The Effects of Subsidized Trainings on Young Workers and Small Firms: Evidence from Uganda

Researchers:

Livia Alfonsi

Oriana Bandiera

Vittorio Bassi

Robin Burgess

Imran Rasul

Munshi Sulaiman

Anna Vitali

Sector(s): Finance, Labor Markets

Fieldwork: BRAC

Location: Uganda (Country-wide)

Sample: 1714 workers and 1538 SMEs

Initiative(s): Jobs and Opportunity Initiative (JOI)

Target group: Job seekers Small and medium enterprises

Outcome of interest: Earnings and income Employment

Intervention type: Apprenticeships and on-the-job training Job counseling Subsidies COVID-19 response Vocational training (TVET)

AEA RCT registration number: AEARCTR-0000698

Data: https://www.econometricsociety.org/

Research Papers: Tackling Youth Unemployment: Evidence from a Labor Market Experiment in Uganda

Partner organization(s): BRAC, International Growth Center (IGC), Private Enterprise Development in Low-Income Countries, Mastercard Foundation, An Anonymous Donor

A growing number of young and unskilled workers around the world are unable to acquire the skills needed to help them secure jobs, and firms are often unable to find and hire the employees they need. Researchers evaluated the impact of offering either subsidized vocational training to unemployed youth or subsidized apprenticeships for firms on youth employment and earning outcomes in urban Uganda. Both forms of subsidized training led to greater skill accumulation, higher employment rates, and higher earnings for workers. However, the gains were larger for vocational trainees and were sustained over time.

Policy issue

Youth unemployment is a major challenge in the developing world, particularly in East Africa where the majority of the population is under age 25, and youth represent 60 percent of those unemployed. A growing number of young and unskilled workers are

unable to acquire the skills to help them secure jobs, and firms are unable to find and hire the employees they need.

Young workers face financial obstacles that may prevent them from investing in the skills that they need to find jobs. They may also face limited opportunities to pursue education past secondary school. On the other hand, firms may lack the time and resources to find, screen, and train new workers. These financial obstacles prevent workers from acquiring the skills they need to access jobs and they prevent firms from hiring workers.

Training programs are popular in low-income economies because populations are young, the quality and duration of schooling is low, and there are limited opportunities to use tertiary education as a means of transitioning young people into good jobs. Despite their popularity, there is mixed evidence on the effectiveness of job training programs. Do subsidized vocational trainings help generate skills and match young workers to good jobs? Do subsidized apprenticeships help firms find better employees? Do these programs lead to better employment outcomes overall? And which one is more effective?

Context of the evaluation

Youth unemployment is a major challenge in Uganda, the country with the second lowest median age in the world. At the time of this study, youth employment rates within the formal sector were below thirty percent, and youth were mostly engaged in insecure and informal casual work. A quarter of employed youth aged 18-25 in Uganda worked in at least one of the following sectors: welding, motor mechanics, electrical wiring, construction, plumbing, hairdressing, tailoring, and catering. Of the youth surveyed for this study, more than sixty percent were unemployed. The average study participant was twenty years old and 44 percent of participants were women.

Firms in Uganda typically consist of small and medium size enterprises in both manufacturing and service sectors. The firms in this study had between one and fifteen employees, in addition to the firm owner. Given the small firm size, job progression for a worker is therefore less likely to occur within the same firm but rather more likely to occur when the worker moves between firms.

Workers in Uganda commonly acquire skills and find work through vocational training institutes (VTIs), which are well established in the country. These institutes typically offer training courses focused on the aforementioned sectors. Workers also accumulate skills through firm-sponsored training, or apprenticeships, which are typically unpaid or require some training fee. The average worker in the study earned US$6 monthly prior to the intervention—roughly ten percent of the Ugandan average—and was normally unable to self-finance either vocational training or apprenticeships.



Three young construction trainees at a vocational training institute in Uganda.

Photo: Livia Alfonsi

Details of the intervention

Researchers partnered with the NGO BRAC to evaluate and contrast the labor market effects of offering workers subsidized vocational training and offering firms subsidized apprenticeships, both designed to improve the sector-specific skills of workers. BRAC advertised a six-month-long vocational training program at five VTIs. The 1,714 workers who applied for the vocational training were randomly assigned to the following groups:

- *Vocationally trained (VT) group:* Workers were offered vocational training in one of eight sectors with the costs entirely covered. Lessons were held Monday-Friday, and thirty percent of course content was dedicated to theory while seventy percent was dedicated to practical work covering sector-specific skills and managerial/business skills. Some of these workers were also assigned to be matched to firms operating in the same sector they had been trained in.
- *Matching only group:* Workers were not offered training, but they were matched with firms to be hired.
- *Firm trained (FT) group:* Workers were matched to firms that were offered a wage subsidy of US$50 per month to hire workers and train them with on-the-job apprenticeships for six months.
- *Comparison group:* Workers were not offered training nor matching services.

The 1,538 firms participating in the study were sampled from fifteen urban labor markets and were selected on the basis of their operating sector and firm size. Firms were randomly assigned to be matched with workers from one of the four groups listed above.

Researchers are conducting a follow-up survey eight years after the intervention to evaluate the longer-term impacts of the programs and how they helped workers weather the economic shock caused by the Covid-19 pandemic.

Results and policy lessons

Both vocational training and subsidized apprenticeships led to marked improvements in sector-specific skills, employment, and earnings; however, the gains for vocational trainees were both larger and sustained over time, likely because they acquired more certifiable skills and were hence able to move back into employment more easily than firm apprentices if they fell into unemployment.

Both forms of worker training led to a marked improvement in the sector-specific skills of workers. VT workers increased their sector-specific skills by 34 percent relative to the comparison group, who scored an average of 30 out of 100 possible points on a 20-minute skills test. The FT workers increased their sector-specific skills by 32 percent. This confirms that both training programs worked as intended and equipped workers with productive skills to a similar extent.

Both forms of worker training led to a greater likelihood of employment, longer periods of employment, and to higher hourly wages. On average, over the three years post-intervention, VT and FT workers were 9 percentage points (21 percent) and 6 percentage points (14 percent), respectively, more likely to be employed relative to 56 percent employment rates in the comparison group. Both VT and FT workers also increased the number of months worked in a year by 19 percent and 11 percent respectively, compared to 4.5 months average annual employment among the comparison group. In addition, the hourly wages of both VT and FT workers, conditional on employment, grew by 11 percent and 12 percent over the comparison group, respectively. This suggests that both FT and VT trainings had a positive impact on productivity, and so is in line with the results on skills accumulation.

Vocationally trained workers experienced more job mobility compared to FT workers. The VT treatment improved the ability of workers to move between jobs, and in particular their ability to exit unemployment. The authors found that VT workers received higher rates of job offers when unemployed, relative to the comparison group. This was not the case for FT workers. Researchers hypothesize this difference was due to the fact that only vocational skills were certified, which allowed VT workers to better show their skills to potential employers while unemployed.

Gains for FT workers materialized quickly but faded over time, while gains for VT emerged slowly but were long-lasting. While both forms of training led to improvements in labor market outcomes when averaged over the three-years post-intervention, the dynamic effects are strikingly different: FT workers started off well because of the initial placement into firms; however, by one year after the end of the apprenticeships very few FT workers were still employed at the training firms. After leaving the training firm the gains dissipated quickly, as FT workers did not experience a higher likelihood of exiting unemployment than the comparison group. If they found a job, they experienced higher wages than the comparison group—due to higher skills and productivity—but by the end of the study period their gains, in terms of employment rates, had dissipated substantially. VT workers instead started off more slowly but then gained steadily over time. The authors suggest this reversal of fortune is explained by the fact that vocational skills were certified, while FT skills were not.

VT was more cost-effective at improving worker labor market outcomes than FT. Though program costs were more expensive for VT (US$470 per trainee) than FT (US$300 per trainee), tackling youth unemployment through vocational training was found to be a more cost-effective policy option than incentivizing firms to hire and train young labor market entrants. One factor that contributed to the lower cost-effectiveness of FT was that only 51 percent of workers assigned to FT were actually offered a meeting with a firm while 68 percent of workers offered VT accepted and completed the training: a key difference between FT and VT is that with FT firms needed to agree to take on the workers, and lack of interest from firms was a limiting factor.

Based on the short-term impact results, BRAC has included trade-specific skills training as one of the core components of their Empowerment and Livelihood for Adolescent (ELA) program and expanded the target group to include youth. This has been

articulated in BRAC's Africa Strategy where they have specified a three-prong approach of ELA that includes soft-skills, vocational skills, and education. For vocational skills, the focus remains on offering training by firms (also known as mentorship intervention). However, more recent results of greater cost-effectiveness of training through vocational training institutes have sparked internal discussions to revisit the relative allocation of resources between VT and FT in their operations in Africa as well as in Bangladesh, where BRAC is implementing skills development programs at a larger scale.

In terms of follow-up projects, the results of this study have led to the development of a randomized evaluation to study the impact of skills certification on the labor market outcomes of vocational trainees and firms.[1], The main results are that the certificates improved the allocation of workers to jobs and led to an increase in worker earnings, conditional on employment. [2]

---

1. The results of this related study are reported in Bassi and Nansamba (2020): https://www.dropbox.com/s/7s6ns3t5al3et5m/Signaling.pdf?dl=0

2. A summary of the paper can be found on VoxDev: https://voxdev.org/topic/labour-markets/labour-market-impacts-soft-skills-certificates