



## Understanding the costs of hiring women in Pakistan

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- Of the employers in our survey, 74% think women are at least as good as, if not better than, men at on-site production jobs in the garment manufacturing industry in Pakistan. However, most factories still do not hire many women on factory floors.
- This paper tries to understand this conundrum by asking: *what deters firms from hiring women?*
- We use unique firm survey data, complemented by a hypothetical-choice methodology and a behavioural game, to examine the economic and non-economic costs of hiring women.
- Findings suggest that addressing the economic constraints faced by employers in hiring women may be more important for increasing female labour force participation than changing social norms for a certain group of employers.
- Employers perceive the cost of providing safe transportation to be more binding as a cost of hiring women.
- Future studies are necessary to understand how the current key findings hold among smaller firms.

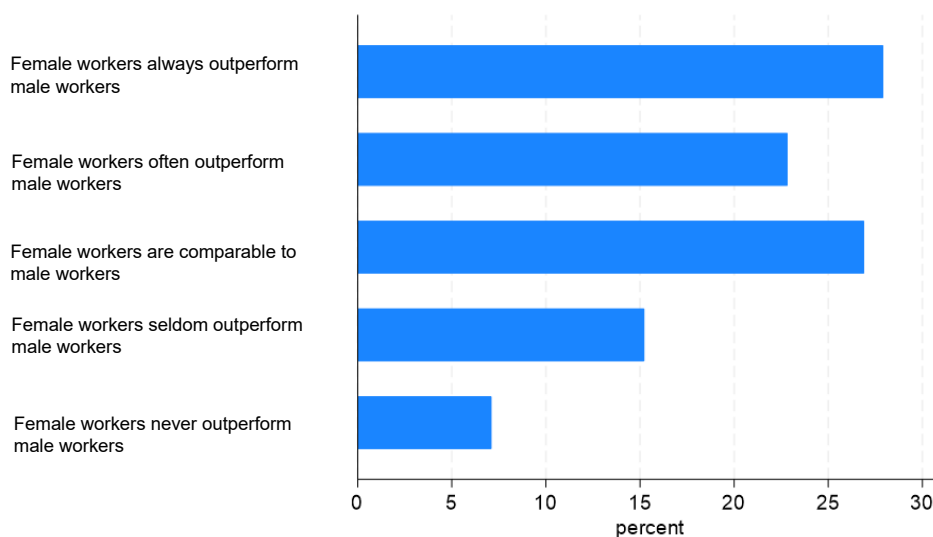
## The state of female hiring in Punjab's garment manufacturing industry

Pakistan's female labour force participation (FLFP) substantially lags behind the rest of the world and its neighbouring countries in South Asia. In 2019, the country's FLFP rate for women ages 15-64 was 22.6%, which is significantly lower than the world average of 52.6% and even low compared to the South Asian average of 25.2% (World Bank Data Bank, 2021). The social norm of physical gender segregation, prevalent in some Islamic countries, makes entering the formal labour market difficult for Pakistani women, but it can also affect Pakistani employers' decisions to hire women, as demonstrated in the recent studies in Saudi Arabia by Miller et al. (2019) and Eger et al. (2022).

Even in this environment, which can be unfriendly to formal female employment, some Pakistani employers are seemingly willing to hire women, and think women are viable job candidates. Our survey of garment manufacturing firms in the Punjab province in Pakistan shows that 74% of the interviewed employers think women are at least as good as, if not better than, men at on-site production jobs (Figure 1).

**FIGURE 1: Employers' perception of relative female job performance**

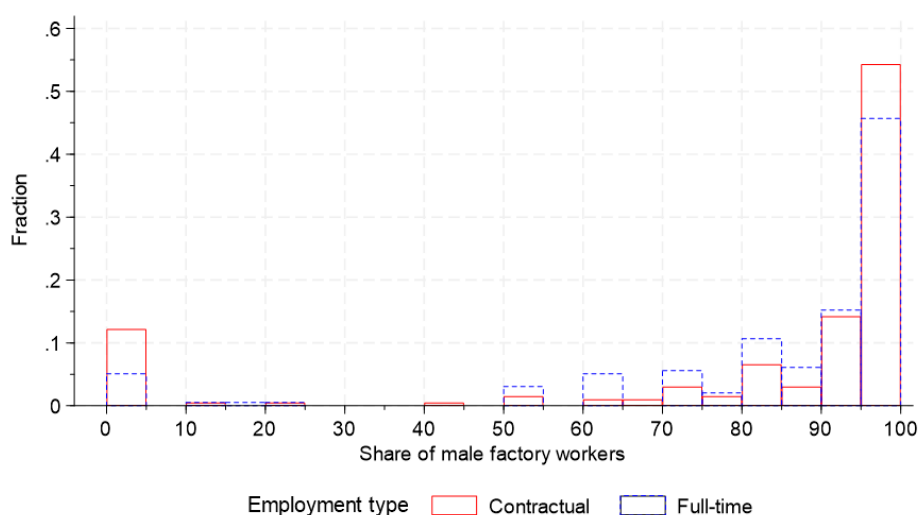
*With which of the statements do you most agree, with respect to non-finishing production positions?*



Notes: Non-finishing production positions were defined in the survey as factory positions in which people work on tasks such as knitting, dyeing, cutting, embroidery, and stitching. There is no statistically significant correlation between employers' positive beliefs about women's relative performance and their social desirability bias.

However, employers in our sample, as well as those in the greater industry, hire very few women for on-site factory positions in Pakistan. Figure 2 shows the distribution of the share of male workers for factory positions. It shows that nearly 70% of employers fill 90% or more of factory positions with men in our survey sample. Furthermore, the share of female employees in Punjab's garment manufacturing industry was only 12% in 2011, according to the Census of Manufacturing Industries (Pakistan Bureau of Statistics, 2011).

**FIGURE 2: Distribution of share of male workers at factory by employment types**



This project investigates this problem by understanding employers' constraints in hiring women in the context of the garment manufacturing industry in the Punjab province of Pakistan. We examine whether there are economic and non-economic costs associated with employing women. The main goals of this paper are to provide evidence of 1) the presence of economic and non-economic costs in hiring women, 2) whether alleviating the burden of economic integration costs can motivate firms to hire women, and 3) the potential for monetary incentives to influence the willingness to comply with social norms.

## Experiment design

To explore our research question about hiring women in Pakistani garment manufacturing firms, we conducted a unique study involving firm surveys and two experimental methods. We interviewed top managers from companies in Punjab, Pakistan, who have control over hiring policies.

Firstly, we used a hypothetical-choice experiment to understand how different costs of hiring women impact firms' likelihood of employing them. We looked at five types of costs: safe workspace, additional training, management of harassment issues, safe transportation, and compensation for household responsibilities. We varied these costs to see how they affect the probability of hiring women.

Secondly, we conducted a behavioural game to measure managers' willingness to follow social norms of gender segregation. In this game, managers sorted marbles for a monetary reward and were offered either a female helper or male helper. If they worked with a female helper, they had to balance the benefit of increased earnings against adhering to gender segregation norms. The lowest price they were willing to pay the helper, determined by a specific method, indicated their adherence to these norms. The higher the price, the more they adhered to gender segregation; the lower the price, the less they adhered.

## Sample characteristics

We surveyed 238 garment manufacturing firms in Punjab, Pakistan, in collaboration with trade associations in the sector. We partnered with the Pakistan Knitwear Training Institute (PKTI), run by the Pakistan Hosiery Manufacturers and Exporters Association (PHMA) and the Pakistan Readymade Garments Manufacturers and Exporters Association (PRGMEA). Of the total number of interviews, 197 completed all components of the survey and constitute our analysis sample. Our respondents were top managers of member companies. We define a top manager as someone who holds 1) a managerial position within a company and 2) a decision-making power that can set the company's hiring policy. A top manager, for instance, can be a company owner, executive, or hiring manager.

### Firm characteristics

The firms in our study are generally established and large-scale:

- Most are in non-residential areas with large production spaces and employ many workers. On average, they had 386 on-site employees in the past 30 days, with a median of 200.
- They have been operating for an average of 26 years, with a median of 22 years.
- 95% of these firms are exporters, with 90% holding at least one international certification.

The primary employment type is on-site contractual production, with an average of 88% and a median of 100% of workers hired contractually. However, there is a significant gender disparity:

- On-site positions are predominantly filled by men, averaging 82% in both full-time and contractual roles, with a median of 90-95%.
- By contrast, off-site contractual positions, often involving tasks like thread cutting, are mostly held by women, with an average of 6% and a median of 0% male workers.

Despite 63% of firms reporting shared spaces for men and women, over 95% have separate bathrooms and prayer rooms for women.

## Top manager characteristics

Top managers in our sample are highly educated and tend to be more accepting of female formal employment.

- Over half of them have a Master's degree or equivalent, while 87% have at least a Bachelor's degree or equivalent.
- Most of them are also married and living together with their spouses.
- The average top manager in our analysis is 41 years old, has 14 years of industry experience, and has worked at the current firm for about 10 years.
- Of these managers, 85% believed that it was acceptable for women to work outside the home and for garment manufacturing firms to hire women for both managerial and non-managerial positions.
- When asked about women's competency in common garment manufacturing tasks against men's, nearly 50% answered women always or sometimes outperform men in cutting, sewing, and finishing. Only 23-25% thought that women underperform in these tasks compared to men.

We asked top managers' what they perceived to be constraints in hiring women by occupation types.

- For non-managerial positions, the most reported constraint in hiring women was the disruption at work, followed by women's family commitments.
- For managerial jobs, the most reported constraint was the lack of women with management experience.

## Key findings

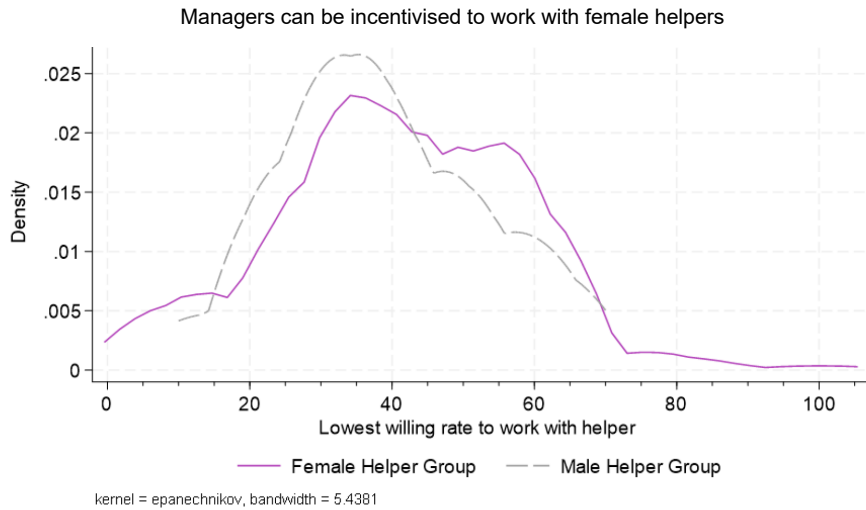
### 1. Among the surveyed firms, the adherence of top managers to social norms of physical gender segregation is not a significant factor.

Figure 3 presents the results from the marble sorting game experiment and plots the willingness to comply with social norms of gender segregation (WTC) for the group of top managers who were assigned a female helper.

- The mean WTC is 41 Pakistani rupees, which is close to the median.

- While managers have different thresholds at which they are willing to work with the helper, the gender of the helper does not seem to affect their decisions.
- Comparing the distributions of managers' reported lowest willing rate to work with the helper across the groups of managers who were assigned the female or male helper, we learn that there is not a statistically meaningful difference between the means of these groups.

**FIGURE 3: Willingness to comply with social norms**



	Mean	Median	SD	Min	Max	Obs
Assigned female helper	40.99	40.00	16.94	5	100	173
Assigned male helper <sup>†</sup>	38.33	37.50	15.00	10	70	24
Difference	2.66					
p-value	0.47					

<sup>†</sup> 10% of the respondents were assigned to the male helper for comparison.

**2. Top managers generally perceive their workers as more open to collaborating with female counterparts, and their willingness to comply (WTC) for a typical male worker does not exceed their own WTC.**

This suggests that, in the given context, traditional norms of physical gender segregation are not deemed crucial. Moreover, the study highlights that the visibility of a typical male worker's actions is a critical consideration for top managers. Concerns about male workers' behaviour towards female workers escalate when their actions are not observable.

**3. The study also points out that other factors, beyond social norms of gender segregation, play a more dominant role in influencing the hiring of women.**

Specifically, the cost associated with providing safe transportation for female workers emerges as a key determinant in the decision-making process of firms regarding the employment of women.

## Conclusion

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- 1. Addressing the economic constraints faced by employers in hiring women may be more important for increasing female labour force participation than changing social norms for a certain group of employers.**

The study has shown that even in a context where social norms around gender segregation are prevalent, such norms may not matter so much for certain groups such as well-educated managers of relatively large firms. However, these firms still hire women for only a small fraction of their total workforce.

- 2. Employers perceive the cost of providing safe transportation to be more binding as a cost of hiring women.**

While the findings from the current study suggest that assisting firms with the cost of providing safe transportation may encourage firms to hire more women, we believe that a further study that can identify an efficient way to provide such support is necessary. This is in line with the experimental findings provided by Field and Vyborny (2022), which show that the lack of safe transportation reduces women's propensity to search for jobs. Our study implies that employers are also constrained in their ability to hire women when they are unable to offer a safe means of transportation to women.

- 3. Future studies are necessary to understand how the current key findings hold among smaller firms.**

The current study sample is limited to relatively large companies, while the industry in Pakistan predominantly consists of much smaller firms. An additional study that can understand constraints of hiring women among these firms will also be relevant. Furthermore, it is important to understand whether social norms hold the same importance for top managers of smaller firms before building concrete policy recommendations.

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