

# Retention Incentives and Mental Health

## Experimental evidence from industrial workers in Ethiopia

**Girum Abebe** (Ethiopian Development Research Institute)

**Stefano Caria** (University of Oxford)

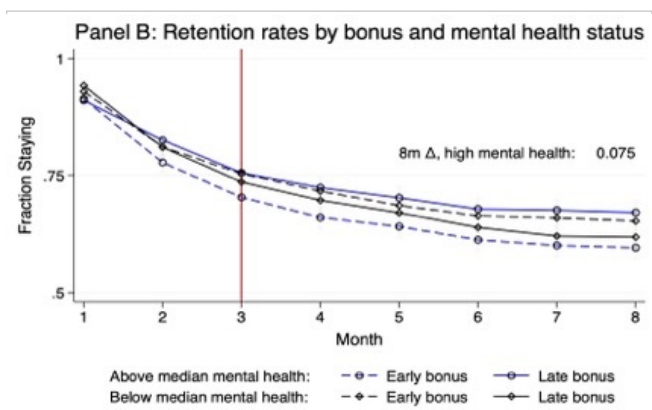
**Lukas Hensel** (University of Oxford)

*Mental health status affects the effectiveness of retention incentives for workers in industrial parks.*

Follow us on Twitter! Find @glmlc

### Topic at a Glance

This project studies the effectiveness of financial incentives for worker retention in a large ready-made garment factory in the Hawassa Industrial Park, Ethiopia. We collaborate with a large company that faces very high levels of turnover among new staff. We report the results of an RCT testing whether a generous eight-month retention bonus outperforms a smaller short-term retention bonus in inducing long-term retention. We find that the more generous, longer-term bonus does not induce additional retention. However, we show that this bonus increases retention for two pre-specified groups: workers who are particularly patient and those with better mental health at baseline. Our results suggest that financial incentives for retention (i) can have unexpected consequences on the composition of the workforce of a firm and (ii) need to be complemented by other retention policies more appealing to impatient and stressed workers to impact overall retention rates. Designing a mechanism whereby different workers can select into different types of retention policies is a fruitful avenue for future research.



Caption: Figure 1 displays retention rates of new recruits in the experiment. Blue lines indicate retention rates for workers with above-median mental health at baseline, and black lines those with below-median mental health. Solid lines indicate individuals who were offered a bonus of 2000 Birr for staying at least eight months. Dashed lines indicate being eligible for a bonus of 300 Birr if they stay at least three months. The difference in retention rates within the high mental health group at month 8 is statistically significant with  $p=0.02$ .

### New Insights

Attracting large, international manufacturing firms to create jobs is the priority of many African governments. Many countries have set up dedicated industrial parks to provide the required infrastructure and offer generous incentives for investing firms. This has been a partial success, with firms relocating from Asia to escape rising wages and make use of lower labor cost in Africa.

One key concern firms face is labor recruitment and retention, which leads to high training cost and low average productivity. This is also true in the context of our study: Hawassa Industrial Park, Ethiopia. Hawassa Industrial Park is one of the flagship projects by the Ethiopian government to attract foreign investors. It has a capacity for up to 60,000 workers and employed more than 24,000 at its peak before COVID-19.

- Worker turnover rates are high, contrary to their expectations. Workers expect to stay three years on the job. However, after three months, 26% of our sample has left our partner company. This increases to 36% turnover after eight months, for an average monthly turnover rate of 5.4%. We explore whether our partner firm can reduce costly turnover by offering targeted retention incentives to workers.

- There is substantial variation in workers' mental health at baseline. We assess their mental health using a variation of the CESD-10 scale with ten questions used to screen for depression at the population level. The questions include, among others, "In the last 7 days, on how many days did you feel depressed?" and "In the last 7 days, on how many days were you hopeful about the future?". There is substantial heterogeneity in workers' mental health status. For example, 66% report being depressed on at least one of the past seven days, while 72% report being hopeful about the future on three or more days. This variation in mental health is linked to workers' reaction to longer-term retention incentives.

- Workers with high mental health are more likely to respond to longer-term retention incentive schemes. We conduct a ran-

domized controlled trial that randomly allocates workers at our partner to different retention incentive schemes. The first group receives 300 Birr if they stay at least three months at the company. The second group receives 2000 Birr if they stay at least eight months at the company. We find that, on average, workers with the longer-term incentive are no more likely to stay until month eight compared to workers with the short-term incentive. However, when considering workers with above-median mental health, we observe that they are 7.5 percentage points (or 20%) more likely to stay until month eight. This effect is significant at the five percent level. We observe no significant effect for workers with below-median mental health. We observe a similar effect for workers with above-median patience (5.3 percentage points higher retention at eight months), suggesting that factors other than mental health might also play a role in determining decisions to react to retention incentives.

**Summary:** We conduct an RCT to study the effect of a longer-term retention bonus on worker retention in Ethiopia's flagship industrial park. We study a population of young female garment workers in Ethiopia who exhibit substantial variation in mental health status when joining work. We find that good mental health when joining the company is linked to workers' responsiveness to the retention incentive: they increase their retention after eight months by 7.5 percentage points, about 20% of the average retention rate in the sample.

## Policy Recommendations

Our findings yield two policy recommendations:

- Increasing the mental health of a company's workforce has the potential to increase their responsiveness to longer-term retention incentives. We find that workers with better mental health are more likely to respond to longer-term retention bonuses in the context of an Ethiopian garment factory. This suggests that improving the mental health of workers through counseling or other mental health interventions has the potential to enable workers to make use of longer-term incentive schemes. Companies might consider bundling their retention incentives with counseling or other mental health services to increase their effectiveness. This recommendation is particularly relevant in contexts that might induce mental health issues, such as migration, transition to factory work, or experiences of poverty in general.

More broadly, our study reveals another aspect through which improved mental health can affect economic outcomes in developing countries: their ability to respond to longer-term financial incentives that might benefit them in the long term.

- Firms should consider coupling financial incentives with other retention policies. Our results show that, on average, workers

do not respond to the eight-months retention bonus. The bonus mostly ends up subsidizing workers who would have stayed anyway without inducing any behavioral change. However, for the subset of workers with good mental health, the effects are large and substantial, suggesting a more favorable cost-benefit calculation. We observe a similar effect for more patient workers, suggesting that there are a range of characteristics that predict responsiveness. Firms that want to increase retention should thus: (i) experiment with alternative policies to boost retention among workers with below-average mental health and among impatient workers; and (ii) find ways to have workers self-select into the retention policy that would work best for them.

## Limitations

The insights drawn from our study are limited in the following aspects:

First, our findings are based on an experiment with a single firm in Ethiopia. While we think that the pattern of industrialization and the nature of factory jobs are similar to several other contexts in Sub-Saharan Africa, other factors such as cultural views on mental health, management practices, baseline compensation levels, and workers' outside options might all affect how workers react to retention incentives.

Second, our study only considers a single longer-term retention bonus scheme and does not vary aspects such as generosity and time horizon. More research is needed to understand how these aspects determine who responds to incentive schemes.

Third, our study took place in the context of the ongoing industrialization of the Hawassa region. The patterns of high turnover that are costly to firms might change once there is an established labor market with an experienced workforce that requires fewer entry-level recruits.

Read more → [g2lm-lic.iza.org/projects/future-of-work/can-temporary-financial-incentives-for-female-industrial-workers-lead-to-long-term-retention-and-a-better-allocation-of-talent/](https://g2lm-lic.iza.org/projects/future-of-work/can-temporary-financial-incentives-for-female-industrial-workers-lead-to-long-term-retention-and-a-better-allocation-of-talent/)

*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.*