


# Economic Impacts of Coronavirus-19 on Female Workers in Bangladesh's Garment Sector

Note: results reported incorporate approximately 50% of the final sample and do not yet include sampling weights, which we are working with statistician collaborators to develop.

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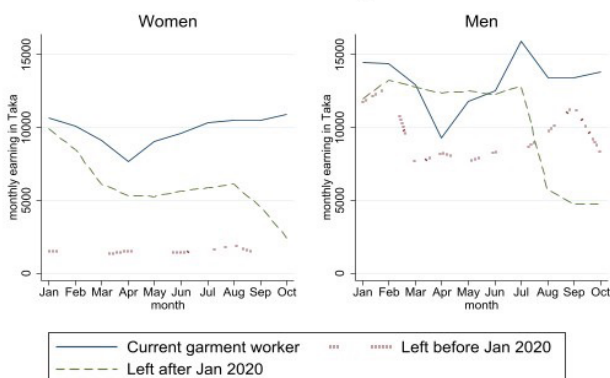
 We conducted a phone survey of garment workers during Covid-19 to see how they are faring during the pandemic.

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## Topic at a Glance

Export manufacturing in low income countries has been devastated by COVID-19. Female workers are likely to be particularly affected, given that they may be in more precarious positions with-in and lack information about their legal rights and eligibility for the government stimulus and other relief programs. This proposal develops and implements a mobile-phone based survey of garment workers in Bangladesh, to provide insights about COVID-19 responses in their workplace and the effects on workers by gender. We recruit the sample by beginning with two samples of garment workers employed in past research by the PI's and BIGD and ask for referrals from these workers, employing statistical techniques to reweight the sample to achieve representativeness. We find that, while garment sector workers experience layoffs, garment work appears to be superior to alternatives, at least during a pandemic. Employers' adoption of COVID-19 prevention practices is negatively correlated with workers' experience of COVID-19, even controlling for workers' personal characteristics.

### 2020 Earnings



Only those who have worked after leaving the garment sector included.

## New Insights

The COVID-19 pandemic struck the global apparel value chain extremely hard from multiple directions. Workers employed in apparel sectors in developing countries, which play critical roles in these countries' industrialization and economic growth, were arguably most vulnerable to this shock. In Bangladesh, where the apparel sector constitutes more than 80 percent of exports, the Bangladesh Garments Manufacturers and Exporters Association (BGMEA) reported that exports during the first 15 days of April 2020 were 84 percent lower than the corresponding period in 2019.

Our research objective is to examine factory-level heterogeneity in the response to COVID-19. In order to examine this heterogeneity, we require a representative sample of workers employed in the sector prior to the pandemic (namely, in January 2020). The central methodological challenge that we face is to recruit a representative sample of garment workers without physically entering into the community due to the COVID-19 restrictions.

To overcome this challenge, we developed what we refer to as a randomized RDS (RRDS) method. At a high level, this approach entails starting with a seed sample of respondents, eliciting their networks, randomly sampling members of their network to follow-up with, and then repeating this process for several rounds. This procedure approximates a Markov Chain on the population graph, so later waves have similar characteristics to a simple random sample.

Surveying is currently ongoing, but we have access to approximately half of our final sample size. This working sample is 40% female, with an average of 4.6 years of experience in the garment sector and 2.5 years of prior experience at their current factory. Their average pre-COVID earnings of 13,290 BDT (approximately US \$154) in January 2020 is well above Bangladesh's minimum wage for garment workers (BDT 8000). Twelve percent of respondents report experiencing one or more symptom associated with COVID-19 during January 2020. (COVID-19 symptoms listed include: Fever, coughing, diarrhea, fatigue, weakness/body ache.

These symptoms are also associated with chronic diseases that are common among poor populations, such as anemia.)

We document several key findings:

- While 17% of garment workers experienced lay-offs, on the whole, garment work appears to be superior to alternatives, at least during a pandemic. Garment workers' earnings declined approximately 33% at the height of the pandemic but have since recovered; in contrast, those who left the sector since January 2020 appear to experience more permanent declines in income. Garment workers' earnings were especially important, given spouse's job situations; the median worker's spouse (if s/he was in the labor force) was only earning 54% of their pre-covid earnings at the time of the survey.
- We document high reported adoption of a small number of core COVID-19 prevention practices among employers, but wide variation in adoption of other prevention measures known to be important for reducing spread. For instance, mask-wearing and temperature checking were close to universal, but only 30% of factories offered covid testing. Moreover, there was variation in effectiveness of prevention practices; 25% of workers were in factories with unpaid sick leave, and 38% of factories either had no handwashing facilities, or sometimes (or more frequently) out of soap.
- Employers' adoption of the eleven COVID-19 prevention practices asked about in the survey is negatively correlated with workers' experience of COVID-19, even controlling for workers' personal characteristics. Namely, a one standard deviation increase in the occupational health index is associated with 0.4 fewer COVID-19 cases.
- There was also wide variation in the stress and mental health consequences of COVID-19 in workplaces. For instance, while 50% of workers said COVID-19 had increased the stress they experience at their workplace, 30% of workers said their stress had decreased since COVID-19. Moreover, the frequency of abuse from management (Measured by the question "How often did/do you see a manager at your factory yell, hit, slap, or otherwise threaten or embarrass workers at your factory?") has fallen on average since pre-pandemic, but increased in some factories.

## Policy Recommendations

At the beginning of the COVID-19 crisis, most garment factories shut down for the official government-mandated closure period and for the BGMEA's recommended closure period afterward, totally about 4 weeks. During factories' reopening toward the end of April, there was a great deal of criticism of the move and skepticism about factories' ability and willingness to adhere to

COVID-19 safety guidelines (Daily Star; April 30, 2020). At the same time, economists emphasized that the costs to workers' livelihoods of factories' remaining closed might outweigh the risks associated with reopening (with appropriate protocols) (Barnett-Howell and Mobarak, 2020).

Our research highlights workers' experience in garment factories during a pandemic. While workers experienced some lay-offs and wage decreases during shutdowns, they fared on the whole better than garment workers who left the sectors; these earnings were especially important given evidence of spousal earnings decreases. At the same time, factories vary widely in their efforts to preserve worker's physical and mental health as they work during the pandemic, and we find evidence that workplace efforts are correlated with worker wellbeing. Our results suggest that government support for policies to support worker health and wellbeing during health crises can allow workers to maintain crucial income sources without sacrificing their physical and mental health.

## Limitations

We currently have access to 50% of our ultimate sample size, so the results could change when the final sample arrives. We are also working with our statistician collaborators to finalize the set of tools to account for the network-based nature of our sample; employing these corrections could further change our results. Moreover, while these techniques seek to account for the selective nature of working who have phones, receive referrals, and are willing to complete phone surveys, it is possible that we cannot fully account for the differences between surveyed workers and a fully random sample of workers.

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*G<sup>2</sup>LM|LIC is a joint program by IZA and the UK Foreign, Commonwealth & Development Office (FCDO) – improving worldwide knowledge on labor market issues in low-income countries (LICs) and providing a solid basis for capacity building and development of future labor market policies.*