to Promote Employment* (1980), p. 83.

TABLE 4.4

Evasion of Excise Duty on Misclassified Cloth of Med-B and Med-A Varieties

	Price ranges	Quantity of misclassified cloth belonging to Med-B and Med-A categories (million sq. metres)	Value of cloth (Rs million)	Price per sq. metre (Rs)	Tax rate applicable (basic) (percentage)	Tax payable (basic) (Rs. million)
		(1)	(2)	(3)	(4)	(5)
Upto	Rs 4 per sq. metre	57.29	119.84	2.09	1.4	1.64
	Rs 4- 6 per sq. metre	114.21	358.38	3.14	1.4	5.02
	Rs 6- 7 per sq. metre	66.62	262.80	3.94	1.4	3.68
	Rs 7- 8 per sq. metre	30.39	138.16	4.55	2.1	2.90
	Rs 8- 9 per sq. metre	15.66	80.58	5.15	2.1	1.69
	Rs 9-10 per sq. metre	12.17	69.83	5.74	2.1	1.47
	Rs 10-11 per sq. metre	4.87	30.79	6.32	2.8	0.86
	Rs 11-12 per sq. metre	4.34	29.99	6.91	2.8	0.84
Above	Rs 12 per sq. metre	6.49	54.25	8.36	5.6	3.04
	TOTAL	312.04	1144.62			21.18

Notes: 1. The value of 226.41 million sq. metres of fine and superfine cloth was estimated at Rs 1110.76 million. At 8 per cent of basic tax rate, which is levied on these varieties of powerloom cloth, the total basic tax payable would be Rs 88.86 million.

2. While distributing the quantity and value of med-B and Med-A powerloom cloth in various price ranges, the pattern given in the memorandum submitted by the Mill Owners Association, Bombay, to the Tripartite Committee, 1982, has been followed.

the basic raw material, namely, cotton. Applying the norms stipulated by the textile technologists for the conversion of cotton into yarn and yarn into fabrics, we have estimated the amount of yarn and fabrics that could, in fact, have been produced. These estimates are then compared with the cotton and yarn consumption figures reported in the mill sector to examine the possibility of suppression of yarn and cloth output in this sector.

We have estimated cotton availability for spinning as follows: Production estimates of cotton are added to the net imports (imports less exports) and changes in the stock of cotton to arrive at the total cotton available in the year. By adjusting this for other uses of cotton and cotton used in hand-spinning (the production of khadi), we have estimated the cotton available for spinning and composite mills.

In the manufacture of yarn from cotton, certain wastages are involved primarily due to the existence of trash in mixing, blowroom droppings, gutter losses, semi-high production card waste and unaccounted losses such as those arising from comber waste, sweepings, clean waste, hard waste and invisible losses. The Ahmedabad Textile Industry's Research Association (ATIRA) gives the norms for wastages under each of these heads for different warp and weft count-groups of yarn. Taking into account these norms we can obtain the estimates of cotton that is reported to have been consumed in the mill sector. By comparing cotton availability with the reported cotton consumption, we can estimate the quantity of suppressed yarn.

We can estimate the understated quantity of cloth also by following a similar methodology. Applying the wastage norms to the availability of cotton we can obtain an estimate of the yarn that could be produced. By making adjustments for the import and export of yarn, yarn deliveries to the decentralised sector and changes in stocks, we can arrive at the estimates of yarn available to the mill sector for weaving or the yarn that would, in fact, have been consumed in the mill sector. Applying the wastage involved in weaving, as per the norms given by the textile technologists, on the reported production of cloth in the mill sector, we can arrive

at the ertimated consumption of yarn pertaining to the reported production of cloth or the reported consumption of yarn. The extent of understatement of cloth production can be estimated on the basis of the difference between yarn that would have been consumed and that is reported to have been consumed.

We have broadly followed the method explained above to examine whether the mill sector indulges in significant understatement of the quantity of cloth produced. To begin with, we considered the cotton availability for spinning by the mills. For the year 1978-79, it is estimated that domestic production plus net imports minus other uses including hand-spinning of cotton amounted to 74.18 lakh bales each of 170 kgs. As the change in stocks was of the order of 0.17 lakh bales, during the year, the total availability works out to 74.35 lakh bales or 1263.95 million kgs.[3]

To estimate the cotton that would have been consumed to produce the reported quantity of yarn we have used the ATIRA wastage-norms. These norms are given for yarn of various warp and weft count-groups, as may be seen from Table 4.5. The yarn production figures, however, are given in count-groups different from the groups for which wastage norms are available. We have assumed that wastage norms are uniform within a count-group and re-estimated the yarn realisation percentages for the count-groups for which yarn production data are available.

While it is easy to compute the cotton consumption required for the reported cotton yarn production, estimation of cotton consumption for the reported blended yarn becomes difficult for want of data on the cotton content in blended yarn. However, on the basis of the discussion we have had with the textile technologists and some manufacturers, we have assumed that the share of cotton in blended yarn is

[3] These items of information have been taken from the Indian Cotton Mills Federation, *Handbook of Statistics*. Bombay, 1983. The data given in the Handbook relate to calendar years and therefore, we have adjusted them to obtain the corresponding figures for financial years.

TABLE 4.5

Wastes and Yarn Realisation (As Percentages of Cotton Consumed)

Mixing	Carded				Combed				
Warp count group (No.)	4-9	10-13	14-25	26-34	28-34	35-44	45-70	71-99	100-140
Corresponding weft counts	4-9	10-13	14-29	30-39	30-38	39-49	50-79	80-109	110-140
Trash in mixing* (per cent)	11.0	10.0	7.0	5.0	5.0	4.0	3.0	2.0	2.0
Wastes (per cent):									
Blowroom Droppings	12.0	11.0	7.7	5.4	5.4	4.4	3.2	2.2	2.2
Gutter Loss	1.2	1.1	0.8	0.5	0.5	0.4	0.3	0.2	0.2
SHP card waste**	4.2	4.2	4.4	4.5	4.5	4.3	4.3	4.4	4.4
Unaccounted loss (per cent):									
Comber waste	—	—	—	—	9.0	10.9	12.0	13.0	14.0
Sweepings	2.0	1.8	1.6	1.4	1.4	1.2	1.0	1.0	1.0
Cleaner waste	0.6	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.2
Hard waste	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Invisible loss	1.8	1.7	1.6	1.5	1.5	1.3	1.3	1.3	1.3
Yarn realisation (per cent)	77.6	79.2	83.1	86.0	77.0	76.9	77.4	77.4	76.4

Notes: *If trash is less by 1 per cent, yarn realisation increases by 1 per cent and *vice versa*.

**SHP=semi-high production cards. With high production cards, the yarn realisation improves by about 0.4 per cent owing to about 0.5 per cent less waste extracted at cards. With tandem carding, the yarn realisation is reduced by about 0.9 per cent compared to SHP cards.

Source: Ahmedabad Textile Industry's Research Association, *Norms for the Textile Industry*, Ahmedabad, 1982, P.S. 28.

35 per cent and have estimated the total mill consumption of cotton for producing the reported quantity of blended yarn in the year 1978-79.

An estimate of the reported consumption of cotton is presented in Table 4.6. It is seen from the table that the reported total consumption of cotton amounts to 1243.78 million kgs. This estimate comes very close to that of the cotton that would have been consumed for spinning—1263.95 million kgs. Thus, the difference is only 20.17 million kgs (1.6 per cent). This order of difference is too small to be definitively attributed to the suppression of yarn because our assumption of 35 per cent of cotton in blended yarn may be too conservative a figure. Besides, in actuality the wastages could be higher, albeit marginally, than the ATIRA's norms on yarn realisation applied in our study. Thus, *prima facie*, there does not appear to be any significant under-reporting of the yarn production and hence evasion of yarn duty on this account, if any, seems to be negligible.

We have attempted also to estimate the extent of suppression of cloth output by the mill sector in the year 1978-79. These computations are detailed in Table 4.7 and largely these are self-explanatory. Given that the suppression of yarn output is negligible, by merely adding the reported cotton yarn consumption to changes in stocks, we can arrive at the estimated yarn that would been consumed in the mill sector. By applying the norms of loss involved in converting yarn into cloth, we can arrive at the possible cloth output from yarn availability and compare it with the reported cloth output. Alternatively, we can derive the actual yarn consumption from the reported cloth production and compare it with the yarn availability estimates to quantify the suppression of cloth output in the mill sector.

To estimate the expected yarn consumption for producing the reported cotton cloth, it is necessary to convert the quantity figures given in terms of metres into kgs. A National Productivity Council study (1976) gives the equivalents of these collected from the Indian Cotton Mills Federation for various qualities of fabrics. Using these equivalents and assuming the cotton content of blended cloth at 35 per cent,

TABLE 4.6

Expected Consumption of Cotton in Spinning and Composite Mills (1978-79)

Count-group of yarn	Production of yarn (million kgs.)		Yarn realisation* (percentage)	Expected consumption of cotton		Total cotton consumption
	Cotton	Blended		Cotton Yarn	Blended** Yarn (Million kgs.)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 — 10s	130.75	1.50	76.60	133.70	0.68	134.38
11 — 20s	274.50	14.75	81.90	335.16	6.30	341.46
21 — 30s	233.00	48.00	84.80	275.74	19.88	295.62
31 — 40s	205.25	83.50	77.00	266.56	37.96	304.52
41 — 60s	63.75	45.75	77.00	82.79	20.79	103.58
61 — 80s	27.25	17.00	77.00	35.06	7.84	42.90
Above 80s	14.75	4.75	77.00	19.16	2.16	21.32
TOTAL	922.00	922.00	215.50	1148.17	95.61	1243.78

Memorandum items:

1. Availability of cotton for mill consumption : 1263. 95mn, kgs,
2. Reported cotton consumption by the mill sector derived on the basis of the yarn produced : 1243. 78mn. kgs.

(Contd.)

TABLE 4.6 *(Contd.)*

3. Difference	:	20. 17mn. kgs.

*Based on the norms of Ahmedabad Textile Industry's Research Association (1982).

**Assuming that the cotton component in blended yarn is 35 per cent. This consists of production available for mill sector consumption (74.18 lakh bales of 170 kgs. each) and changes in stock (0.17 lakh bales of 170 kgs. each).

Source: For Cols. (2) and (3) : Government of India, Ministry of Commerce, Office of the Textile Commissioner, *Indian Textile Bulletin*, Bombay, 1980.

TABLE 4.7

Difference between Declared and Estimated Yarn Consumption (1978-79)

Sl. No.	Quality of cloth and yarn counts*	Declared cotton yarn consumption of mills (million kgs.)	Declared cotton cloth production of mills		Estimated yarn consumption*** (million kgs.)	Differences between declared and estimated consumption (million kgs.)
			Million mertres	Million** kgs.		
	1	2	3	4	5	6
1.	Coarse (1 — 16s)	116.90	435.00	92.05	96.89	20.01
2.	Med-B (17— 25s)	137.60	921.25	116.91	123.06	14.54
3.	Med-A (26 — 40s)	161.75	1675.50	182.46	192.06	−30 31
4.	Fine (41 — 60s)	10.75	80.75	10.09	10.62	0.13

(Codld.)

TABLE 4.7 *(Contd.)*

	1	2	3	4	5	6
5.	Superfine (61s and above)	10.00	127.25	9.21	9.68	0.32
	TOTAL	437,00	3239.75	410.72	432.31	4.69

Notes: *Data on count-groups of yarn are available in the intervals of 1-10s, 11-20s, etc. Therefore, to get the count-groups 1-16s, 17-25s. etc., which corresponded to the variety of cloth (like coarse, Med-B.), we have assumed uniform distribution of yarn within the intervals 1-10s, 11-20s and arrived at the above count-groups.

**For converting the cloth data given in metres into kilograms we have taken the equivalents averaged for five years (1969-1973) on the basis of the data given in National Productivity Council (1976). The computed equivalents per 100 metres of coarse, medium B, medium A, fine and super fine cloth are 21.16 kgs., 12.69 kgs., 10.89 kgs., 12.50 kgs., and 7.23 kgs,, respectively.

**In the process of weaving the cloth, the estimated loss of yarn is about 3 per cent (ATIRA) to 5 per cent (Dr. Aggarwal, IIT, Delhi). In the above figures a 5 per cent loss is assumed.

we have arrived at the total weight of the cloth produced in the mill sector.

According to the ATIRA norms, the losses involved in weaving yarn at winding, warping, sizing and other stages should aggregate about 3 per cent. This, however, is the minimum wastage involved and, in actuality, the wastage could indeed be higher. On the basis of our discussion with textile technologists we have taken the wastage at 5 per cent and estimated the expected consumption of yarn. The difference between the yarn that would have been consumed and the actual consumption indicates the extent of understatement of cloth production.

Our estimates, as may be seen from the table, do not indicate significant understatement of cloth output. The underestimation seems to be of the order of only 1.00 per cent of the cloth production. This again cannot definitely be attributed to tax evasion as our assumption regarding the cotton content in blended fabrics and the wastage norms are subject to some margin of error.

However, it is necessary to note that the estimate of understatement is very sensitive to the length-to weight conversion ratio we have employed in the study. If indeed these are overestimates, we could conclude that the mill sector does in fact indulge in under-reporting of its production in order to evade excise duty. The suspicion that the ratio could be over-estimated arises from the fact that the length-to-weight ratio is taken from the Indian Cotton Mills Federation (ICMF) which may already include an element of understatement of the output. Again, the resulting cloth-yarn ratio in the mill sector works out to be much lower than the conversion norms used in the case of handlooms and powerlooms. But, to be able to conclusively state that the length-to-weight ratio is overestimated, we have to prove that understatement has been done only in respect of the meterage (length) of cloth and not its weight. If both have been equally understated the ratio would remain the same. We have no reason to presume that understatement would have been done in respect of only the length of the cloth produced and not its weight. On the issue

of the mill sector's cloth-to-yarn conversion ratio being lower than that of the handloom and powerloom sectors, we may state that this can happen due to differences in weaving technology, category-mix of cloth, the average width of cloth as well as the density of yarn in the cloth. In order to avoid any bias arising from the instability of the length-to-weight ratio, we have employed yearly average ratios for five years (1969-73) for each quality of cloth. Nevertheless, it is possible that these ratios are over-stated and evasion arising from understatement of the quantity of output is apparent, and not proved.

On the whole, it appears that there is no significant degree of evasion of duty on cotton textile fabrics through the suppression of output. This, as we have reasoned earlier, is plausible since the production flows in the composite mill sector can be easily monitored and therefore, the probability of being detected is higher if the tax is evaded by suppressing output.

b. *Undervaluation and evasion of duty*

Undervaluation for evasion of the excise duty can be done in many ways. Given that the tax rates levied on the fabrics are graded in terms of counts of fabrics and their prices, undervaluation can easily be done by both misclassifying the fabric count and the price of the fabric. Other methods of undervaluation brought to our notice include tie-in-sales[4] and misclassification of sound fabrics as 'fents' and 'rags'. Again, there can also be understatement of the manufacturing sale price [5]. As it may not be possible to monitor the distributive

[4] When a dealer buys fabrics of two different prices, the volume of purchases of the fabric of lower price may be overstated and that of higher price correspondingly understated. This method is called 'tie-in-sales'.

[5] It is very difficult to draw a distinction between evasion and avoidance in such cases. It is well known that the invoice price of the cloth is generally almost 15 to 25 per cent lower than the stamped price. While the retailer recovers the sale margins at various stages of transaction added to the stamped price, including the excise duty thereon from the consumer, the government receives a much lower

(Contd.) p. 259

channels as much as the production flows, the probability of detecting evasion would be lower when these methods are employed and, therefore, we have hypothesised that under this method, the evasion could indeed be significant.

Revenue loss arising from evasion of the tax through undervaluation can be quantified by independently estimating the amount of tax that should have been collected (potential) on the basis of household consumption of textiles and comparing the estimate with the actual collection [6]. As we have found that revenue loss due to the suppression of quantity is negligible, the discrepancy between the potential and the actual could easily be ascribed to evasion through undervaluation.

To estimate the extent of evasion, we have to proceed through various steps which are detailed in Table 4.8. The *Consumer Purchases of Textiles* (Govenrment of India, 1978, 1979) gives us the price-range-wise details on household purchases of categories of cloth such as dhoties, sarees, drill shirting, coating, suiting, ladies' dress materials, bed cover, bed sheet, chadder, long cloth and sheeting. These together constitute 67 per cent of total quantity of cloth consumed and 71 per cent of the value of cloth consumed. From the total consumption we have excluded the consumption of handloom and khadi cloth purchases, the data on which are available in *Consumer Purchases of Texiiles* (Government of

[6] Actually, comparison should be made with the duty liability for that year's declared production and not actual collections. But the data on the former are not available and hence we have to compare with the latter. The implicit assumption in doing so is that the amount of arrears in that year is not different from the previous year's.

Footnote contd. from p. 258

amount of excise revenue than that payable on the stamped price. This arises because of the lack of coordination between the offices of Textile Commissioner which merely require the price to be stamped on the cloth and that of the Excise department which collects excise duties on the invoice price irrespective of the stamped price. The illegality of the discrepancy cannot be established easily and therefore the loss of duty under this head is on the borderline between evasion and avoidance.

TABLE 4.8

Estimation of Consumption of Mill Cloth of Different Varieties

Q=Quantity in million metres
V=Value in million rupees

Varieties	Consumption per household		Total consumption		Controlled cloth		Handloom textiles	
	Q in metres	V=Rs	Q	V	Q	V	Q	V
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Dhoti	11.6617	61.8653	1171.7618	6216.1944	66.6878	278.5213	153.3317	690.5956
2. Saree	16.2050	105.3554	1628.2703	10586.0579	44.8588	197·8554	274.8114	1740.6255
3. Shirting	10.1288	71.4905	1017.7368	7183.3297	103 3528	330.0976	31.6510	312.7927
4. Coating/Suiting	1.3577	13·1209	136.4210	1318.3815	14.4422	27.6002	12.9618	113.2404
5. Ladies' dress material	8.2241	59.8994	826.3534	6018.6618	—	—	6.0288	61.8954
6. Bed sheet/bed cover/ chaddar/wearable chaddar	1.9182	17.7214	192.7398	1780.6374	—	—	7.0336	71.2400
7. Long cloth/sheeting	5.2933	27.0240	531.8681	2715.3580	108.3975	431.3003	4.1197	17.3829
TOTAL	54.7888	356.4769	5505.1512	35818.6207	337.7391	1265.3747	489.9380	3011.7225

Contd.

TABLE 4.8 (contd.)

Varieties	Khadi textiles		Powerloom and Mill sector		Consumption considered of powerloom		Powerloom	Consumption of mill sector	
	Q	V	Q	V	Q	V		Q	V
			(3)— (5)+ (7)+ (9)	(4)— (6)+ (8)+ (9)		Value at ex— factory price	Value at retail price	(11)—(13)	(12)—(15)
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Dhoti	15.4738	64.8093	938.2685	5182.2682	301.7450	1149.6230	1547.9520	634.5230	3636.3160
2. Saree	4.9235	10.9523	1303.6766	8632.6247	419.9740	1915.3490	2729.8310	883.7030	5902.7940
3. Shirting	9.9676	95.9579	872.7654	6444.4815	281.2220	1429.9520	1889.8120	591.5430	4054.6700
4. Coating/suiting	15.4738	117.2596	93.5431	1060.2813	30.1890	235.4480	329.6640	63.3540	730.6170
5. Ladies' dress material	10.0178	91.2354	810.3068	5865.5310	261.1450	1300.8350	1781.0090	549.1620	4084.5220
6. Bed sheet/bed cover/chaddar/ wearable chaddar	6.0991	36.4740	179.6071	1672.9234	57.8500	370.7800	514.8650	121.7570	1158.0500

Contd.

TABLE 4.8 (Contd.)

	9	10	11	12	13	14	15	16	17
7. Long cloth/ sheeting	—	—	419.3509	2266.6748	135.0340	502.6580	668.4180	184.3170	1598.2570
TOTAL	61.9556	416.6885	4615.5184	31124.7849	1487.1590	6904.6450	9461.5510	3128.3590	21663.2340

Notes: 1. Columns (1) and (2) are calculated from *Consumer Purchases and Price Trends of Textiles*, Monthly Bulletin.

2. Total consumption both quantity and value columns (3) and (4) is derived by taking total no. of households (=100479500) in 1978-79.

3. Controlled cloth [columns (5) and (6)] is from Textile Commissioners' Office and relates to packing of controlled cloth.

4. Columns (7), (8), (9) and (10) are arrived at by multiplying the total number of households with the per household data available on consumers' purchases.

5. After taking total production of powerlooms from the report of the *Expert Committee on Tax Measures to Promote Employment*, Government of India, (1980) the quantity of cloth due to diversion of hank yarn from handloom sector was added to get actual quantities of powerloom cloth. From the total production, quantity of powerloom cloth exported was deducted to get the quantity available for home consumption. The value of the powerloom cloth available for home consumption was derived from the price data available in the abovementioned report. Taking 67 per cent of the quantity and 71 per cent of the value, the distribution in each category was made in the same proportion of columns (11) and (12) for quantity and value of powerloom cloth, respectively.

India, 1978, 1979). Also we have excluded the quantity and value of controlled cloth consumption from the mill sector on the basis of the data on controlled cloth packed during the period as given by the Textile Commissioner's Office. The value of controlled cloth has been estimated on the basis of the information on prices of the mill sector cloth of different quantities available in the *Report on Tax Measures to Promote Employment* (Goverment of India, 1980), adjusted for the subsidies assuming subsidy per square metre of controlled cloth.

The third important adjustment pertains to the exclusion of powerloom cloth consumption. This necessitates the estimation of both the quantity and value of the consumption of powerloom cloth. Assuming that the changes in stocks are zero, consumption of powerloom cloth would be equivalent to its production *minus* exports. However, as worked out earlier, official productiom estimates of powerloom cloth are understated to the tune of 513 million metres as these have been misclassified as handloom cloth. Therefore, we have added these to the production estimates of powerloom cloth given in the *Report on Tax Measures to Promote Employment* (Government of India, 1980) to arrive at the quantity of powerloom cloth production. The report gives the estimates in terms of different qualities, namely, coarse, medium-B, medium-A, fine and superfine. The misclassified quantity of cloth can also be easily disaggregated into these categories. The report also gives the average producers' prices of the five qualities of cloth on the basis of which we have arrived at the estimated ex-mill value of production of powerloom cloth. Estimates of the quantity and value of consumption of powerloom cloth have beed obtained by deducting the quantity and value of exports from the relevant production estimates. The value of consumption in retail prices has been estimated by adding the margins derived by us on the basis of the

replies to the questionnaire circulated among the textile mills[7].

In order to estimate the extent of evasion arising from undervaluation of cotton textile fabrics, we have relied heavily on the data on consumer purchases of textiles collected by the Market Research wing of the Textile Committee. These data have been collected since 1969 for the sample households stratified over size of towns spread across the country and income classes of the households. The information on the purchase of cloth is collected for 7450 such households that voluntered the information and information from these households is collected on a continuous basis every year. Besides, about 20-25 per cent of the sample is replaced every year to obviate the bias arising out of staticness of the sample.

These data on consumption of textiles are collected on a scientific basis and have definite advantages over other sources for various reasons[8]. First, no other source gives the data at the level of disaggregation as this source does. Second, unlike the other important source of data on consumption, namely, the National Sample Survey, there is no reason to believe that the present source would have a significant downward bias. This is mainly because, as the sample households are the same every year, the questionnaires will be filled on the basis of the account of their purchases kept by them rather than on the basis of their memory. Again, as the data are collected by the Textile Committee and not the taxation departments, there is no cause for households to understate their purchases.

[7] We circulated a questionnaire to a number of textile mills to obtain information on the difference between ex-factory and retail prices of cotton fabrics of categories such as shirting, suiting, dhoti, long cloth, drill, saree, ladies' dress material, coating, sheeting, bed sheet, covers and chaddar. From the same survey, we have obtained information on the average width of the various types of fabrics also. The questionnaire is given in Appendix II.

[8] A detailed exposition of the method of collecting these data is given in the *Report on Consumer Purchase of Textiles* published annually by the Textile Committee, Ministry of Commerce, Government of India.

We have mentioned earlier that consumption of the seven categories of the cloth considered by us constitutes 67per cent of the quantity of cloth consumed and 71 per cent of the value of cloth consumed in the aggregate. But if we consider the consumption of mill sector cloth alone, these categories constitute 69.3 per cent of the quantity and 75.7 per cent of the value.

It is necessary to note an important anomaly here. The seven categories constituting 69.3 per cent of the quantity of mill sector cloth consumed aggregate to 3128 million metres. However, this is only 112 million metres less than the aggregate total production of 3240 million metres as was reported in Table 2.2. The production figures available for domestic consumption (production—exports ± changes in stocks) would work out to be lower than the estimated consumption of the seven categories which forms only 69.3 per cent of total cloth consumption. This raises the suspicion that either the production figures are understated or consumption figures are overstated.

Understatement of the production figures is possible due to either of the following reasons:

(i) The yarn production figures are understated, which means that the cotton production figures are understated or yarn deliveries to the handloom and powerloom sectors are overstated.

(ii) The length-to-weight ratio employed to examine the extent of understatement of output could be an overestimate. The existence of wide discrepancy leads to the suspicion that some amount of evasion may indeed be taking place by understating the production figure, although we are unable to quantify the extent of understatement.

The discrepancy pointed out above may also arise if the consumption estimates are overstated. As we have already explained, the sampling of the households and the collection of the consumption data have been done on a scientific basis and therefore, we do not have any reason to presume that there could be a significant over-estimation of the consump-

tion figures. However, there is a possibility that our assumption of the constancy of changes in stock may not be entirely realistic. The stock here refers to the sum total of stocks in the wholesale and retail outlets, on which we do not have any information. To the extent that the stock figure for 1978-79 is different from that of the previous year, there can be a discrepancy between the production and consumption figures. Also, it is possible that mis-stamping of powerloom cloth as composite mill cloth could have to some extent inflated the consumption estimates. In any case, if the consumption figures are over-estimated, our evasion estimates would have, to that extent, an upward bias.

To calculate the tax potential in respect of the categories of fabrics considered by us, we require information on the purchases of mill fabrics of more than 41 counts and less than 41 counts, the latter disaggregated further in terms of different ex-mill price ranges corresponding to the tax rate categories. We have separated the consumption of cloth of below 41 counts in proportion to the production estimates of coarse, medium-A and medium-B fabrics given in the *Reporton Tax Measures to Promote Employment* (Government of India, 1980). Correspondingly, the proportion of fine and superfine cloth production is applied to the total consumption to arrive at the consumption of cloth above 41 counts. The values of these categories have been obtained by multiplying the quantities with retail prices, which are arrived at by adding appropriate margins to the ex-mill prices given in the same report.

As the rates of excise duty on cotton fabrics of below 41 counts vary according to the price of the fabric, we have to obtain the quantities, and values of these fabrics in terms of different price ranges corresponding to tax rate categories. Fortunately, *Consumer Purchases of Textiles* (Government of India, 1978, 1979) gives us data on the price-range-wise purchases of different varieties of cloth considered by us. We have apportioned the mill cloth consumption of less than 41 counts according to the data in these price-range-wise purchases. This does not impart a significant bias in the estimation, for, the cloth of less than 41 counts constitutes

almost 92 per cent of the quantity of cloth purchases and 91 per cent of the value of purchases. An additional assumption involved in this exercise is that the purchase of the cloth of the decentralised sector would fall into a pattern similar to that of the mill sector's cloth.

All the price ranges and values so far derived are in retail prices. To estimate the tax potential from these, we have to convert them into ex-factory prices. Similarly, the quantities are in terms of linear metres whereas the tax rates are specified per square metre. As mentioned earlier, on the basis of the response received from the mills to a questionnaire circulated to them, we have obtained both the average width of the cloth of different varieties considered by us and the average margin of increase of retail prices over the ex-factory prices. From these, by applying the relevant rates of taxation, we have estimated the excise tax potential in respect of the categories of mill cloth considered by us. These computations are detailed in in Tables 4.9 to 4.16 and the aggregate tax potential is derived in Table 4.17.

It is seen from Table 4.17 that the categories considered by us should have yielded excise revenue amounting to Rs 93.71 crore from the levy of only the basic duty and another Rs 14.06 crore from the levy of special and additional duties. As mentioned, the categories considered by us constitute only 75.7 per cent of the value of total consumption of textiles. Assuming that the tax potential varies proportionately with the amount of cloth, the total excise duty potential in respect of cotton fabrics of the mill sector would increase by the same proportion. This would amount to Rs 140.51 crore. But the actual collections in 1978-79, as given in the *Statistical Year Book of Central Excise* (Government of India, 1984), amounted to only Rs 100.97 crore (Rs 87.80 crore basic duty + Rs 13.17 crore special and additional) [9], Thus, the estimated excise duty evasion by means of undervaluation of mill sector fabrics alone amounted to Rs 39.54 crore in 1978-79. This formed as much as 28.1 per cent of the excise duty collection from cotton textile fabrics.

[9] Again, it should be noted that taking actual collections rather than the duty liability from declared production makes an implicit assumption that amount of arrears in the year has not changed from the previous year.

TABLE 4.9

Potential Tax Base and Revenue from Basic Excise Duty (1978-79) on Cloth of Over 41 Counts of Yarn

Varieties	Quantity (million metres)	Value at retail price (Rs in million)	Percentage decrease of ex-factory price over retail price	Estimated value at ex-factory price: Col. (2)— $\frac{\text{Col (2)}\times\text{(3)}}{100}$ (Rs in million)	Rate of basic excise duty (per cent *ad valorem*)	Basic duty liability $\frac{\text{Col. (4)}\times\text{(5)}}{100}$ (Rs in million)
	(1)	(2)	(3)	(4)	(5)	(6)
1. Dhoti	51.90	334.72	25.75	248.53		37.28
2. Saree	72.29	543.65	29.85	381.37		57.21
3. Shirting	48.39	419.48	24.42	317.04		47.56
4. Coating/suiting	5.18	67.29	28.59	48.05	15	7.21
5. Ladies' dress material	44.92	376.18	26.93	274.87		41.23
6. Bed sheet/bed cover/ chaddar/ wearable chaddar	9.96	106.66	28.00	76.79		11.52
7. Long cloth/sheeting	23.26	147.20	24.86	110.61		16.59
TOTAL	255.90	1995.18				218.60

TABLE 4.10

Potential Tax Base and Revenue from Basic Excise Duty (1978-79) on Cloth of Below 41 Counts of Yarn (Variety : Dhoti)

(Price range (Rs) Exceeds	Does not exceed	Q= quantity in million metres	V= value at retail price (Rs in million)	Percentage decrease of ex-factory price from retail price	Estimated value at ex-factory price Col.(2)— Col.(2)× (3) / 100 (Rs in million)	Estimated ex-factory price per metre (Rs) Col.(4)/ Col.(1)	Estmated ex-factory price per sq.metre (Rs) Col.(5) / (1.1741)*	Rate of basic excise duty (per cent ad valorem)	Basic duty liability Col.(4)× Col.(7) / 100 (Rs in million)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	2	20.68	39.93		29.65	1.43	1.22		0.59
2	3	69.56	201.94		149.94	2.15	1.83		3.00
3	5	158.36	634.84		471.37	2.98	2.54	2	9.43
5	6	106.04	539.48		400.56	3.78	3.22		8.01
6	7	81.04	500.88		371.90	4.59	3.91		7.44
7	8	57.56	424.66	25.75	315.31	5.48	4.67	3	9.46
8	10	31.81	275 19		204.33	6.42	5.47		6.13
10	11	24.18	241.86		179.58	7.43	6.33	4	7.18
11	12	6.47	71.60		53.16	8.22	7.00		2.13
12	15	18.06	2 8.43		162.18	8.98	7.65	6	9.73
15	20	5 83	84.47		62.72	10.77	9.17	10	6.27
20	—	3.03	66.32		49.24	16 25	13.84	15	7.39
TOTAL		582.62	3299.60						76.76

Note: * Average width of the cloth is 1.1741 metres.

TABLE 4.11

Potential Tax Base and Revenue from Basic Excise Duty (1978-79) on Cloth of Below 41 Counts of Yarn (Variety: Saree)

Price range (Rs) Exceeds	Does not exceed	Quantity in million metres	Value at retail price (Rs in million	Percentage decrease of ex-factory price from retail price	Estimated value at ex-factory price. Col.(2)— Col.(2)×(3) / 100 (Rs in million)	Estimated ex-factory price per metre.(Rs) Col.(4)/ Col.(1)	Estimated ex-factory price per sq. metre (Rs) Col.(5) / (1.0919)*	Rate of basic excise duty (per cent) *ad valorem*	Basic duty liability Col.(4)× Col.(7) / 100 (Rs in million)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	2	21.10	38.05		26.69	1.26	1.15		0.53
2	3	50.39	129.16		90.61	1.80	1.65		1.81
3	4	103.21	353.17		247.75	2.40	2.20		4.96
4	5	113.76	496.79		348.50	3.06	2.80	2	6.97
5	6	102.08	536.99		376.70	3.69	3.38		7.53
6	7	83.33	523.59		367.30	4.41	4.04		11.02
7	8	98.51	709.55		497.75	5.05	4.62		14.93
8	9	63.70	521.98	29.85	366.17	5.75	5.27	3	10.99
9	10	47.31	435.70		305.64	6.46	5.92		9.17

(Contd.)

TABLE 4.11 (Contd.)

		1	2	3	4	5	6	7	8
10	12	60.61	635.06		445.49	7.35	6.73	4	17.82
12	15	47.06	615.77		431.96	9.18	8.41	8	34.56
15	18	14.69	241.70		169.55	11.54	10.57	12	20.35
18	25	3.90	72.35		50.75	13.01	11.92	14	7.11
25	30	1.38	36.98		25.94	18.80	17.22	15	3.89
30	—	0.41	12.33		8.65	21.10	19.32		1.30
TOTAL		811.44	5359.17						152.94

Note: * Average width of the cloth is 1.0919 metres.

TABLE 4.12

Potential Tax Base and Revenue from Basic Excise Duty (1978-79) on Cloth of Below 41 Counts of Yarn (Variety:Shirting)

Price range (Rs)		Quantity	Value at	Percentage	Estimated	Estimated	Estimated	Rate of	Basic
Exceeds	Does not exceed	in million metres	retail price (Rs in million)	decrease of ex-factory price from retail price	value at ex-factory price. col. (2)— col. (2)×(3) / 100 (Rs in million)	ex-factory price per metre. (Rs) col. (4)/ col. (1)	ex-factory price (per sq. metre) (col. (5) / (0.8876)* (Rs)	basic excise duty (per cent *ad valorem*	duty liability col (4)× col. (7) / 100 (Rs in million
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	2	1.14	2.07		1.80	1.58	1.78		0.04
2	3	7.33	19.44	13.14	16.89	2.30	2.59	2	0.34
3	4	17.22	61.20		53.16	3.09	3.48		1.06
4	5	58.44	267.96	17.48	221.12	3.78	4.26		6.63
5	6	101.79	564.04	17.79	463.70	4.56	5.14	3	13.91
6	7	102.93	678.17	19.68	544.71	5.29	5.96		16.34

(Contd.)

TABLE 4.12 (Contd.)

		1	2	3	4	5	6	7	8
7	8	75.12	576.86	21.07	455.32	6.06	6.83	4	18.21
8	9	73.65	641.37	23.55	490.33	6.66	7.50	6	29.42
9	10	23.14	227.02	25.65	168.79	7.29	8.21	8	13.50
10	12	40.30	447.84		296.25	7.35	8.28		23.70
12	15	27.86	376.72	33.85	249.20	8.94	10.07	12	29.90
15	20	10.48	180.29		119.26	11.38	12.82	15	17.89
20	—	3.75	92.22		61.00	16.27	18.33		9.15
TOTAL		543.15	4135.20						180.09

Note: * Average width of the cloth is 0.8876 metre.

TABLE 4.13

Potential Tax Base and Revenue from Basic Excise Duty (1978-79) on Cloth of Below 41 Counts of Yarn (Variety : Coating/suiting)

Price range (Rs)		Quantity in million metres	Value at retail price (Rs in million)	Percentage decrease of ex-factory price from retail price	Estimated value at ex-factory price Col. (2)— Col (2)×(3) / 100 (Rs in million)	Estimaten ex-factory price per metre. (Rs) Col. (4)/ Col (1)	Estimated ex-factory price per sq.metre (Rs) Col. (5) / (0.9933)*	Rate of basic excise duty (per cent *ad valorem*)	Basic duty liability Col.(4)× Col.(7) / 100 (Rs in million
Exceeds	Does not exceed								
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	3.50	0.10	0.33		0.24	2.40	2.42		Neg.
3.50	5.00	1.09	4.05		2.89	2.65	2.67	2	0.06
5 00	6.00	2.66	13.33		9.52	3.58	3 60		0.20
6.00	7.00	5.03	31.24		22.31	4.44	4.47	3	0.67
7.00	8.00	6.87	49.62		35.43	5.16	5.19		1.06
8.00	9.00	6.59	55.65		39.74	6.03	6.07	4	1.59

(Contd.)

TABLE 4.13 (Contd.)

		1	2	3	4	5	6	7	8
9.00	10.00	10.62	101.62	28.59	72.57	6.83	6.88	4	2.90
10.00	12.00	4.50	48.03		34.30	7.62	7.67	6	2.06
12.00	15.00	5.54	67.39		48.12	8.69	8.75	8	3.85
15.00	19.00	7.35	110.31		78.77	10.72	10.79	12	9·45
19.00	25.00	4.83	93.66		66.88	13.85	13.94	15	10.03
25.00	—	2.99	88.09		62.91	21.04	21.18	—	9.44
TOTAL		58.17	663.32						41.31

Note: * Average width of the cloth is 0.9933 metre.

TABLE 4.14

Potential Tax Base and Revenue from Basic Duty (1978-79) on Cloth of Below 41 Counts of Yarn (Variety:Ladies Dress Material

Price range (Rs) Exceeds	Does not exceed	Quantity in million metres	Value at retail price (Rs in million)	Percentage decrease of ex-factory price from retail price	Estimated value at ex-factory price Col. (2)— Col. (2)×(3)/100 (Rs in million)	Estimated ex-factory price per metre. (Rs) Col. (4)/ Col. (1)	Estimated ex-factory price per sq. metre. (Rs) Col. (5)/(0 9334)*	Rate of basic excise duty (per cent *ad valorem*)	Basic duty liability col.(4)× col. (7)/100 (Rs in million)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	2	2.87	3.71		2.71	0.94	1.01		0.05
2	3	10.89	27.81		10.32	1.87	2.00		0.41
3	4	25.62	82.70		60.43	2.36	2.53	2	1.21
4	5	60.82	250.99		187.78	3.09	3.31		3.76
5	6	90.86	467.25		341.42	3.76	4.03		10.24
6	7	68.48	423.12		309.17	4.51	4.83	3	9.28

(Contd).

TABLE 4.14 (Contd.)

		1	2	3	4	5	6	7	8
7	8	52.59	377.51	26.93	275.85	5.25	5.62	3	8.28
8	9	55.92	456.87		333.83	5.97	6.40	4	13.35
9	10	25.36	232.88		170.17	6.79	7.19	6	10.21
10	12	56.48	589.63		430.84	7.63	8.17	8	34.47
12	15	36.31	463.91		338.38	9.34	10.01	12	40.68
15	20	13.97	230.66		168.54	12.06	12.92	15	25.28
20	—	4.08	95.30		69.64	17.07	18.29		10.45
TOTAL		504.24	3708.34						167 67

Note: • Average width of the cloth is 0.9334 metre.

TABLE 4.15

Potential Tax Base and Revenue from Basic Duty (1978-78) on Cloth of Below 41 Counts of Yarn (Variety: Bed Sheet/Bedcover Chaddar)

Price range (Rs) Exceeds	Does not exceed	Quantity in million metres	Value at retail price (Rs in million)	Percentage decrease of ex-factory price from retail price	Estimated value at ex-factory price. Col. (2)— Col. (2)×(3)/100 (Rs in million)	Estimated ex-factory price per metre. (Rs) Col. (4)/ Col. (1)	Estimated ex-factory price per sq. metre. (Rs) Col. (5)/(1.375)	Rate of basic excise duty (per cent *ad valorem*)	Basic liability Col.(4)× Col. (7)/100 (Rs in million)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	2	0.50	0.74		0.53	1.06	1.02		0 01
2	3	1.42	3.37		2.43	1.71	1.65		0.05
3	4	3.99	14.19		10.22	2.56	2.47		0.20
4	5	8.81	40.27		28.99	3.29	3.17	2	0.58
5	6	12.10	69.81		50.26	4.15	4.00		1.01
	7	13.93	93.36		67.22	4.83	4.66	3	2.02

(Contd.)

TABLE 4.15 (Contd.)

		1	2	3	4	5	6	7	8
7	8	10.96	82.01		59.05	5.39	5.20	3	1.77
8	9	16.49	141.83	28.00	102.12	6.19	5.97		3.06
9	10	8.09	78.86		56.78	7.02	6.77	4	2.27
10	12	13.23	150.04		108.03	8.17	7.87	6	6.48
12	15	10.36	140.89		101.44	9.79	9.44	10	10.14
15	20	7.83	132.37		95.31	12.17	11.73	14	13.34
20	25	2.84	64.24		46.25	16.29	15.70		6.94
25	29	0.36	9.88		7.11	19.75	19.04	15	1.07
29	35	0.62	18.29		13.17	21.24	20.47		1.98
35	40	0.16	3.79		2.73	27.30	26.31		0.41
40	—	0.18	7.47		5.38	29.89	28.81		0.81
TOTAL		111.81	1051.41						52.13

Note : * Average width of the cloth is 1.0375 metres,

TABLE 4.16

Potential Tax Base and Revenue from Basic Excise Duty (1978-79) on Cloth of Below 41 Counts of Yarn (Variety : Long Cloth/Sheeting)

Price range (Rs) Exceeds	Does not exceed	Quantity in million metres	Value of retail price (Rs in million)	Percentage decrease of ex-factory price from retail price	Estimated value at ex-factory price Col. (2)— Col.(2)×(3) / 100 (Rs in milllion)	Estimated ex-factory price per sq.metre (Rs) Col. (4)/ Col. (1)	Estimated ex-factory price per sq.metre (Rs) Col. (5) / 1 1574)*	Rate of basic excise duty (per cent *ad valorem*)	Basic duty liability Col.(4) × Col. (7) / 100 (Rs in million)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
—	1.50	0.39	0.58		0.46	1.18	1.02		0.01
1.50	2.00	3.37	6.53		5.23	1 55	1.34		0.10
2.00	2.50	10.63	24.96		20.00	1.88	1.62	2	0.40
2.50	3.00	14.67	41.21		33.02	2.25	1.94		0.66
3.00	3.50	17.18	58.04	19.87	46.51	2.71	2.34		0.93
3.50	4.00	10.03	50.50		40.47	3.11	2.69		0.81

(Contd.)

TABLE 4.16 (Contd.)

		1	2	3	4	5	6	6	7
4.00	5.00	52.94	243.34		19.499	3 68	3.18	2	3.90
5 00	6.00	58.95	331.71	19.87	265.83	4.51	3.90		5.32
6.00	7.00	49.29	327.79		243.84	4.95	4.28		7.32
7.00	8.00	17.96	139.30		103.63	5.77	4.99	3	3.11
8.00	9.00	13.11	114.49	25.61	85.17	6.50	5.62		2.56
9.00	10.00	2.90	28.73		21.37	7.37	6.37	4	0.85
10.00	—	6.66	83.87		62.39	9.37	8.10	8	4.99
TOTAL		261.08	1451.05						30.96

Note: * Average width of the cloth is 1.1574 metres.

TABLE 4.17

Aggregate Tax Potential from the Considered Varieties of Cloth

(Rs in million)

	Variety	*Potential tax liability (Basic)*		
		Variety upto 41 counts	Variety above 41 counts	Total
1.	Dhoti	76.76	37.28	114.04
2.	Saree	152.94	57.21	210.15
3.	Shirting	180.09	47.56	227.65
4.	Coating/suiting	41.31	7.21	48.52
5.	Ladies dress material	167.67	41.25	208.90
6.	Bed sheet/bed cover wearable chaddar	52.13	11.52	63.65
7.	Long cloth/sheeting	30.96	16.59	47.55
	TOTAL	701.86	218.60	920.46

Note: Rs 920. 46 million, shown as the total potential tax, however, does not include the amount that is due from the controlled cloth. Adding Rs 1.66 crore of potential tax from the controlled cloth, the total works out to Rs 93.71 crore.

Aggregate Loss of Duty on Cotton Textile Fabrics

The evasion of duty on cotton cloth through inter-sectoral misclassification was estimated earlier at Rs. 12.70 crore. The loss of revenue to the exchequer by means of undervaluation in the mill sector fabrics has been estimated at Rs 39.54 crore. Thus, in the aggregate about Rs 52.24 crore seem to have been evaded. Had this amount been collected, the aggregate excise duty from cotton textile fabrics would have amounted to Rs 184.85 crore [10]. Thus, the extent of evasion works out to as much as 28.3 per cent. In other words, almost 47.2 per cent of the actual duty collection from cotton textile fabrics seems to have been evaded.

[10] The amount of excise duty collected in 1978-79 is shown to be Rs 132.61 crore.

We may now summarise the findings of our study. We have hypothesised that excise duty is evaded by taking advantage of inter-sectoral and intra-sectoral differences in the structure of the excise duty. Duty evasion through misclassification of yarn was estimated at Rs 6.90 crore, forming 7 per cent of the yarn duty. The inter-sectoral missclassification of cloth is estimated to have resulted in evasion of duty to the tune of Rs 12.70 crore. As regards evasion arising from the intra-sectoral differences in the tax structure, our analysis reveals that suppression of quantity does not seem to have been practised by the mill sector on a significant scale, which also conforms to our *a priori* reasoning. However, through undervaluation of the mill sector cloth, a sizeable amount of revenue amounting to Rs 35.54 crore seems to have been evaded.

Limitations of the Study

The complexity of the structure of excise duty on cotton textile fabrics and the lack of detailed disaggregated data corresponding to the complex excise tariff schedule makes imperative certain assumptions while estimating the evasion of excise duty. We have made the assumptions explicit in appropriate places while explaining the methodology. However, it seems necessary to re-capitulate so as to indicate the possible directions and size of bias in our estimates.

Second, in our estimation, we have considered excise evasion arising out of inter-sectoral misclassification of yarn and cloth, on the one hand, and understatement and undervaluation of the output of the composite mill sector, on the other. While considering evasion in the composite mill sector, it is necessary to point out that our emphasis has been mainly on pure cotton fabrics. However, as was pointed out earlier, some portion of blended fabrics falls within the Central excise definition of cotton fabrics. Although the possible underestimation and evasion of the duty therefrom is taken into account by assuming the cotton content in blended yarn as 35 per cent, the possible evasion of the duty arising from undervaluation of blended fabrics could not be estimated by us. This is because we do not have any information on the

proportion of blended fabrics falling within the excise definition of cotton fabrics. In any case, the amount of evasion arising from this source may not be substantial as, the blended fabric forms only 16 per cent of the cotton plus blended fabrics and the proportion of blended fabrics falling within the excise definition of cotton fabrics would be much smaller. Nevertheless, it is necessary to note that, to that extent, our estimate of evasion has a downward bias.

We have already pointed out the anomaly arising from the discrepancies in production and consumption estimates. This would imply that either production estimates are understated, which means our conclusion that evasion due to suppression of quantity is insignificant, needs to be qualified, or consumption estimates are overstated, which implies that our estimate of evasion due to undervaluation has an element of upward bias.

It is necessary to mention that our attempt at measuring the extent of evasion has been confined to cotton textile fabrics (Tariff Item 19) and any generalisation from this on the extent of evasion by the textile sector as a whole would not be appropriate. Although we have estimated the evasion of yarn duty arising from the conversion of hank yarn into other forms, we have not made a comprehensive study of this or the evasion of duty in respect of other articles in the textile sector.

We had mentioned earlier in this chapter that a significant amount of tax evasion seems to have been taking place through the misclassification of power-processed fabrics as hand-processed. As we do not have any reliable information that would help us to estimate the evasion thus practised in the unorganised sector, we have not attempted to measure this. We have taken only the recorded amount of powerloom cloth misclassified as handloom cloth as the lower limit for measuring the extent of evasion in this regard. While the actual evasion on this account may not be as high as the estimates made by the Mill Owners Association (Rs 120 crore in 1981-82), we think that it would be sizeable and certainly higher than our estimates.

While estimating the extent of evasion arising from the undervaluation of the fabrics in the composite mill sector, for want of data at the desired level of disaggregation, we had to make a number of assumptions. The important among these assumptions are: (i) The data on cotton cloth consumption given in the *Consumer Purchases of Textiles* (Government of India, 1978, 1979) are reliable; (ii) the level of retail stocks at the end of the year has not changed in comparison with that at the beginning of the year, so that production minus exports does, in fact, represent consumption; (iii) the pattern of consumption of mill sector cloth is identical to the pattern of its production. Thus, the purchase of cloth of more than 41 counts and less than 41 counts, the latter disaggregated in terms of various price ranges, could be derived in proportion to the relevant production pattern, the data for which are available; (iv) the category-wise consumption of mill and powerloom cloth is identical. Hence the total mill cloth could be allocated among the different items in the category in proportion to their relative shares in the mill and powerloom cloth taken together, and (v) the distribution of the categories considered by us in terms of tax rate categories is identical to the distribution of cloth of the categories not considered by us. Accordingly, on the basis of the evasion figures obtained on the categories considered in the study forming about 70 per cent of total purchase, the total evasion estimates are obtained by blowing up our estimates proportionately. It is necessary to mention that assumption (iv) may result in an upward bias in our estimates of evasion. This is because, as we have pointed out earlier, the proportion of fabrics of higher counts in the consumption of powerloom fabrics is higher. If these fabrics are priced higher, then our estimates of the consumption of higher-priced categories of mill sector cloth get exaggerated; hence, the estimates of evasion also get exaggerated accordingly.

5

Reform of Excise Duty on Cotton Textiles—Broad Issues

Introduction

IT has been our contention that, *inter alia*, the nature of the industry and the structure of excise duty partly determine the method of evading the excise duty on cotton textile fabrics. Again, the nature of the industry itself has been an outcome of, among other factors, the complex structure of excise duty which leaves open some avenues of evasion. Attempts to achieve multiple objectives have complicated the structure of excise duty.

The discussion on policy issues directed towards reforming the structure of excises to reduce evasion, therefore, has to address itself to the objectives that have contributed to the complicated structure. Specifically, the discussion should be concerned with two questions: (i) whether the objectives pursued are appropriate and (ii) whether the methods employed to achieve the objectives are efficient.

Besides the objective of raising revenue, the two other major objectives of the excise rate policy on cotton textile fabrics seem to be (i) equity and (ii) encouragement of labour-intensive techniques of production. Equity is sought to be achieved by means of a graded tax structure with reference to count groups of fabrics as well as differential tax rates on fabrics of different prices. Encouragement to labour-intensive techniques is sought to be given by levying

differential tax rates on fabrics produced in different sectors, the rates varying inversely with the labour intensitsy in production.

It is beyond the scope of this study to make any judgement on the merits of the policy objectives and the emphasis placed on them. Again, it is the prerogatiye of the Government to decide upon the extent of equity to be achieved through providing cheap cloth to the common consumer and discriminating against the richer consumer *vis-a-vis* the poorer consumer. However, when inter-sectoral discrimination is made in order to promote labour intensity in production, the issue of relative efficiencies of the three sectors—mill, powerloom and handloom—also become important. Unfortunately, little systematic work has been done to examine whether the interest outlay saved by reducing capital costs in the labour-intensive sector is greater than the increased wage biil. If such a situation indeed exists, the labour-intensive sector would be profitable, and excise rate discrimination would be required only to enhance this. If, on the contrary, the increased wage bill is higher than the interest saved, there is a cost in terms of the loss of efficiency in promoting the labour-intensive sector.

A recent World Bank study (Mazumdar, 1984) which examines the relative efficiency of the three sectors, concluded that given the wage levels prevailing in the three sectors, only powerlooms were profitable. Further, the enormous wage differential that existed betweeu the mill and the powerloom sectors was crucial to the private profitability of the powerlooms[1]. Now the pertinent decision should be whether additional encouragement of the powerloom sector in terms of lower excise rates is required and, if so, by how much. In other words, the structure of excise rates should be decided on the basis of detailed studies on the relative efficiency of the different sectors. Again, greater employment intensity but lower labour productivity, in the segment of

[1] If, however, labour is valued at a uniform (lower) powerloom wage in both the miil and powerloom sectors, the study concludes that the social profitability is very much lower.

the textile sector which produces basically wage goods, has to be set off against increasing employment in labour-intensive capital formation sectors. Only then the decision to encourage the sectors or any segment of the sectors can be taken. The excise rate policy can be appropriately designed only after such a careful analysis.

The second important issue is whether the means to achieve the objectives are appropriate. In other words, the issue is whether the excise rate policy is the most efficient method of achieving the specified objectives.

As mentioned earlier, an important reason for having a differential rate structure of excise duties for cotton fabrics—depending upon the count of the fabric as well as its price—is the desire to aehieve equity. But the attainment of equity is possible only if the richer sections consume higher-priced fabrics as well as fabrics of higher counts. But gradation of rates with reference to count groups and prices seems to be unnecessary to serve the objective of equity. If indeed fabrics of higher counts are priced higher, the highest basic tax rate (15 per cent in the case of mill fabrics) would automatically apply. On the other hand, if fabrics of higher counts are priced lower, they could be consumed by the poorer sections of society and taxing them at very high rates irrespective of their price would be inequitous. Thus, there is really no case for differentiation with reference to count groups; differential taxation with reference to broad price catagories alone should serve the purpose of equity.

The discrimination in tax rates in respect of both count groups and price ranges has two important unintended effects. First, it provides a vast avenue for the evasion of the tax through misclassification of both count categories and price ranges. To prevent the misclassifieation of cloth of different count groups, the laboratory tests required at present can be avoided by levying tax rates varying only with the broad price ranges of the cloth. It is necessary to stress that differentiation has to be made only in terms of broad price categories to reduce the possibility of evasion of the tax through price misclassification; for, rate differenti

ation on narrow price-range categories enhances the possibility of misclassification. Secondly, rate differentiation by count groups produces the unintended effect of less efficient utilisation of inputs. As a consequence of this tax policy, the spinning mills would produce yarn of lower counts even from long staple cotton to avoid paying excise duty at higher rates although yarn of higher counts can be produced. As yarn of lower counts yields lower quantity of cloth, total cloth output would be much less as a consequence of the excise rate policy[2] (Desai, 1981).

The excise duty on cotton yarn too adds to this unintended effect. The specific nature of the duty, the rate increasing with yarn count, provides the incentive to manufacture yarn of lower counts even though higher counts can be produced from a given quality of cotton. It would therefore seem to be rational to recommend that cotton yarn may be subjected to *ad valorem* rates of tax, the rates varying with the price of yarn, on the lines suggested by the Indirect Taxation Enquiry Committee (Government of India, 1978). This would, besides ensuring more efficient utilisation of cotton, also avoid elaborate laboratory tests by the Excise Department to verify the yarn count.

The Indirect Taxation Enquiry Committee examined this issue in detail and concluded that there was no justification for taxing the lower priced cloth consumed by the poorer sections of the community at very high rates merely because the cloth was made from yarn of higher counts. The Committee recommended a telescopic rate structure in terms of broad price categories. Consequently, the five-fold rate categorisation in terms of coarse, medium A, medium B, fine and superfine cloth was abolished in 1977, but categorisation was still made in terms of fabrics of more and less than 41 counts[3]. This, in our opinion, seems to be wholly unnecessary. As stated by the Indirect Taxation

[2] A kilogram of yarn of about 40 counts yields only 10 metres of cloth whereas yarns of higher counts yield 15 metres of cloth per kilogram.

[3] Changed subequently to 51 counts.

Enquiry Committee, "the real test to apply in distinguishing between the cloth consumed by the rich and the poor should be the price factor and on this basis, the cheaper cloth should be taxed at lower rate." We would therefore suggest that the recommendation of the Committee on the rate structure should be implemented in its entirety and a telescopic rate structure should be imposed on fabrics distinguished in terms of broad price categories.

We have mentioned earlier that inter-sectoral differentiation in the rates of excise duty leads to inter-sectoral misclassification and evasion of duty. The two important avenues of such evasion are: (i) exemption of hank yarn which is presumed to be used only in handlooms and (ii) exemption of powerloom fabrics processed in hand processors. We have mentioned the existence of widespread evasion of excise duty on yarn as well as fabrics through the abuse of these exemption provisions. Use of hank yarn on a significant scale in the powerlooms after the rewinding of the hank yarn into cones or pirns results in the widespread evasion of the yarn duty. Similarly, misdeclaring power-processed fabrics as hand-processed leads to evasion of the duty on cloth on a significant scale.

In view of the widespread evasion of the tax through misclassification of cloth, it is necessary to question whether it is wise to continue with these exemptions and whether the excise policy is really appropriate for encouraging the concerned sectors. Besides the estimate of evasion of excise duty, even the official information on cloth production derived from yarn delivery is rendered misleading due to this misclassification.

Given that the exemption accorded to hank yarn is the basic cause of this misclassification and tax evasion, withdrawal of the exemption becomes imperative. The issue, however, is how this can be done if we have to continue the encouragement to the labour-intensive handloom sector.

In our opinion, this can be done in either of two ways. Firstly, one can evolve a bonded movement system wherein hank yarn can be sold to handloom cooperatives who would ensure the distribution of the yarn to the actual producers.

This may, however, create enormous administrative problems for the proposed cooperatives as there exist a very large number of very small producers in this sector. Alternatively, it may be preferable to levy the tax on hank yarn at the rates applicable to non-hank yarn, and the amount thus collected may be ploughed back to the handloom industry through a scheme of subsidies. The method will be similar to the levy of "additional" excise duty, the proceeds of which are earmarked to subsidise controlled cloth and Janata cloth. We are therefore of the view that exemption accorded to hank yarn should be withdrawn.

Another important avenue of evasion arises from the exemption accorded to the powerloom and handloom fabrics processed by the hand-processors. Processing includes singeing, desizing, scouring, mercerising, bleaching, dyeing, printing, pre-shrinking and chemical finishing operations. The traditional hand-processing industry did not use machines and even today, there is much to be said in favour of encouring artisans in this sector by giving excise exemption and other advantages to them. In recent times, however, a new class of hand-processors has emerged using sophisticated machines identical to the power-processors and each processing about 20,000 metres of cloth per day. It is estimated that in 1977 they processed about 1225 million metres of cloth and employed about 80,000 workers (Government of India, 1980b) On these processors, excise duty at compounded rates was levied from 1973-74 until 1.4.1978. This was abolished with effect from 1.4.1978. when the powerloom cloth processed in hand-processing units was completely exempted. However,under the notification 130 of 1982, eligibility for exemption has been limited to 15,000 metres per day in a hand-processing unit. But, it should be noted that this limit is adequate enough to claim exemption for virtually the entire amount of cloth processed in hand-processing units. The rates of compound levy in 1976-77, on the stentering and mercerising machines respectively, were Rs 4500 and Rs 5000 per year.

There is much to be said in favour of imposing at least a compounded levy on these independent hand-processors as

it existed from 1973-74 to 1976-77. We have already stated that the existing study on the relative efficiencies of the three sectors indicates that powerlooms are more profitable than the mill sector due to the existence of enormous wage differentials, and a further advantage in terms of excise concessions does not seem to be necessary. Besides, it should be noted that the stentering and mercerising machines used by the hand-processors are identical to those used by the power-processors, and although to operate them, they have to employ a larger number of labourers, the labourers find the work very exhausting (Government of India, 1980b). Besides, the Working Group on Hand Printing and Hand Processing Industry concluded that ". . . the substantial excise benefits enjoyed by the hand-processing units are not being passed on to the consumers or the labourers employed in the Industry" (Government of India, 1980b, p.6). Further, exemptions granted to the powerloom fabrics processed by independent hand-processors have resulted in the large-scale evasion of the tax through misclassification of power-processed fabrics as hand-processed. In view of these, there does not seem to be really a case for giving exemptions to hand processing units which use machines for stentering and mercerising and the tax applicable to power-processed powerloom cloth should be applicable to these. However, it may be difficult to administer the levy due to the existence of a large number of hand-processors. Therefore, to begin with, a compounded levy on the lines that existed during the period 1973-74 to 1976-77, on stentering and mercerising machines could be revived, but perhaps at higher rates. Gradually, the levy should be made to vary with the value of cloth output. The Working Group on Hand Printing and Hand Processing Industry (Government of India, 1980b) also has recommended the levy of excise at 3 per cent on all manually operated machines processing cotton textiles, which could be imposed when it becomes possible to monitor the production flow of these units.

Another important issue that requires the immediate attention of policy makers is the urgent need to foster cooperation

particularly between the Office of the Textile Commissioner and the Central Board of Excise and Customs. The lack of coordination between the two has resulted in enormous loss of revenue through avoidance and evasion of the excise duty. Specifically, while the Office of the Textile Commissioner requires only that the mill cloth be stamped, it does not go into the question of whether the tax is in fact paid according to the stamped price. Nor does it examine in detail whether the stamped price has any relevance to the cost of producing the specified quality of cloth. The Excise Department on its part is indifferent to the stamped price and merely collects excise duty according to the invoice price. Our investigation has revealed that often the invoice prices are lower than the stamped prices by over 20 per cent. The consumer, however, generally, does not get the benefit of the lower tax paid as he does not have any means of knowing the invoice price.

Thus, while the manufacturers and traders can recover the tax on the stamped price from the consumers, they would pay a substantially lower amount to the Government. To avoid this, two important measures are called for. First, the Textile Commissioner's Office and the Excise Department should work in close cooperation and it should be mandatory that the invoice price on which excise duty is paid should be the stamped price. Secondly, the Textile Commissioner's Office should examine the relationship between the cost of production and the invoice/stamped price of the cloth. In this, they could seek the cooperation of the Bureau of Industrial Costs and Prices which could undertake detailed cost studies.

Coordination between the offices of the Textile Commissioner and the Central Board of Excise and Customs can also be helpful in preventing evasion through suppression of the output of yarn and fabrics. Although we have not found any significant extent of evasion through this method, we do not altogether rule out the possibility in some specific cases. Actually, the Report of the Expert Group on Textiles (Government of India, 1976) mentions the cases of some mills showing lower production in Central Excise records than what is shown in the returns furnished to the Textile Commis-

sioner. This can be easily avoided by cooperation between the two departments.

An important factor inhibiting the effective implementation of the tax on the unorganised sector is the lack of information on this sector. The number of powerlooms, handlooms, mechanised hand-processors and power-processors, the type of technology employed in them, and the quantum of cloth manufactured and processed, by quality and price ranges, are some of the points on which regular flow of information is essential for effectively enforcing the tax. This can be collected only through periodic surveys, which we think should be conducted. Besides, it is also essential to conduct studies on the relative efficiencies of the three sectors on the lines of the World Bank study (Mazumdar, 1984) by enhancing the sample size. These should effectively plug the information gap and should go a long way in ensuring better administration and enforcement of the tax.

References

1. Ahmedabad Textile Industry's Research Association (1982). *Norms for the Textile Industry*, Ahmedabad: ATIRA.

2. Allingham, M.G. and Sandmo, A. (1972). "Income Tax Evasion: A Theoretical Analysis", *Journal of Public Economics*, Vol.1, No.3/4.

3. Anand, Ritu (1979). "Choice of Technology in Textile Industry". Government of India, Planning Commission, Project Appraisal Division, 1978-79.

4. Cencus Publications (1978). *Cencus Central Excise Tariff 1978-79*. New Delhi.

5. Desai, Ashok, V. (1981). "Technology and Market under Government Regulation" (Mimeo). New Delhi: *National Council of Applied Economic Research.*

6. Erkki, Koskela (1983). "A Note on Progression, Penalty Schemes and Tax Evasion", *Journal of Public Economics*, Vol.22, No.1.

7. Government of India (1976). *The Report of the Expert Group on Taxation*, Bombay: Collectorate of Excise.

8. Government of India (1977, 1978). *Report of the Indirect Taxes, Enquiry Committee*, Parts I&II, New Delhi: Ministry of Finance (Department of Revenue).

9. Government of India (1978). *Consumer Purchases of Textiles.* Bombay: Market Research Wing, Textile Committee, Ministry of Commerce.

10. Government of India (1978). *Consumer Purchases and Price Trends of Textiles.* Bombay: Market Research Wing, Textiles Committee, Ministry of Commerce, Monthly Bulletin Nos.88-99.

11. Government of India (1979). *Report of the Committee on Controls and Subsidies.* New Delhi: Ministry of Finance.

12. Government of India (1979). *Consumer Purchases of Textiles.* Bombay: Market Research Wing, Textile Committee, Ministry of Commerce.

13. Government of India (1979). Bombay: *Consumer Purchases and Price Trends of Textiles.* Market Research Wing, Textile Committee, Ministry of Commerce, Monthly Bulletin, Nos. 100-111.

14. Government of India (1980). *Report of the Expert Commiitee on Tax Measures to Promote Employment.* Ministry of Finance, Department of Revenue.

15. Government of India (1980a). *Indian Textile Bulletin,* Annual Number Vol. XXVI No.5, Bombay: Office of the Textile Commissioner, Ministry of Commerce.

16. Government of India (1980b). *Report of the Working Group on Hand-Printing Industry and Hand-Processing Industry,* New Delhi: Ministry of Commerce.

17. Government of India (1984). *Statistical Year Book, Central Excise* Vol. 1. New Delhi: Directorate of Statistics & Intelligence, Central Excise & Customs.

18. Government of Kerala (1976). *Report of the Committee on Commodity Taxation,* Trivandrum.

19. Jain, L.C. (1983). "Handlooms Face Liquidation" *Economic and Political Weekly,* Vol.XVIII, No. 35.

20. Mazumdar Dipak, (1984). *The Issue of Small versus Large in the Indian Textile Industry, An Analytical and Historical Survey.* World Bank Staff Working Papers, No.645. Washington D.C.: The World Bank.

21. Mill Owner Association (1982). *Memorandum Submitted by the Mill Owners Association, Bombay to Tripartite Committee, Bombay.*

22. National Institute of Public Finance and Policy (1981). *Sales Tax System in Bihar.* New Delhi.

23. National Productivity Council (1976). *Productivity Trends in Cotton Textile Industry in India*, New Delhi.

24. Sinha, N., Bagchi, A. and Sud, B.L. (1983). "Evasion of Excise Duty on Plastics" (Mimeo)- New Delhi: National Institute of Public Finance and Policy.

25. Srinivasan, T.N. (1973). "Tax Evasion: A Model", *Journal of Public Economics*, Vol.2.

26. Srivastava, D.K. (1983). *Evasion of Excise Duties: Case Study of Copper*, (Mimco). New Delhi: National Institute of Public Finance and Policy.

27. The Indian Cotton Mills' Federation (1983) *Handbook of Statistics on Cotton Textile Industry, 1958-83*, Bombay.

Appendix I

Structure of Excise Duty on Cotton Textile Fabrics

Evolution of the Levy

Excise duty on cotton textile fabrics levied under tariff item No.19, is one of the oldest levies. Originally, in the late 19th century, the levy was conceived as an antiprotective measure to enhance the competitiveness of the cloth produced in Lancashire mills. In independent India, the levy was introduced in January, 1949, on only the superfine variety of cloth at the rate of 25 per cent. Gradually, other varieties were brought into the fold of the excise net. The levy of handloom cess in 1953, additional excise duties in lieu of sales tax in 1957, introduction of compounded levy procedure for smaller powerloom units in 1955 and its withdrawal in 1977, replacement of specific structure with an *ad valorem* structure in 1976, and major changes in tariff description and duty structure in 1977 are important landmarks in the evolution of the structure of excise duty on cotton textile fabrics.[1]

The major changes brought about in 1977 were of far-reaching significance and since then only a few minor changes have been made. Therefore, the currently prevailing structure is largely determined, albeit with minor modifications, by these changes. Essentially, besides the change in tariff description of cotton fabrics, the rate structure was also changed from the five-fold classification of superfine, fine, medium A,

[1] A detailed discussion on the evolution of excise duty on cotton textiles is provided in the *Report of Indirect Taxation Enquiry Committee*, Government of India, 1977.

medium B and coarse into largely an *ad valorem* telescopic form. The changes effected were, total exemption of non-power/steam processed powerloom and handloom fabrics, lower rates on powerloom and handloom fabrics processed by independent processors, exemption from compounded levy on powerlooms excepting unauthorised powerlooms and exemption of yarn duty for the composite mills. Subsequently, further modifications were made wherein yarn duty exemption for the composite mill sector was repealed and the structure of tax rates reverted to a graded, differential form, the rates depending on the price of leviable fabrics in respect of fabrics of less than 41 counts, while a uniform rate applied to fabrics of higher counts. In the following paragraphs, we explain the structure of excise duty prevailing in 1978-79, the year for which we have estimated the extent of evasion. The important changes effected in subsequent years are explained thereafter.

Definition of Cotton Fabrics

For the purpose of the Central Excise Tariff, 'cotton fabrics' are defined so as to include all varieties of fabrics manufactured either wholly or partly from cotton. In the latter case, a fabric is classified as cotton fabric if (i) in such fabric, cotton predominates in weight or (ii) such fabric contains more than 40 per cent by weight of cotton and 50 per cent or more by weight of non-cellulosic fibres or yarn or both.

It is specified that the varieties of cloth under tariff item 19 would include dhoties, sarees, chaddars, bed sheets, counterpanes, table-cloths, embroidery in the piece, in strips or in motifs and fabrics impregnated, coated, or laminated with preparations of cellulose derivatives or of other artificial plastic materials.

In the case of fabrics embroidered, and impregnated, coated, etc., the percentages referred to above are to be considered with reference to the base fabrics.

The statutory classification of Tariff item 19 refers to the following three categories, as far as our reference year, *viz.* 1978-79, is concerned:

(i) Cotton fabrics other than (i) embroidery in the piece, in strips or in motifs, and (ii) fabrics impregnated, or laminated with preparations of cellulosic derivatives or of other artificial plastic materials.

(ii) Embroidery, in the piece, in strips, or in motifs, in or in relation to the manufacture of which any process is ordinarily carried on with the aid of power.

(iii) Cotton fabrics impregnated, coated, or laminated with preparations of cellulosic derivatives or of other artificial plastic materials.

A fourth category was added to the statutory classification in 1980, as:

(iv) Cotton fabrics covered partially or fully with textile flocks or with preparations containing textile flocks such as flock printed fabrics and flock coated fabrics. Besides this, sub-item I was redefined to exclude sub-item IV, in addition to sub-items II and III. Moreover, sub-item I was divided into the following two categories:

(a) Cotton fabrics, not subjected to any process.

(b) Cotton fabrics, subjected to the process of bleaching, mercerising, dyeing, printing, water-proofing, rubberising, shrink-proofing, organdie processing, or any other process or any two or more of these processes.

The statutory basic rates of duty for sub-items I and II were fixed at 20 per cent. On sub-items III and IV, the statutory rate was fixed at 30 per cent. In addition to the basic duty, a special duty levied at 5 per cent earlier was enhanced to 10 per cent in 1980.

The statutory rates merely represent the ceiling rates—these are the maximum rates the Government can levy. The actually levied rates are governed by the effective rates notified by the Government from time to time.

Structure of Effective Rates 1978-79

Cotton textile fabrics are subjected to the basic, additional

and special excise duties. In addition, handloom cess is also levied, the proceeds of which are earmarked for the development of the handloom sector. The proceeds from additonal excise duties are earmarked to subsidise the controlled cloth and Janata cloth schemes.

In order to understand the structure of effective rates that prevailed in 1978-79, it is necessary to distinguish between (i) compoiste mills; (ii) powerlooms, and (iii) handlooms and (iv) embroidered impregnated and coated fabrics. The structure of tax rates on composite mills, powerlooms and handlooms is outlined in Table A.1. The rates applicable on embroidery, impregnated and coated fabrics are indicated in Table A.2.

Table A. 1 is self-explanatory, but a few observations may not be out of place. First, distinction is made between cloth of more than 41 counts and that of less than 41 counts. All cloths of more than 41 counts are taxed at uniform rates within the sector, irrespective of price and category (sound, fent or rag). On cloths of less than 41 counts, however, tax rates vary according to the price of the fabric and category. The second important feature of the rate structure is the existence of inter-sectoral rate differences. Generally, on powerloom fabrics processed by composite mills and independent processors (with the aid of power), the tax rates are respectively lower than those imposed in the mill sector, by 30 per cent subject to a maximum reduction of 3 percentage points. Similarly, duty at 55 per cent and 40 per cent of the mill rates are applicable on handloom fabrics when processed by the composite mills and independent processors.

Structure of Exemption

There exist a number of notifications exempting various types of cotton fabrics from payment of duty. The important one among these from our point of view is the exemption accorded to cloth produced in the decentralised sector. It should be noted that grey fabrics manufactured in powerlooms and handlooms are completely exempted. Even these fabrics if processed without the aid of power or steam are not subject

TABLE A.1

Rates of Excise Duty on Cotton Fabrics Sector-wise (1978-79)
(All rates given are in percentage)

Sl. No.	Description	Mill-made	Handloom Fabrics Processed by independent processors		Powerloom fabrics processed by independent processors
			Approved by Govt.	Not approved by Govt.	
	(1)	(2)	(3)	(4)	(5)
1.	Cotton Fabrics (including fents and rags) in which the average count of yarn is 41s or more	15	5 without printing or dyeing or both	8**	*
			9 with printing or dyeing or both	12	12
2.	Cotton Fabrics (other than those in which the average count of yarn is 41s or more)* whose value per square metre:				
	(a) Does not exceed Rs 4	2	0.80	1.40	1.40
	(b) Exceeds Rs 4 but does not exceed Rs 6	3	1.20	2.10	2.10
	(c) Exceeds Rs 6 but does not exceed Rs 7	4	1.60	2.80	2.80
	(d) Exceeds Rs 7 but does not exceed Rs 8	6	2.40	4.20	4.20

Contd.

TABLE A.1 Contd.

(1)	(2)	(3)	(4)	(5)
(e) Exceeds Rs 8 but does not exceed Rs 9	8	3.20	5.60	5.60
(f) Exceeds Rs 9 but does not exceed Rs 10	10	4.00	7.00	7.00
(g) Exceeds Rs 10 but does not exceed Rs 11	12	6.00	9.00	9.00
(h) Exceeds Rs 11 but does not exceed Rs 12	14	8.00	11.00	11.00
(i) Exceeds Rs 12	15	9.00	12.00	12.00
3. Fents and rags with average count of yarn less than 4!s whose value per square metre:				
(a) Does not exceed Rs 4	2	0.80	1.40	1.40
(b) Exceeds Rs 4 but does not exceed Rs 7	3	1.20	2.10	2.10
(c) Exceeds Rs 7 but does not exceed Rs 9	6	2.40	4.20	4.20
(d) Exceeds Rs 9 but does not exceed Rs 12	10	4.20	7.00	7.00
(e) Exceeds Rs 12	15	9.00	12.00	12.00

Notes:

* Cotton fabrics of this group when classified under 'controlled cloth' variety, are subject to a tax rate reduced by 50 per cent.

(Notes contd)

TABLE A.1 Notes contd.

** In the budget proposal effective from 1.3.1979 the duty was increased from 8 per cent to 12 per cent. It was subsequently reduced to 11 per cent with effect from 24.4.1979.

(i) The effective rate on further processing of duty-paid fabrics of composite mills (both for less than and more than 41 counts groups) is less of tax already paid.

(ii) Handloom fabrics processed by registered handloom cooperative societies and hand processors not using power or steam are exempted from paying duty.

(iii) The above effective rates of duty on cotton fabrics are composite ones representing basic and additional duty in lieu of sales tax. The allocaiion between basic and additional duty is 75 per cent and 25 per cent, respectively.

(iv) In addition to the above, there is a special excise duty of 5 per cent on basic duty effective from 1.3.1978 and additional excise duty @ 10 per cent of basic duty effective from 4.10.1978.

(v) For handloom fabrics processed by independent power processors not approved by Government and powerloom fabrics processed by independent power processors, there was a concessional rate of duty on processing (i.e., bleaching) without printing or dyeing or both of 8 per cent *ad valorem* vide notification No. 226/77 dated 15.7.1977. This concession has been withdrawn through the 1979-80 budget vide notification No. 60/79 dated 1.3.1979.

Source: Government of India, Ministry of Finance, Department of Revenue. *Report of Expert Committee on Tax Measures to Promote Employment*, 1980, New Delhi.

2. Cencus Publications, *Cencus Central Excise Tariff, 1978-79*, New Delhi.

TABLE A.2

Effective Rates : Embroidery etc.
(As on 1.3.1978)

Effective rates (per cent) *ad valorem*	Description of goods	Notification number
Rs 9.35 per metre of embroidery machine per shift plus the duty payable on base fabrics.	Embroidery in the piece, in strips and in motifs.	85/71
7 *plus* duty payable on base fabrics, if not already paid.	Embroidery in the piece, in strips, and motifs, where provisions under notification number 85/71 are not applied.	65/69, 271/77 and 272/77
30 *plus* duty payable on base fabrics, if not already paid.	Cotton fabrics impregnated, coated or laminated with preparations of cellulose derivatives or other artificial plastic materials (other than low density polyethylene) excluding PVC coated conveyor belting.	100/77 and 273/77
24 *plus* duty payable on base fabrics, if not already paid.	PVC coated or impregnated conveyor belting.	273/77 and 100/77

Source: Cencus Publications (1978) *Cencus Central Excise Tariff 1978-79*, New Delhi.

to tax. A summary of various exemptions along with the relevant notifications is presented in Table A3.

Changes in the Tariff Subsequent to 1978-79

In order to bring the discussion up-to-date, we have presented below a summary of changes that were introduced after 1978-79. These changes have reference to the tariff structure as it was on 1.3.1978 in comparison to its position

on 1.4.1979, 1.4.1980, 1.3.1981 and 15.7.1982. These dates refer to the Working Schedules of the Central Excise Tariff published subsequently.

As on 1.4.1979

(i) Explanation (III) was added to the definition of the item specifying that floor coverings falling under item 22G are not included under item 19.

(ii) Exemption on rubberised cotton fabrics was withdrawn (Notification No. 39/68).

TABLE A.3
Schedule of Exempted Fabrics

Sl. No.	Description of goods	Notification No.
	(1)	(2)
1.	Damaged or sub-standard fabrics (chindies of 23 cms. or less in length) belonging to item 19(I) and (II) or otherwise discarded fabrics during processing.	69/69
2.	Fabrics belonging to item 19(I) fully exempted depending on the following end-uses: (i) intended for use in textile printing, dyeing, bleaching, or sizing process; (ii) drill, long cloth, and markin intended for use in the coated abrasives industry; (iii) intended for use in manufacturing cotton absorbent lint; (iv) hosiery garments; (v) trimmings and cuttings of less than 7.5 cms. in width if intended for use in making paper; (vi) Indian National Flags; (vii) surgical absorbent lint in pack of 5 kgs. or less; (viii) fabrics of 15 cms. or less in width; (ix) unprocessed cotton fabrics if	70/69

(1)	(2)
manufactured on a handloom; (x) processed khadi; (xi) unprocessed cotton hosepipes and belting woven as such; (xii) hosiery.	
3. Fents of duty-paid processed cotton fabrics arising out of further processing.	135/69
4. Chindies (6 cms. or less in length) of laminated, coated, etc., fabrics (19 III).	67/70
5. Cotton fabrics falling under item 19(I) when subjected to finishing processes specified below: Calendering (other than calendering with grooved rollers), flanelleterising, stentering, damping on grey and bleached sorts, back filling on grey and bleached, singeing, scouring, cropping or butta-cutting, curing or heat setting and padding.	80/76
6. Samples of excisable goods	171/70
7. Rags of duty-paid processed cotton fabrics arising out of further processing	106/70
8. Unprocessed cotton fabrics falling under item 19(I) manufactured on powerloom other than fabrics containing more than 1/6th by weight of fibre or yarn or both of non-cellulosic origin, and coating, suiting, etc.	230/77
9. Cotton fabrics [item 19(I)] when processed without the aid of power or steam.	137/77
10. All varieties of fabrics coated or laminated with preparations of low	100/77

(1)	(2)
density polyethelene.	
11. Purchases of cotton fabrics out of cash donations for relief of the cyclone-affected people in Andhra Pradesh, Tamil Nadu, Pondicherry, Lakshwadeep, Orissa, etc.	337/77

Source: Same as for Table A.I.2

(iii) Exemption to composite mills with respect to duty on that part of value which represented duty on yarn has been withdrawn (Notification No. 99/77 para 13).

(iv) 6 per cent *ad valorem* reduction in the effective rate applicable to canvas, duck, and filter cloth (sound, fents and rags) manufactured on powerlooms has been extended to (a) cotton fabrics containing more than 1/6th by weight of fibre or yarn, etc., of non-cellulosic origin, (b) coating, suiting, etc., and (c) canvas, duck, and filter cloth (Notification No. 223/77).

(v) The distinction made in col. (iii) of Notification No. 323/77 between average counts of yarn of 41s or more and less than 41s and the corresponding maximum reduction has been deleted and substituted by a maximum reduction of three per cent *ad valorem* in all cases.

(vi) Similar changes in the case of fents and rags were also introduced.

(vii) Unprocessed cotton fabrics used in the same factory for processing were exempted from duty (Notification No. 290/79).

(viii) Processed cotton fabrics when subjected to further processing in the same factory were exempted from duty (Notification No. 291/79).

As on 1.4.1980

(i) Special excise duty was raised to 10 per cent.

(ii) A new category was created for cotton fabrics covered partially or fully with textile flocks, etc. The statutory rate of duty for this category was fixed at thirty per cent *ad valo-*

rem plus the duty payable on the base fabrics.

(iii) With reference to the exemption regarding specified finishing processes (para 9) two conditions have been added: (a) No exemption is available if unprocessed cotton fabrics falling under sub-item I (a) on which excise duty is leviable are subjected to any of these processes within the factory where the unprocessed fabrics have been produced or (b) if cotton falling under sub-item I are also subjected to any process other than specified in the given table within the same factory.

Two processes have been added in the list, i.e., (i) expanding and (ii) hydro-extraction with the aid of power.

(iv) The distinction between fabrics of an average count of 41s or more and those of less than 41s in Col. (iii) of notification No. 323/77 was re-introduced. The rates for sound fabrics, and fents and rags, is to be reduced by 30 per cent in both cases but in the latter case the reduction in the rate shall not exceed 3 per cent *ad valorem.*

(v) For controlled dhoti, saree, etc., full exemption is granted in place of the existing 50 per cent reduction.

(vi) Set-off for finishing processes under clause (vi) of Notification No. 313/77 is not included at this place in the amended notification.

As on 1.3.1981

The effective rate of duty on flocked cotton fabrics, i.e., item 19(IV) has been specified as duty leviable on the base fabrics plus 15 per cent *ad valorem* (Notification No. 29/81).

As on 15.7.1982

(i) Two new provisions were added to the existing list pertaining to the compounded levy rates for powerlooms as indicated below:

Provided that in the case of any person who has applied to the Textile Commissioner for written permission for the installation and working of powerloom on/or before the 31st day of December, 1979, the rate of duty shall, subject to the

production of necessary evidence to the satisfaction of the proper Officer of the Central Excise, be nil until such permission is granted by the Textile Commissioner.

Provided further that where such person has not produced the written permission of the Textile Commissioner by the 30th day of June, 1981 to the proper Officer, the duty fixed under this notification shall be payable for the entire period for which he was assessed nil rate of duty under the first proviso.

(Vide Notification No. 104/81 dated 8.4.1981.)

(ii) The distinction so far based on the dividing line provided by the average count of yarn of 41s has been redefined with reference to 51s both for sound fabrics as well as fents and rags.

(iii) The fifty per cent reduction for the processing of cotton fabrics [provision (iia) of Notification No. 136/77 and (iiia) of Notification No. 226/77], has been changed to a seventy-five per cent reduction.

(iv) With reference to the rate schedule given in Notification No. 226/77, apart from Sl.No.1, referring to fabrics with an average count of yarn of 41s or more, and Sl. No. 2, referring to fabrics with an average count of yarn of less than 41s, the following third category has been added: "Cotton fabrics not specified in Sl. Nos. 1 and 2". The effective rate of duty for this category has been fixed as 15 per cent *ad valorem.*

As on 1983-84

(i) The effective rate of duty on cotton fabrics containing more than 40 per cent but less than 50 per cent polyester was reduced from 15 per cent to 6.5 per cent *ad valorem.*

(ii) Additional duty in lieu of sales tax on cotton fabrics impregnated, coated or laminated with preparation of cellulose derivatives or of other artificial plastic material is duty for the time being leviable on fabrics, if not already paid, plus 10 per cent *ad valorem.*

(iii) The above rate of (ii) is also applicable to the cotton fabrics covered partially or fully with textile flocks such as flock printed fabrics and flock coated fabrics.

(iv) The effective rates of additional duty in lieu of sales tax on cotton fabrics impregnated, coated or laminated with preparations of cellulose derivatives or of other artificial plastic material except LDPE is fixed at the duty leviable on the base fabrics, if not already paid, plus 5 per cent *ad valorem.*

(v) The effective rates of additional duty in lieu of sales tax on cotton fabrics covered partially or fully with textile flocks or with preparations containing textile flocks such as flock printed fabrics and flock coated fabrics is fixed at the duty leviable on base fabrics, if not already paid, plus 5 per cent *ad valorem.*

Important Tariff Definitions

Apart from the definition of cotton fabrics, discussed earlier, other important terms frequently used in the context of Excise Tariff relating to cotton fabrics are base fabrics, fents, rags, composite mills, count and average count of yarn. The definitions relating to these are given below:

BASE FABRICS

Means—

Fabrics falling under sub-item I of this item which are subjected to the process of embroidery or which are impregnated, coated or laminated, with preparations of cellulose derivatives or of other plastic materials.

Where two or more of the following fibres, that is to say,

(i) man-made fibre of cellulosic orgin;
(ii) cotton;
(iii) wool;
(iv) silk (including silk noil);
(v) jute (including Bimlipatam jute or mesta fibre);
(vi) man-made fibre of non-cellulosic origin;
(vii) flax; and
(viii) ramie.

in any fabric are equal by weight, then, such one of those fibres, the predominance of which would render such fabric, falls under that item (hereafter in this explanation referred

to as the applicable item) among item Nos. 19,20,21,22A and 22AA, which read with the relevant notification, if any, for the time being in force issued under the Central Excise Rules, 1944, involves the highest amount of duty, shall be deemed to be predominant in such fabric and accordingly such fabric shall be deemed to fall under the applicable item.

FENTS

Means—

(i) *Bonafide* cut-pieces of cotton fabrics of length (excluding cut-pieces of towels) of length 45 cms. or more but not exceeding 90 cms. where the width of the fabric is one metre or more, and of length 65 cms. or more but not exceeding 135 cms. where the width of the fabric is less than one metre, arising during the normal course of manufacturing (including processing) or packing or drawing samples;

(ii) damaged cotton fabrics (excluding damaged towels) of length 45 cms. or more but not exceeding 90 cms. where the width of the fabric is one metre or more, and of length 65 cms. or more but not exceeding 135 cms. where the width of the fabric is less than one metre; and

(iii) cut-pieces of length 45 cms. or more but not exceeding 90 cms. where the width of the fabric is one metre or more, and of length 65 cms. or more but not exceeding 135 cms. where the width of the fabric is less than one metre, cut from damaged dhoties or sarees.

RAGS

Means—

(i) *Bonafide* cut-pieces of cotton fabrics of length more than 23 cms. but less than 45 cms. where the width of the fabric is one metre or more, and of length more than 23 cms. but less than 65 cms. where the width of the fabric is less than one metre, arising during the normal course of manufacturing (including processing) or packing or drawing samples; and

(ii) Cut pieces of damaged or sub-standard cotton fabrics of length more than 23 cms. but less than 45 cms. where the

width of the fabric is one metre or more and of length more than 23 cms. but less than 65 cms. where the width of the fabric is less than one metre.

COMPOSITE MILL

(i) Means a manufacturer who is engaged in spinning of cotton yarn or weaving or processing of cotton fabrics with the aid of power and has a proprietary interest in at least two of such manufacturing activities;

(ii) "Handloom fabrics" means cotton fabrics made from cotton yarn (other than hand-spun cotton yarn) and woven on looms worked by manual labour;

(iii) "Independent processor" means a manufacturer who is engaged exclusively in the processing of cloth with the aid of power and who has no proprietary interest in any factory engaged in the spinning of yarn or weaving of cotton fabrics.

COUNT

Means the count of grey yarn.

AVERAGE COUNT OF YARN

(i) Yarn used in the borders of selvedges shall be ignored;

(ii) For multiple-fold yarn, the count of the basic single yarn shall be taken and the number of ends per 25.4 mm. in the reed or the number of picks per 25.4 mm. as the case may be, shall be multiplied by the number of piles in the yarn; where there is basic single yarn of different counts, the count of the basic single yarn which has the highest count shall be taken to be the count of each basic single yarn;

(iii) In the case of fabrics manufactured from cotton and other yarn, the other yarn shall, for the aforesaid purpose, be deemed to be cotton yarn;

(iv) Where there are yarns of different counts in warp or weft or both, the count of the yarn which has the highest count shall be taken to be the count of warp or weft, as the case may be; and

(v) The average count can be obtained by applying the following formula:

$$[(W_1 Z_1 + W_2 Z_2/(Z_1 + Z_2)]$$

where,

W_1 = Count of warp
W_2 = Count of weft
Z_1 = Number of ends per 25.4 mm. in the reed
Z_2 = Number of picks per 25.4 mm. in the weft,

the result being rounded off, wherever necessary, by treating any fraction which is one half or more as one, and disregarding any fraction which is less than one half.

Appendix II

Questionnaire Circulated for the Survey on Cotton Textile Fabrics

1. Name of the manufacturer ——————————
2. Type of fabrics and description ——————————
3. Nature of processing and sort No. ——————————
4. Date ——————————
5. Count warp ——————————
6. Width of the fabrics (in cms.) ——————————
7. Weight per sq. mtr. in yarn ——————————
8. Percentage of different fibre/yarn ——————————
9. Ex-factory cx-fabric stage price (Rs per sq. metre) ——————————
10. Basic duty ——————————
11. Additional duty (ST) ——————————
12. Additional duty (TX) ——————————

13. Special duty ——————————
14. Handloom cess ——————————
15. Duty on yarn ——————————
16. Total ——————————
17. *Ad valorem* incidence of duty (Per cent) ——————————
18. Wholesale price including all excise duties ——————————
19. Octroi ——————————
20. Local taxes ——————————
21. Others ——————————
22. Retail price including all duties ——————————
23. Remarks ——————————

TABLE A.II.1

Number of Observations in Different Varieties of Cloth Covered by the Survey

Sl. No.	Variety	Number of observations
1.	Dhoti	27
2.	Saree	26
3.	Shirting	117
4.	Coating/suiting/drill	25
5.	Ladies dress material	32
6.	Bed sheet/bed cover/chaddars	8
7.	Longcloth/sheeting	57
	TOTAL	292