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**Expansion of Markets and Women Workers
A Case Study of Indian Garment-Manufacturing**

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ABSTRACT

The literature on the gendered implications of expansion of markets for employment often looks at women workers as the victims of the trade liberalization process resulting from discrimination in the labour market. However, discrimination is a complex process taking different forms in different contexts leading to different outcomes. This study suggests that in the context of a dynamic industrial activity of a poor labour surplus economy, discrimination against women can take place outside the labour market. For example, employment depends on education and skills to which women have unequal access. The study is based on selected firms of Indian garment- manufacturing industry.

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INTRODUCTION

This study aims at understanding women's relative position inside a firm in the context of expanding market opportunities in India, concentrating on the garment manufacturing industry. Changes in the economic regime in India have led to an expansion of markets and technological modernization with implications for employment in general and women in particular. The literature on the implications of the macro-economic changes in the industrial sector is not gender specific (Chakravarty, 1999; 2002). However, there is a women-focused literature on women as victims of the changes in the policy regime (Jhabvala, 2002; Neetha, 2002)¹.

Expansion of markets leads to shift of resources including labour from non-tradables to tradables especially to the exportable sector. This can create unemployment in the non-exportable sectors because labour mobility is relatively lower than the mobility of other resources of production. Again, due to different socio-economic constraints within the labour force women usually have systematically lower capabilities than men and need different requirements to be mobile. These constraints on mobility restrict women to a certain distinct sectors. Usually, in developing countries, unskilled female labourers dominate the consumption goods branch of the non-tradable sector and the unprotected manufacturing of import substitutables² (Collier, 1994). Unemployment generated in those sectors as a result of expansion of markets in a broader sense³ will consequently affect female labourers disproportionately. Again, from other developing country experiences it may be expected that the retrenched female labourers may get employment in the newly emerging sectors of exportables but only at a lower wage rate than the on-going one in that sector. Garment manufacturing for exports is a case in point (Standing, 1989).

¹. However, there are some exceptions such as Dev, 2000.

². Let us assume that the economy is divided into three broad macro economic sectors of non-tradables, import substitutables and exportables.

³. Import liberalization leading to fall in prices of the import substitutables leading to crunch in production and thereby crunch in employment.

The question to be specifically asked here is: what happens as export oriented industrialization grows over time? Theoretically one would expect either male labour to shift into this activity, or female labour supply to increase, or the productivity of female labour to increase via fresh investments. Unfortunately, no significant research has been done in this direction. The scanty evidence from the traditional exporting countries does not help us to state anything conclusive about the problem.

The paper begins by briefly outlining the experiences of East and South –East Asian countries regarding export orientation and women workers. This is followed by a discussion of the sample firms of our study. The rest of the paper deals mainly with the applicability of the received ideas in the Indian context focusing on the selected firms.

THE STYLIZED FACTS

It has been found that there are certain universal regularities in the composition of exports of manufactures and related patterns of labour use by gender. Performance of developing countries in their exports of some labour intensive manufactured products such as clothing, footwear and processed foods followed by (when diversification takes place) production of electronic products for consumer and business use was typically good (United Nations 1995). That successful industrialization, or, for that matter, presence of export-led industrialization largely depended on a considerable expansion of female labour is already on record. Taking cue from these findings, we look at the scenario from the Indian context. Does this tendency of higher female labour take place as export-led industrialization gets emphasis after a long period of the import substitution regime?

The reasons for the increased absorption of female workers in export manufacturing are well known. The labour intensive products exported by the third world countries are by nature low technology-intensive ones. This is especially true for the clothing industry⁴. Consequently, the increasing cost competition in the export markets leads entrepreneurs to search for newer sources of cheap labour. It has been argued that 'young women, particularly in the newly industrialising countries of Asia, have been oppressed, both socially and economically for so long that they are

⁴. Although in recent years some technological modernizations have taken place in this industry. We will come back to this issue as we go along.

forced to develop low “aspiration” wages as well as low “efficiency” wages’ (Standing, 1989: 1080). These women are ready to work for very low wages and for longer hours under exceedingly inhospitable conditions of work. Their ‘oriental docility’ normally does not let them join unions and agitate against the management (Standing, 1989). Joeques (1995) maintains that the most important, though not the sole reason behind the differential distribution of male and female workers of different branches of industry, is the gender gap in wages in manufacturing.

An additional reason, as Joeques noted in 1995, behind women’s increasing absorption in the export oriented manufacturing, as pointed out by many researchers, (for example, Barbezat, 1993), is their alleged high turn-over rates which help make a flexible work force (Lim, 1984); that is, women workers are less likely to protest layoffs. This in fact is a corollary of the docility argument. We shall bring the reasons for gender preference (if any) into special focus later in our study.

Finally, in export manufacturing, the production process of electronic goods is highly technology-intensive and is going through continuous modernization. Though clothing is comparatively less technology-intensive, studies have pointed out a substantial amount of technological modernization taking place in the larger garment-manufacturing firms, mainly involved in exports. These changes in the production process have led to some significant changes in certain job categories. However, in the case of clothing industry, the main production line machinery, methods and tasks of production remain almost untouched by the technological modernization. It has been claimed that the new, highly skilled, posts (resulting from technological change) tend to be filled by male workers. As a result, the labour force in exporting industries is not entirely female. Moreover, Joeques (1982) claims:

Some men continue to be taken in production line positions (paid a higher wage) to act as agents of social control: they break up female solidarity.

With these stylized facts in mind we now turn to India.

THE STUDY FIRMS

Secondary data show some indications of differences between the experiences of the early exporting countries and that of India (Goldar, 2002). However, macro information often hides substantial sector-specific differences. Therefore, we decide to narrow our field of inquiry down to garment manufacturing of India. The reason behind the choice of this sector is its increasing export intensiveness combined

with technological improvement propelled by the policies for expansion of markets from the early 1980s. Moreover, garment manufacturing has been one of the most women intensive sectors in India from the beginning. For the detailed study we have chosen Hyderabad and the surrounding areas, where a large number of manufacturing units have come up in recent years. More importantly, the government of Andhra Pradesh has established an apparel export promotion park in the year 1998-1999 near Hyderabad. The firms in this park generally have high export shares in their net sales and are technologically quite sophisticated.

According to the Handloom and Textile Department of the Government of Andhra Pradesh there are altogether 31 garment- manufacturing firms in and around Hyderabad. In order to get sufficient contrasts we divide the firms primarily on the basis of export shares, categorizing those with 60 per cent or more as export-oriented units. Firms under the two categories of market orientation then have been classified by their female labour intensity and level of technological modernization. Since female labour intensity is generally much higher in the domestic-market-oriented firms compared to export-oriented ones, we employ slightly different definitions to decide the relative women intensity in the two groups of firms. For the domestic-market-oriented firms, relatively high female intensity relates to percentage of women being 80 or above and in the case of export-oriented firms it is 70 or more. Information collected from the Community Development Centre of the Apparel Export Park helped us to categorize firms in terms of modernization.

For selecting the sample, the present study has adopted a purposive sampling procedure since we are not trying to make any quantitative generalization. Table 1 describes the procedure followed. While M_1 represents the domestic market oriented firms, M_2 represents the firms which mainly cater to the export market; H_1 and H_2 stand for relatively low and high women intensity respectively and finally T_1^1 and T_2^1 represent technologically advanced and non-advanced units respectively. Table 1 gives the eight-fold classification of units.

Table 1
The Categorization of Firms⁵

Type of Market	Domestic (M1)		Export (M2)	
Percentage of Women Workers	Relatively High (H1)	Relatively Low (H2)	(H1)	(H2)
Technologically Advanced (T1)	H1T1 (A)	H2T1(C)	H1T1 (E)	H2T1 (G)
Technologically not ⁶ Advanced (T2)	H1T2 (B)	H2T2 (D)	H1T2 (F)	H2T2 (H)

Note: A, B, C and D in parenthesis thus emerge as specific types. For example, firm A is a technologically advanced, relatively more women intensive unit which caters to the domestic market.

Table 2
Basic Information About the Sample Firms

Firms	Year of Inception	Number of Workers	Percentage of Women in Total Sales	Percentage Workers Technological	Level of Exports Modernization	Performance
A	1999	900	80	40	Modernized	Profit Making
B	1996	25	85	Nil	Non-Modernized	Do
C	1995	140	69	Nil	Modernized	Break even
D	2000	30	70	Nil	Non-Modernized	Loss Making
E	2000	75	70	100	Modernized	Profit Making
F	1998	100	80	60	Modernized	Break even
G	1998	100	50	75	Modernized	Break even
H	2001	20	10	75	Modernized	Profit Making

⁵. We were requested by the management not to use the names of the specific firms.

⁶. Actually, there is no export-oriented firm which can be called technologically backward.

Considering the detailed and minute nature of information to be collected we have decided to consider only one firm under each of the 8 categories described in the Table 1.

Table 2 summarizes the important information about the sample firms of our study. The main sources for secondary information for the study were the documents collected from the Handloom and Textile department of Andhra Pradesh and the Community Development Centre in the Apparel Export Park. These secondary sources apart, we have collected data through long interviews with the management and with at least one worker from each category of every single firm. We have also laid our hands on different firm level accounts kept by the management.

DISCRIMINATION?

The issues of employment and wages of the women workers in the sample firms constitute the themes of this section. According to Table 3 total employment has increased over the years almost in every firm except in the case of firm D within the group of domestic- market- oriented firms. The decline in the total number of workers in the case of firm D is considerable. However, this is the only firm in our sample, which is making losses consistently since its inception. The percentage of female employment, however, has not increased in any of these firms catering mainly to the domestic market. While employment percentage of women has, in fact, declined in the cases of firms A, C and D, firm B shows a constant female percentage share at two points of time. The decline in the case of firm A is as sharp as 8 per cent points. But the total number of women working in the three firms A, B and C has not declined.

Turning to the export-market-oriented firms, we find that the total employment has improved generally except in the case of firm H in the year 2002-03 when compared with the years of inception. However, even in the case of firm H the decline is marginal. Percentage share of women workers on the contrary has declined, except in firm E, in the year 2002-03 in this group as well. In the case of Firm E the percentage, however, has not increased, but remained constant at the two points of time. While the employment of women workers has increased significantly in firms E and F, the total number of women workers has declined in firms G and H. In fact, in the year 2002-03, there is no woman worker in firm H. Therefore, according to Table 3, percentage share of women's employment has declined irrespective of market

orientation as well as degree of female intensity in the sample firms.

Table 3
Percentage of Women Workers in Sample Firms
in the Year of Inception and in 2002-03

Firms	Percentage of women in the year of inception	Total number of workers in the year of inception	Percentage of women in 2002-03	Total number of workers in 2002-03
A	80 (720)	900	72 (720)	1000
B	85 (21)	25	85 (23)	27
C	69 (97)	140	68 (99)	146
D	70 (21)	30	69 (9)	13
E	70 (53)	75	70 (84)	120
F	80 (80)	100	71 (107)	150
G	50 (50)	100	44 (45)	102
H	10 (2)	20	Nil	18

Note: Total number of women workers is given in the parenthesis.

Inception years are given in Table 2.

According to the stylized facts stated above technological modernization in the clothing industry changed certain job categories where new skills are essential, requiring more formal training and experience. Moreover, Joeke, in her 1982 study claims that such positions tend to be filled by male workers. This is part of the reason, she claims, why the labour force in exporting industries is not completely female.

Since the late 1980s some of the well-established exporters in the garment sector in India have started modernizing their units (Koshy, 1997). The liberal import policies for the exporters played a major role in these initiatives. Is it then the level of technological modernization which leads to the general decline of the percentage of women workers in the sample firms? In order to get an answer let us have a quick look at the level of technological modernization in the sample firms in comparison with the available standard technical advancement.

Table 4
Level of Technological Modernization of Different Firms

Description of technological advancement	Name of the firms where the specific technological advancement is available
1. Light box checking machine	A, E, F and G
2. Computer aided designing	A, E and F
3. Mechanized cutting	A, C, E, F, G and H
4. Computer aided manufacturing	A, C, E, F and G
5. Micro-processor controlled checking	A, E, F and G

Notes: firm E does not perform computer-aided designing in the Apparel Export Park. However, the designs come from their parent firm generated by computer-aided designing.

Since firm H produces garment accessories and not garments, the technological processes for this firm are not comparable with those of other units in the sample. However, the management of firm H considers their unit as technologically semi modernized in terms of available technological advancement.

Table 4 demonstrates that the level of technological modernization in firm A among the domestic market oriented firms, along with all the export market oriented firms except H, is internationally comparable. Firms C and H can be considered semi modernized and finally firms B and D are technologically non-advanced ones. Thus, it can be concluded that export-oriented firms are generally technologically more advanced when compared with the domestic market oriented firms except firm A. However, it is worth mentioning here that firm A is continuously increasing its share of exports in its net sales and in the year 2002-03, the share has reached to 55 per cent.

Combining the facts revealed from Tables 3 and 4 it becomes evident that the percentage decline in women's employment is much sharper in the case of technologically advanced firms than in the technologically backward ones irrespective of their market orientation except in the case of firm E. However, firm E cannot be held wholly as an exception here because much of its activities which relate to higher technology, such as computer aided designing, are carried out in its parent firm in Coimbatore. Moreover, production diversification of this unit is extremely limited here; in fact, men's shirts are the only product of this firm. These evidences

hint at the confirmation of the experiences of the early exporting or newly industrializing countries as shown by the stylized facts in the context of Andhra Pradesh.

Gender Differential in Wage Rates

However it will be too hasty to conclude that the decrease in the female intensity in the sample firms is the result of technological modernization since we have not looked at the distribution of men and women workers in different categories in the sample firms. Before turning to the issue of categorical divides (which we attempt to do in the next section), let us observe the management's attitude towards their female employees in the two groups of firms, catering to different markets. Change in management attitudes in general can be a proximate cause for a decline in the female percentage share.

When we asked the management 'do you have any gender preference for recruitment in all categories?' The answer was a universal 'Yes' irrespective of categories in our sample. There are mainly two reasons behind this choice behaviour. The management claim that their experience with both male and female workers tells them that women workers are more efficient and sincere in their work. The second reason is broadly related to the 'characteristic docility' of women as a result of which it is less likely for them (women) to be involved in trade union activities. The management reiterate that any kind of unionism which can lead to a strike especially in an export firm, can be extremely costly as the production is highly time bound. These reasons for employing women in the labour intensive industries of the developing countries are often cited in the existing literature (for example, Edgren, 1984).

However, the management never talked about the lower wage cost involved in employing women workers, which is the most important reason behind heavy recruitment of women in the export manufacturing of East and South- East Asian countries. We asked the question: do the rates of wage and other terms and conditions for different categories of work vary across gender? In every case, the management claimed that they did not practice any differential in terms and conditions for workers on the basis of gender.

In order to verify the management's answer, we crosschecked the wage details given by the management with the workers (preferably female) from different categories. The workers were asked how much salary a male worker earned with the same level of formal education and experience for the same category of work

as she did. Interestingly, the answer, almost in every case, confirmed that the same amount was paid both to the male and the female incumbents, irrespective of the firm's market orientation and other specificities such as level of technological modernization and female intensity. Table 5 gives a summary description of the wage rates for different categories of firms in our sample.

However, a close look at the earnings of the workers segmented by gender reveals a different fact in some cases. We find that the firms which can be considered as practicing continuous process production or which employ three shifts for production, the total earnings and the monthly wage rates for male and female workers, for each category of work, do not differ, *ceteris paribus*, irrespective of market orientation. This is the case for firm A in the domestic market and firm E in the export market. In the cases of all other firms except firm B and H irrespective of market orientation and technological status, male workers' monthly earnings are more than that of the female workers' (Table 6). In these 4 firms, however, in some cases, monthly earnings exceed the monthly wage rates even for the female workers. These inconsistencies made us go back again to the respondents both at the level of management and the workers. We find that the differences in earnings and wage rates occur because of the existence of piece rate work at times of necessity. The firms which work for three shifts in a day do not practice the piece rate system.

Table 5

Wage Rate for Different Categories (Rs. Per Month)			
<i>(Weekly or Daily Wages are Converted into Monthly Wage Rate)</i>			
Firms	Supervisors	Tailors	Helpers
A	5300/-	1700 to 2300 depends on the grades of tailoring.	1500/-
B		Completely piece rate approximately 2500 on an average	1200/-
C	4800/-	1600 to 2000 + piece rate	1200/-
D	4000/-	1600 to 2000 + piece rate	1300/-
E	5000/-	1700 to 2200	1500/-
F	4800/-	1800 to 2200 + piece rate	1300/-
G	Not available	Not available	Not available

Note:

- (1) As firm H does not produce ready-made garments as such and produces garment accessories, the work categories are different.

(2) There are generally two to three grades under the tailor category. In each case we have given the range of wage rates for each firm.

Table 6				
Earnings of Male and Female Workers in Firms C, D, F. (Rs. Per Month)				
Firms	Tailor First Grade		Tailor Second Grade	
	Male	Female	Male	Female
C	2600	2100	1800	1600
D	2000	1800	1600	1600
F	2500	2200	2000	1800

Note: The wage earnings figures are collected from the workers and they are based on their previous month's earnings. Workers themselves said that these were approximate figures because piece rate earnings were given as soon as the work was done and not together with the basic wage.

From the detailed discussions with both the male and female workers and with the management we found that in every case male workers did much more piece rate work than did the female workers. In response to the question why this was so, the management said:

We have no problems if women work after the usual working hours, in fact we prefer that, as generally a woman is more sincere in her work; but stringent labour laws do not permit employment of women workers late in the night, as we do not have transport facilities. Given the risks involved for a woman to move alone late at night it may not be advisable also.

Incidentally, both firms A and E have their own transport system and women workers work in all shifts in those two firms. Moreover, by the management view, because of different household responsibilities women workers prefer not to take a heavy load at the work place. Female workers, in their turn, confirm this fact and mention that it becomes a tremendous pressure both physical and mental, if they work beyond the usual hours. The family and husbands are ready to let them go for work but not at the cost of their own comfort. This issue of women's constrained utility maximization from her outside job has been extensively dealt with in the context of Bangladesh garment manufacturing sector in Kabeer (2001). Thus, the difference between

earnings and wage rates emerges out of the fact that men earn more by doing the piece rate work, confirming Krishnaraj's (1987) finding in the factories of Mumbai.

Does this finding contradict the argument of women's cheap labour which has been considered the supreme source of the East Asian export performance? In fact, it does not. When East Asian export industrialization started, those countries were not as poor as India. Wage rates were already quite high (Song, 2002)⁷. At the same time an educated 'reserve army' of women labour seeking employment in the industrial sector was present, ready to work at a lower wage rate. On the contrary, the Indian condition is quite different even today. The wage rates in the unorganized sector are very low, there is no employment security, and rarely any social security benefits either. It is often found that both men and women are ready to work at a very low wage (Krishnaraj, 1987). In spite of there being a few big firms, much of the garment activities in India is still carried in the unorganized sector. Moreover, in India it is still quite difficult to find educated women ready to join the industrial workforce. Women who usually work for paid employment are mostly poor. Education for a girl child in that economic category is still not common. More on this, later.

This is a point which has to be emphasized, not to contest the usual feminist understanding but to highlight the importance of contextuality. Incidentally, Appleton et al. (1990) find no evidence of gender biases in wage determination in the context of Ivorian labour markets in Africa⁸. This study points out that Ivorian labour markets were in fact more equitable in comparison with labour markets in developed countries. Moreover, Susan Joeke (1995) reports some supporting anecdotal evidence relevant to pay relativities in trade related employment in Bangladesh garment manufacturing. The economic and social conditions of Bangladesh are quite similar to those of India, if not worse. She reports that the wage gap by gender being extremely small in this case with the female: male ratio of wages being almost unity (0.97). She argues:

"One interpretation of the situation is that in order to create the kind of (female) workforce that experience in other countries suggests they will find most satisfactory, employers have offered women high start-up wages, on a par with male wages... If this 'kick-start' hypothesis is correct, employers may

⁷. "As economic success reduced absolute poverty in the 1970s, the focus of discontent shifted to the relative deprivation that most workers thought was the result of government reluctance to distribute wealth equally." (Song, 2002: 207).

⁸. As Collier noted in 1994

begin to exploit women's vulnerable labour market position once a female labour supply is established..." (Joeques, 1995: 28).

But our perception is different. We believe that for the greater part the reason lies in the generally low economic conditions of the country where men are also ready to work at very low wages. In this context it becomes irrelevant to imagine lower efficiency and aspiration wages for women alone. Increasing the demand for industrial labour in the economy may be a proximate way to increase the wages in the unorganized sector in general and garment manufacturing in particular. The case of Singapore can be considered as an example in this regard (Yue, 1984).

Let us now turn to the two firms, B and H which need a special consideration. We start with Firm B which caters to the domestic market only. This firm concentrates only on the embroidery work on women's dress materials. The entrepreneur runs the system purely on the piece rate basis. As no machine is involved in the production process, and the designs are often quite varied, it is extremely difficult to standardize the earnings of the male and female workers. Moreover, most of these piece rate workers work for other boutiques in the city as well. firm H, on the contrary, is mainly an exporting firm. This firm does not produce garments but garment accessories. Therefore the work categories and wage rates are not comparable with those in the other firms in our sample. This firm, as reported earlier does not have a single woman worker in the year 2002-03, although it had a few initially. In the context of the international experience and, moreover, the experience of the other firms in our sample, we find this fact crucial.

As a response to our question regarding gender preference in recruitment, the management said: 'we do prefer women workers as well. In fact, our own experience with the women we have had is much better than with males'. When asked about the apparent contradiction between preference and practice, the management gave the following reason:

Our firm is a very small one and primarily caters to the export market. Around six to eight months a year we mainly produce for the export market alone. In those months we prefer overtime work. After shipment for the foreign market, we do not need more than a shift of regular work for catering only to the domestic market. Women cannot work during the night shifts, as we do not have any transport arrangement of our own. So, if we employ women for the day shifts, we need male workers for the night shifts. Considering the size of

the total production, it actually becomes more costly. So we have decided to employ only male workers, but a very small number, who will be with the firm as permanent workers and will take care of the extra production at the time of need. In future we have a plan to increase the scale of production and diversify to manufacturing garments. Then we will employ women workers again.

The above discussion suggests that it is not the labour market discrimination that leads to lower earnings for the female workers. On the contrary, it is the general social constraints (sometimes in the form of legal constraints), which prohibit women to work and earn at par with their male counterparts in the labour market.

DO WOMEN CONCENTRATE IN LOWER CATEGORIES ONLY?

We now turn to the distribution of female employment in different categories in the sample firms. It has often been claimed that as a result of 'labour market discrimination', women are found to be working at the lowest categories in all industrial activities. In the Indian context, studies have pointed out women's domination in the low skilled jobs of the garment –manufacturing units of Thiruppur in Tamil Nadu (Cawthorne, 1995; Swaminathan et al., 1999⁹). Moreover, if the reason behind the decline in the female percentage share in the sample firms is technological modernization, then it is expected that concentration of women in the lower categories increases with an increase in the male concentration in the higher categories.

Table 7 gives the occupational distribution of female workers in the sample firms. This table clearly reveals two important facts. First, while women workers are concentrated in the lower categories such as helpers and grade C tailors, they are also present in the higher categories such as Designers and Supervisors, in all the firms except Firm E irrespective of market orientation, technological modernization and degree of female intensity. Secondly, again while it is true that the higher posts go mostly to the male workers, the latter can also be found in the lower categories such as helpers. The percentage of male helpers varies between 30 and 50 in different firms.

Table 8, however, has something more important to say. Here, we consider only firms A, C and E, because the detailed employment data on the basis of different

⁹. '...the classic argument that men attend to skilled jobs and women to the unskilled ones.' (Swaminathan, 1999: 110).

categories for two points of time are not available for the other firms. Let us start with firm A. In the year 1999-00, i.e., the inception year of this firm, there were no women in the categories of floor-in-charge or designer. The year 2002-03, however, shows the presence of one woman among the 4 employees in this category. The percentage of women in the category of supervisor has also improved to 10 over 0. Now, there are 3 women line supervisors. Two of them have been promoted (from Grade A tailor category) on the basis of their efficient performance, and one has joined with experience of working in some garment-manufacturing unit in Mumbai. In the case of Tailor category also, there is a notable change.

Table 7				
Number and Percentages of Women Workers in Different Categories of the				
Sample Firms as on April 2003				
Firms	Floor Incharge/ Designer	Line Supervisor	Tailor	Helper
A	One (25%)	Three (10%)	210 (70%)	200 (70%)
B	One (100%)	Nil	17 (80%)	4 (100%)
C	One (100%)	Two (50%)	60 (75%)	38 (63%)
D	No females. This firm has only one male incharge	One (100%)	6 (67%)	2 (50%)
E	This category does not exist	No female supervisor. One male supervisor	40 (73%) Trainees 30 (100%)	14 (70%)
F	One designer (100%)	One (33%)	65 (75%)	35 (70%)
G	One Designer (50%)	One (33%)	38 (58%)	21 (52%)
H	Nil	Nil	Nil	Nil

Note: Firm H produces garment accessories and not garment s; so the categories of work are different from the others. However this is the only firm that employs male workers.

While the year 2002-03 marks a significant improvement in the percentage share of

women in the upper categories of tailoring, only the lowest category shows a 15 per cent decline. The same is true for the case of category 'helper' where the female percentage has gone down to 72 in the year 2002-03 from 86 at inception. The picture is not different in the other two firms.

Table 8						
Percentage of Women Workers in Selected Firms at Two Different Time Points.						
Work Categories	Firm A		Firm C		Firm E	
	1999-01	2002-03	1995-96	2002-03	2000-01	2002-03
Floor-in-charge/ Designer	Nil	25 (1/4)	Nil	100(1/1)	This category does not exist	
Line supervisor	Nil	10 (3/30)	Nil	50 (2/4)	Nil	Nil
Tailor			69	63		
Grade A	Nil	60	NA	NA	Nil	35
Grade B	70	79	NA	NA	78	75
Grade C	85	70	NA	NA	Not applicable	Not applicable
Helper	86	72	71	63	74	71

In reaction to the question: do you prefer women workers in the higher categories as well, such as supervisor, the management reiterated that if they got an adequately educated young woman with experience they would definitely prefer the woman to a male candidate with similar background. Here, an obvious question comes to mind: why is the number of women supervisors so low, especially in the case of Firm A, where the total number of supervisors is 30? The management responds:

We are searching for women who have the basic qualifications for a supervisor. But it is extremely difficult to find that kind of women, having experience in a garment unit as well. Because of this specific reason, we have decided to give training to the most efficient women workers, so that in future we can replace at least some of the male supervisors with female ones. In fact, we have already started the process as a test case and the two female supervisors are working quite efficiently in their respective departments. ,

This suggests, in the context of our sample, that the discrimination against women

¹⁰ As Kabeer noted in 2001.

is not taking place within the labour market. It is the lack of education in general and lack of technical education in particular which makes a woman less endowed and bars her entry into the industrial labour market as such. A similar situation of difficulty in getting female supervisors is reported in Paul-Majumder et al. (1993) in the case of Bangladesh garment manufacturing industry¹⁰.

'The differential initial endowment of education and access to information and credit emerging out of different social constructs affect women's labour market participation in several ways' (Collier, 1994). In the Andhra Pradesh context, at inception, the management found it very difficult to get the required workforce, as the state was a newcomer in the area of garment manufacturing activities. The management of firm A decided to train the available workforce from the nearby villages, employing more women than men. However, the management emphasized –in our interviews- the fact that they made it a point to employ some male workers in every category together with female workers. This is very significant, and similar to the experiences of other firms as well. Initially, entry qualification for training was basic education and age below 30 years. However, the educational qualifications were generally much better in the case of male workers. The management assert that the years of schooling attained by a worker plays a very important role in the learning ability. Therefore, even if the machineries are not very complicated and jobs not quite difficult, a strong sense of co-ordination and alertness about things one is doing are essential for getting trained quickly, especially when one is totally unexposed. Theoretically this particular issue of education's overall role in increasing productivity has been substantially dealt with in the literature of industrial organization.

As a result, the more educated workers were performing better in acquiring skills compared to the less educated ones. Because almost all the male workers have passed the tenth standard (or, the school leaving examination), most of them managed to get positions in different grades at tailoring. This is more or less true for the better-educated female workers as well. However, within a year, the better-educated women in the lower categories of tailoring started performing more efficiently than better qualified males and started moving up. Table 8 corroborates this experience of the management. It is important to note here that while market orientation has nothing to do with this experience, the level of technology might have played an important role, as all the firms are not only technologically advanced but also operating within the process of continuous modernization. However, this can be confirmed with a more intensive investigation, especially of the non-modernized units.

Let us now turn to another important issue. We have already noticed that there is a general decline in the percentage of women workers in the total workforce of the sample firms, while in almost every case total employment has increased. In the context of strong preferences for female workers, this is apparently contradictory. However, the management say that the shortage of educated female workers is the main reason behind this, apart from social constraints we discussed earlier. Women face many types of constraints, which originate mainly within the household arising from the burden of reproduction and family care. Even though the level of fertility has declined in A.P considerably during the 1990s, families do not allow a woman to go for work during the first 3 or 4 years of marriage. This is mainly because of child bearing and rearing, and related issues. So, the available women workforce for the firms falls either in the age group of 18 to 22 or above 27 or so.

The incidence of education is considerably higher among the first age group women than among the second age group especially if it is after 5th standard. This is also the general trend in rural Andhra Pradesh according to the statistics reported by the Commissioner and Director of School Education, Andhra Pradesh (1999-00). However, according to the management, because of the lack of industrial culture in Andhra Pradesh, especially in rural areas, young unmarried women do not want to work. Working outside home can reduce chances of a good marriage. Therefore, the women who are available for work are in the age group 27 to 35. The comparatively lower educational attainments of these women are a hindrance to their competing for jobs.

This argument is strictly true when the category of work needs some type of skill, especially associated with handling of the machines. But the argument does not hold much water for a category like 'helpers', where uneducated or barely educated women dominate in a major way. However, Table 8 shows a considerable decline in the percentage points of women workers in the lower categories. On the other hand, while moving around inside the villages, we found a number of women workers having been retrenched from the lower categories of work after a year or so, and some more women who were ready to accept any job in the garment factory to get some additional income to support their families. (Moreover, usually a helper is not promoted to the category of tailor, while a tailor can be promoted to the supervisory category).

These facts together can mean that it is a conscious management policy to employ

some male workers in every category. When we put forward this question to the management, our hunch came true. The management of firm E (the parent firm of which is in Coimbatore) said:

In Tamil Nadu, the garment industry is female dominated. There are certain unskilled and semi skilled job categories which are specifically ear marked for women. We found that if there is a temporary shortage of women workers, available male workers with similar background demand a higher wage. And once you give a higher wage for a specific category of work, it is quite difficult to reduce it. Considering the lower female participation in the industrial work in Andhra Pradesh, we purposefully decided not to encourage any kind of stereotyping of job categories whenever it is possible.

In the context of limited labour supply any kind of stereotyping of job categories leads to labour market distortion and increases inefficiency in terms of increase in

costs. The presence of male workers in every category of work in the sample firms is therefore not because of 'breaking women's solidarity' as found by Joeques (1982) in another context. In our case, this situation is better explained as the management's conscious choice to reduce the labour cost arising out of labour market distortion.

To conclude, a major shortcoming of this study is its smallness of the sample size. However, it does open up a set of new questions which can be verified by proper secondary data and through appropriately constructed samples.

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