

# The impacts of industrial and entrepreneurial work on income and health: Experimental evidence from Ethiopia

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## Appendix for online publication

### VII A brief history of the Ethiopian labor market

Over the last three decades, Ethiopia has seen the transformation of urban employment dominated by public sector work, paying skills premiums with considerable queuing unemployment, to one that is more flexible, with a rising importance of private sector work, without obvious skill premiums between the private and public sector, and with lower (but still considerable) unemployment. The private sector labor market has limited unionization and no minimum wages, and firms face few restrictions in wage setting, hiring or firing. We draw these conclusions from a literature that draws on large sample cross-section and panel data surveys in urban areas, focusing on descriptive statistics, and regression analysis using participation selectivity corrections.

Before 1991, labor market data suggest a dual labor market in Ethiopia, as urban young people queued for public sector jobs, allocated in part by patronage. Ethiopia was a controlled (command) economy, with strong controls on labor mobility. There was centralized recruitment and deployment of civil service personnel and employees of publicly owned companies. Workers were not allowed to move without permission. The private sector was repressed, with very few larger private sector companies. By 1989, more than 75 percent of those aged 15-29 in formal wage work were working for government and state-run enterprises.<sup>53</sup> The public sector was paying better than the private sector. Krishnan (1996) estimated selectivity-corrected Mincerian earnings regressions to find returns to secondary

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<sup>53</sup>Krishnan (1996), using data from the Survey of Adolescent Fertility, Reproductive Behavior and Employment Status of the Youth Population in Urban Ethiopia, 1990, representative of urban areas.

education that were 65 percent higher for public sector employment than private sector wage work. She also found that connections (in the form of family background) strongly influenced whether a public sector job could be obtained.

Post-1991, these restrictions were gradually removed, with the end of central recruitment. Still, using data from 1994, Serneels (2007) found that the informal sector remained small and the urban labor market preserved the qualities of a dual sector with queuing for scarcer public jobs. Using data from a random sample across 7 urban areas, 80 percent of male adults in a wage job were employed in the public sector. The data suggest there was a large pay gap between public and private organizations—80 percent higher pay in the government sector for men (although that is not by skills). With a third of the labor force supposedly looking for work, there was also large unemployment, larger than what we usually see among urban workers in sub-Saharan Africa.<sup>54</sup> The urban informal sector was also surprisingly small throughout the 1990s, as there were about as many people in formal wage work (private and public) as in the informal sector.

Thus urban unemployment was most highly concentrated among very young men. In 1994, half of men between 15 and 30 reported they were unemployed, but this peaked at 19 years of age (Serneels, 2007). In 1989, only a third of the same group was unemployed, suggesting a rapid increase (Krishnan, 1996). Rather similar to 1989, however, in 1994 young men had a median duration in unemployment of nearly 4 years, and a majority of the unemployed had never held paid work in their lifetimes. Half the men aged 15 to 30 reported searching for a job in the public sector, implying job queues for this sector were far in excess of the employment opportunities. Of the remainder, half were indifferent between informal sector and private sector wage work.<sup>55</sup>

But a shift towards informality was already underway in the 1990s. Comparing

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<sup>54</sup>See Kingdon et al. (2006) for a comparison with Ghana, Uganda and Tanzania.

<sup>55</sup>Education raised unemployment as well, and as returns to education remained higher in the public sector in this period (Krishnan et al., 1998), this is suggestive of a ‘queueing’ story. Similarly, having a father in the civil service raised unemployment—but duration of unemployment was lower the higher family wealth and connections (Serneels, 2007), similar to the Krishnan (1996) results: particular types have good reasons to queue, as they can be more successful to get the prized public sector jobs. This is not inconsistent with the early conclusion by Myrdal (1968) that unemployment in developing countries like Ethiopia is a ‘bourgeois phenomenon’.

panel data for the same group of young male adults in 1989 and 1994, among those working in 1989, 58 percent were in public sector wage work and only 20 percent in the informal sector. By 1994, this was 31 percent in public sector wage jobs and more than half in the informal sector. So while there was still queuing, probabilities of success were declining fast.

From 1994 to 2004, private sector jobs began growing quickly.<sup>56</sup> Not only were far fewer public sector jobs created in urban areas, but also central recruitment and other restrictions on the inter-sectoral movement of labor were removed, resulting in much more labor market flexibility. Private formal sector wage employment doubled in this period. Large public wage premiums remained, but the link between this premium and skills disappeared. There was also increasing mobility between these three sectors (private wage, public wage and informal). The increase in the rates of mobility, especially after 2000, across sectors of employment was accompanied by a small but persistent decline in the rate of open unemployment.

Franklin (2014a) used data from the Urban Employment and Unemployment Survey to assess labor markets in 2012. Unemployment among those aged 15-29 was estimated now at about 25 percent. Many of them aspired still to government jobs. For very low levels of education, they still pay better, though there is no skill premium anymore for higher levels of education. But the labor market is much more flexible and the private sector plays an increasingly important role offering stable employment opportunities. Median unemployment spells for these young adults are 13 months, and there is much evidence of temporary wage work, mainly in the private or informal sector. Of those in work, a quarter were in public sector jobs, a third in private sector jobs and the rest in the informal sector including domestic work.

Labor hiring, firing and compensation is governed by the 2003 Labor Law (FDRE, 2003). It does not stipulate a minimum wage, but allows for trade union activity and collective bargaining, without requiring it. Active unions and collective bargaining, including over minimum wages, are very common in the public sector and state-owned enterprises, but not in the private sector (ILO, 2011). Unions are

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<sup>56</sup>See Bigsten et al. (2013) who use panel data covering 10 years. The data have some problems: this is a panel so we observe aging and attrition of older workers.

present in some private enterprises, but union activity is largely focused on workers' rights and benefits, and on specific labor conditions. Unionization remains limited, with less than 13 percent of workers on salaries or wages belonging to a union (ILO, 2011). In general, employers can set wages without frictions in the form of legal restrictions or reference to unions.

## VIII Firm and cohort details

This section provides additional firm, job, and process details for each cohort. Table B.1 summarizes details of each cohort's recruitment, randomization, and grant implementation.

### 1 Beverage producer

The beverage plant is located in a town of roughly 200,000 people in the Oromia Region, around 20 km outside Ethiopia's capital Addis Ababa. The plant manufactures bottled spring water as well as flavored water in various bottle sizes, mainly for domestic consumption. In 2010, the plant was more than a decade old, had approximately 150 employees in total, and shared the site with three non-beverage firms owned by the same parent company, a domestically owned investment firm. We learned of the firm and the opening through personal contacts of the authors.

The firm operated six days a week, 24 hours a day, with three 8-hour shifts, and workers rotate through shifts over time. The nightshift is unpopular. The firm had a reputation for being quite lenient with personal leave, personal breaks, or lateness, and some workers reported this is one reason they did not leave for other factories. About three-quarters of production staff are women. Women typically engaged in washing, labeling and bottling, whereas men performed more labor-intensive work such as packaging, loading, and operating heavy machinery.

Ownership changed several times between 2009 and 2014. In 2014, upon visiting the factory, we learned that it had filed for bankruptcy, had been closed for some months, but had just reopened.

Workers were organized in a local union, which mainly advocated for small

Table B.1: Cohort recruitment, randomization, and implementation details

Characteristic	Horticulture							
	Beverage producer (1)	(2)	farm (3)	Flower farm (4)	Shoe factory (5)	21/5/2012 (6)	Garment & Textile factory (7)	(8)
Job start date	5/4/2010	5/4/2010	3/10/2011	2/11/2011	28/1/2013	21/5/2012	11/5/2013	24/6/2013
Number of openings	15	19	30	50	50	30	45	65
Minimum education	8	8	n/a	n/a	n/a	8	6	6
Applicants	288	101	101	~170	230	114	210	263
Eligible applicants	60	68	90	152	190	90	197	226
Surveyed and randomize								

changes to working conditions (e.g. reassigning pregnant women to physically undemanding tasks), advocating for benefits (such as maternity leave), and on rare occasion organizing walkouts in the event of late pay.

**Compensation** In April 2010, the plant offered starting salaries for 350 Birr a month to unskilled workers, with wages rising up to 600 Birr for more experienced workers. Managers and workers all agreed that pay is based mainly on seniority rather than productivity and ability, although ability and experience is one factor in promotion to more complex and higher paid tasks. Inexperienced workers begin with simpler jobs, in the bottle washing department for instance, but can graduate to higher skilled jobs in the firm. There are no incentive programs or bonus schemes. The cohort we study was not eligible for benefits, though in later years the firm introduced three months of maternity leave and transportation services for local commuters.

Firm managers were aware that turnover was high in part because other factories in Burayu were paying higher wages, in some cases twice the wages of Burayu, and because seasonal construction work also offered men higher wages. They increased starting wages several times from 2010–13, in part to keep pace with inflation and in part to reduce turnover, but their wages remained at the lower end of the scale compared to other factories in the town. When asked why wages were not increased further managers noted that they were uncertain whether this was profitable, or how much it would reduce turnover. One manager felt that turnover had only a modest impact on the firm because experienced workers were not required for the work, though it meant they seldom operated at full capacity as a result. Managers were also aware that the work flexibility and leniency allowed them to pay a lower wage (which some workers confirmed). They explained they were also cash flow constrained, and were facing increasing competition and falling real prices from new beverage producers, and so raising wages was not financially possible.

**Health and hazards** Most of the issues reported were concerning the chemicals used for washing bottles. In interviews, workers attributed respiratory issues, skin rashes, fainting, and in one case a lost pregnancy to these chemicals. From 2010–14,

one serious accident could be recalled, when a new trainee lost three fingers in a machine. In general, moreover, the work could be physically demanding, especially the lifting and carrying of heavy water bottles and packages, and standing a full shift at bottling machines. Also, the factory was not heated and could become quite cold at night (especially if wet), to which many employees attributed common respiratory illnesses.

**Recruitment and randomization, first cohort (March 2010)** For the first cohort, the firm sought 15 workers to work on an expansion project for producing 5 liter bottled water. They also planned to move some excess workers out of other jobs to staff this new line in addition to the 15 new hires. Firm managers expressed a preference for a specific number of females and males.

We assisted the firm in advertising the factory jobs in the greater Burayu area in 5-6 different sites between Burayu town and the next nearest town. Approximately 100 advertisements were posted for a period of 4 days.

This resulted in more applicants than expected: 327. The firm screened and deemed eligible just 60 eligible partly on qualifications (at least eight years of education and who lived in the town where the firm is located, since the firm pays transport costs to and from work) and partly on a first come first served basis. Prior factory experience and age did not influence eligibility. 7 of the 60 could not be located for the baseline or randomization and were dropped from eligibility before randomization. There were 19 men and 34 women.

The randomization of the 53 to the job offer or pure control group was not stratified. We conducted the randomization by public draw, for transparency and buy-in by the sample.

**Recruitment and randomization, second cohort (March 2011)** In the second wave of hiring, the firm sought 19 workers to work on a further expansion project replace workers who had left other lines. They expressed a preference for seven females and 12 males. Females are typically preferred for assembly line works such as packing, labeling and quality checking, while males are typically preferred for jobs that require physical strength, such as loading and unloading products.

We assisted the firm in advertising the factory jobs in the greater Burayu area in 5–6 different sites between Burayu town and the next nearest town. Approximately 100 advertisements were posted for a period of 4 days.

101 applications were received. Factory staff screened the applicants according to the understanding of working conditions and shift work, prior work experience, education, salary expectations, and proximity to the site. Consequently, 68 eligible applicants were identified by the firm and we surveyed all of them.

The 101 was sufficient but lower than expected and so two enumerators conducted informal qualitative interviews to assess the relative lack of interest in the job compared to the previous year. Major reasons included low pay relative to construction and public works day labor, as well as higher wages in other Burayu firms. The factory notice also requested that each applicant have a personal reference; even though this was never used in screening, it may have deterred some applicants.

We randomized using computer algorithm, stratified by gender. 23 (not 19) were assigned to the job offer, anticipating some refusals. (This is the only time we offered excess jobs to the sample. Refusals in future firms/cohorts would be offered to people outside the study sample.)

**Grant intervention** No cash grant program was conducted for the first cohort. The second cohort was the first time the cash grant program was conducted. We could not find an Ethiopian non-profit organization willing to disburse cash grants with only basic training, and so we hired a private consultancy to disburse cash and provide training. The training commenced at the end of April 2011, roughly three weeks after the jobs began. We disbursed the grant in two tranches, roughly a month apart.

## 2 Vegetable farm

The horticultural farm is one of the main Ethiopian exporters of fruits and vegetables. Using open fields and greenhouses with modern irrigation technology, the firm produces various types of vegetables, fruits and flowers for domestic and foreign consumption. It is comprised of six farms located in different parts of the



country, with headquarters in Addis Ababa. The firm is foreign owned and managed. We first established contact with the farm through a national horticultural association, via local research managers.

We worked in a one-year old site roughly 300 kilometers south of the capital, just outside a local capital city of roughly 200,000 people. It operated several greenhouses producing vegetables primarily for export. It employed nearly 250 production workers. There was one daily shift, and workers were required to work 8 hour days, 6 days a week. In practice shifts could last 10 or 12 hours, workers being required to complete their daily tasks, and there would not be paid for these extra hours. In busy seasons workers would work the seventh day of the week, typically for double pay, but receive no days off that month.

Eighty percent of workers were female, due to a preference of the company to hire women, and all were permanent rather than part-time or seasonal employees. Workers performed a range of activities including land preparation, harvesting, planting, greenhouse maintenance, transporting products, cutting, and chemical spraying. The majority of workers lived near the farm and had their own crops to cultivate. Work at home was a major source of absenteeism.

The study firm is the largest commercial farm in the area. Its competitors tend to hire short term labor rather than offer permanent contracts, but also pay slightly higher wages as a result.

Workers established a local labor union shortly after the study cohort began working (one did not exist before because the firm was so new). The union was semi-active, and tended to inform workers of their rights and responsibilities, intervene if there was a disagreement between workers and supervisors, advocate for higher wages, inquire as to the reasons workers were fired, and intervene if the reasons were deemed insufficient. A strike was threatened in 2014 for the first time.

**Compensation** In 2011-12, wages varied from 480 Birr to 600 Birr a month (in 2011 Birr) depending on position. Harvesting and crop culture paid lower salaries, and breeding and chemical spraying paid higher salaries. Chemical spraying wages were partly to compensate for unpleasantness and risk, so those in the chemical

department earned higher wages than others. Wages increased annually by about 10-15 percent (inflation was roughly 10-25 percent over the period). Managers and workers generally agreed that pay was tied to seniority, absences, and ability. The highest performing workers were recognized twice annually with prizes, and workers can receive end-of-season bonuses based on performance and attendance. Bonuses can be as high as 280 Birr per month.

Shortly after the study cohort began working, the farm began offering some transportation services to workers. Workers also had access to a clinic free of charge. Women received three months of maternity leave, and all received two weeks of annual leave, plus time off for emergencies.

Despite relatively high turnover, it was not a major management concern, in part because they were easily replaced and skills and experience were not deemed essential. It did mean that the farm was always running slightly below capacity however, and this was the chief disadvantage cited.

**Health and hazards** The workers we interviewed described chemicals and dust in the workplace as a major health risk, though many didn't specify how they were directly affected by it, and their responses overall didn't seem to indicate high anxiety about their occupational hazards in the workplace compared to other study firms. Some workers described having eye and skin irritation from contact with the chemicals sprayed on plants, and one woman attributed a lost pregnancy to the chemicals. Chemical spraying staff were equipped with masks and were tested for chemical toxicity in their blood every three months. Those with elevated toxicity were reassigned to another department for 6 months before returning to chemical spraying.

There is no piped water at the factory, thus workers reported they sometimes get sick when drinking from stagnant water jugs provided by the firm. Others complained of eye issues resulting from the intense reflection in the greenhouse. The region is malarial, leading to high illness, but it is not clear the risk is elevated in the farm.

**Recruitment and randomization** We worked with the firm to post 20 advertisements at the farm premises and the furthest distance the farm allowed workers to come from (based on walking distance and public transport). The firm’s human resource office registered 101 eligible applicants.

The HR officer deemed 90 of the applicants eligible, in that they were (visually) in good physical condition and between the ages of roughly 18 and 35. There was no educational requirement, unlike manufacturing firms. the firm preferred to hire 90 percent women, so the majority of the sample was female. We found and surveyed 89 of the 90. Some Amharic enumerators used local translators to deliver the survey to respondents who spoke only a local language. In future surveys we made sure to have local-language trained enumerators, for all cohorts.

We randomized the 89 via a computer algorithm: 30 to receive the job offer, 29 the grant, and 30 the pure control group. Randomization was stratified by gender.

**Grant intervention** The training commenced roughly two weeks after the jobs began. Grants were disbursed in two tranches, roughly a month apart. the same private consultancy ran the grant intervention.

### 3 Flower farm

The flower farm is located roughly 100 km south of Addis Ababa in the Oromia region. It is foreign-owned and had been established almost a decade before. The farm grows two species of cut flowers for export to Europe, and employs anywhere from 700 to 3,000 workers, depending on the season. As of December 2011 the firm employed over 2,000 people, a majority of whom were permanent production workers. Field research managers established contact with the firm through the national horticultural association.

The firm operates seven days a week, and workers work 5.5 days a week, in one shift a day. Three quarters of production workers are women. Production workers perform several tasks including plant breeding, propagation, crop culture, harvesting, cooling, and “elite” (i.e. preparing the mother plants for propagation). Most workers are from the surrounding area, or have migrated from the south and

southeast regions of Ethiopia. They typically live with family members or other factory workers to minimize the cost of living.

The firm has an unusually active labor union, which established a collective bargaining agreement with management. This agreement details the benefits, leave, bonus, materials and protective gear provided to workers, and is negotiated each year. Additionally, the union is responsible for informing workers of their rights and responsibilities, chemical re-entry scheduling (i.e. determining when workers may re-enter the greenhouse after spraying), and intervening if workers are fired unjustly or have disagreements with management. Indeed, there have been a few instances in which workers who management had intended to fire were kept on after the labor union intervened. There have been three strikes at the company, in 2011, 2012 and 2013, over pay, national pension contributions, and the expiration of contracts, and all strikes resulted in many of the worker demands being met.

**Compensation** In 2012, wages varied by department, from 422 ETB to 726 ETB (\$24-41) a month. Those in the chemical department earned higher wages than others. Wages increased annually by 25 percent (inflation was roughly 10-25 percent over the period). There are 20 promotion levels, and each worker was promoted one level a year. Workers could also move up levels based on ability, according to supervisor evaluations. Workers generally agreed that pay was tied to both seniority and ability. There are no bonuses or incentive pay schemes.

Workers commonly work seven days a week or other overtime and receive 2.5 times hourly pay for these extra hours.

Shortly after the study cohort began working, the farm began offering some transportation services to workers. Workers also had access to a clinic free of charge. Women received three months of maternity leave, and all received two weeks of annual leave, plus time off for emergencies.

Management were aware of the high turnover issue, and felt that turnover negatively affects the firm because new workers must be trained for one month, thereby increasing costs and reducing productivity. Supervisors also agreed that turnover results in significant losses for the firm since new workers must be trained and remaining workers often need to work overtime to cover the increased work burden.

In general this was one reason that the firm aimed to keep wages competitive with other farm jobs in the area, and also for the bonus scheme.

**Health and hazards** Workers complained of the excessive heat in the greenhouses, the chemicals being sprayed, and not being given sufficient water. Several workers complained the chemicals used cause skin irritation and respiratory issues. Workers are provided protective clothing, including masks, gowns, gloves, and closed-toed plastic shoes. The firm performs a chemical toxicity test on production workers every three months. If test results are below a certain threshold (which indicates one has been exposed to toxic chemicals), workers are moved to another department and tested monthly. When their levels return to normal, they are returned to their previous posts.

Regarding water, one jerry can is brought to each greenhouse in the morning. Everyone in the greenhouse drinks from this jerry can and once it's gone, workers are not permitted to drink additional water. Workers attributed kidney problems, urinary tract infections, swelling of the legs, and frequent fainting due to the excessive heat and inadequate water. The region is malarial, leading to high illness, but it is not clear the risk is elevated in the farm. The firm conducted an internal absenteeism study in 2012, which reported that 27 percent of workers interviewed self-reported that they became sick at least once as a result of the firm's working conditions.

**Recruitment and randomization** Advertisement by word of mouth was deemed sufficient to attract a large pool of applicants. The firm required applicants to be female and at least 18 years old. Registration and screening occurred concurrently. 190 applicants were registered, and a small but unknown number were turned away. The baseline survey and randomization took place the following day, and 152 appeared for the survey. The firm preferred to limit randomization to these 152 since they displayed enough interest in the job to attend the survey.

We randomized the 152 via a computer algorithm: 50 to receive the job offer, 50 the grant, and 52 the pure control group.

Grant intervention The training commenced roughly two weeks after the jobs began. Grants were disbursed in two tranches, roughly a month apart. The same private consultancy ran the grant intervention.

#### 4 Garment and textile factory

The firm has two main plants on the same site: one that produces and dyes textiles from raw materials, and another that produces garments, principally for export to the United States and Europe, including a large number of major retail brands. The firm is located just outside the capital of the Tigray region, Mekelle, about 775km north of the capital. It is domestically owned, and had been in operation nearly a decade. In 2012 the firm employed over 1,400 people, a majority of whom were permanent production workers. Field research managers established contact with the firm through a firm visit.

The firm operates six days a week and workers work the full six days, eight hours a day. There were three overlapping shifts a day, with no night shift. 85 percent of production workers are women, and jobs are not officially segregated by gender. Production workers operated heavy machinery in the spinning and weaving and dyeing processes, and operated small machinery (such as sewing or cutting machines) in garment production.

The firm had an active labor union, which mainly advocated for small changes to working conditions and advocating for worker's rights and benefits. We were not aware of any organized labor actions or collective bargaining.

Compensation In 2012, the starting salary for production workers was 417 Birr per month, and management reported that after four to six months, depending on the job, workers could earn between 100 to 200 Birr more per month. The textile plant was typically staffed with the more experienced and higher paid workers, because of the skill required to operate the machinery. There were no other major textile or garment manufacturers in the area, and so most of this experienced was accumulated in-house. Workers could increase their pay principally by demonstrating ability and moving to more high skilled positions. Our study sample generally

started in the garment manufacturing (lowest skilled) side of the business. There were no bonuses or incentive pay schemes during the study period, though one was introduced in 2014. Double overtime pay was offered for working a seventh day or holidays.

The firm offered some transportation services to workers. Workers also had access to a clinic free of charge. Women received three months of maternity leave, and all received three weeks of annual leave, plus time off for family events and emergencies.

Management were more concerned about turnover at this firm than the other study firms, in large part because the new workers must be trained. Losing workers diminished productivity and led them to incur direct training costs. Some managers attributed high turnover to the practice of hiring workers with a 10th grade education or more, who would quit the firm to pursue higher-paying opportunities outside the manufacturing sector, or to continue their education. In 2014 the firm was considering lowering their minimum education level to sixth grade.

**Health and hazards** The most common health issue reported was respiratory infections (difficulty breathing, coughing, and congestion) from exposure to dust particles and chemicals in the factory. A couple of workers also maintained they had kidney infections from not being permitted to use the washroom or drink water throughout the day. One worker explained that there are only four or five toilets for over 1,000 workers; therefore, it is difficult to use the washroom in the allotted 15-minute breaks.

**Recruitment and randomization (three cohorts in 2012 and 2013)** This was a period of expansion for the firm, and workers needed to be replaced because of turnover, and so the firm sought to hire 30 people in May 2012, 45 in May 2013, and 60 in June 2013. All three cohorts proceeded similarly.

Jobs were advertised on the front gate, and we assisted the firm in posting advertisements within a few kilometers of the firm, including the capital city. Each hiring round advertised to a slightly wider area.

The firm required applicants to at least 18 years old within a specific education

range: 8 to 12 years in the first cohort, and 6 to 12 in the second and third cohorts. Applicants with higher or lower qualifications were rejected. Staff then gave applicants basic physical tests: (i) for minimum height (to be able to reach necessary parts of the machinery); (ii) an eye exam; (iii) ability to walk back and forth rapidly; and (iv) a threading test (passing a thread through ten needles on a piece of wood). Ignoring applicants who did not meet the basic gender and education criteria (on whom we do not have data), 90 of 114 applicants passed the physical examination and were deemed eligible in the first cohort, 197 of 210 in the second, and 226 of 263 in the third cohort.

We randomized eligible applicants via a computer algorithm, only including those who re-appeared for a baseline survey. In the first cohort, a large number quit within the first few weeks, and the firm had trouble replacing them rapidly. Thus in the second and third cohorts we randomly selected about 40 applicants as a reserve list for the firm to draw from in the coming months, and excluded them from the study sample and initial job/grant randomization. In the first cohort, 30 received the job offer, 29 the grant offer, and 30 neither (no gender stratification). In the second cohort, 45 received the job offer, 45 the grant offer, and 50 neither (all were women). In the second cohort, 60 received the job offer, 60 the grant offer, and 68 neither (all were women). We did not survey or follow the reserve list individuals.

**Grant intervention** The training commenced roughly two weeks after the jobs began. Grants were disbursed in one tranche. This time we ran the grant intervention through a parastatal organization with the field research managers overseeing much of the activity, to reduce overall implementation costs (since the private firm was subject to taxation, which increased implementation cost by about a third).

## 5 Shoe factory

The firm has two manufacturing plants in Addis Ababa and 28 retail outlets, and manufactures leather shoes for both domestic and international markets. About 90 percent of sales are domestic, with the balance mainly to Italy and China. It was a parastatal in operation for more than 75 years and was privatized in 2011, being



bought by an Ethiopian national. We worked in their largest plant, with over 700 production workers in 2013. We established contact with the firm through a survey enumerator's professional contacts.

The firm operates 5.5 days a week, in one shift a day, but managers and workers explained that there is effectively mandatory overtime evenings and weekends—about 1–2 hours a day when production demands it, plus Sunday. Production workers are both male and female and perform several tasks including leather cutter, sewer, sole adhering (gluing), stitching, packaging, and assistant or “helper” positions for several of these manufacturing tasks. The firm is centrally located in Addis Ababa and draws workers from around the city. Shoemaking is a longstanding and traditional enterprise in Ethiopia, and there are many large and small firms in the capital.

The firm has a labor union that bargains on behalf of workers and is involved when workers are fired (due to misbehavior and other issues). Additionally, shortly after the baseline survey, a few workers went on strike because they disagreed with their supervisors and asked that the supervisors be shifted to another section. They were partly successful.

**Compensation** This was the firm with the most sophisticated compensation scheme, and also the one firm where workers had the most upward mobility inside and outside the firm.

In 2013, compensation varied depending on the duties assigned, and appeared competitive for low-medium skilled labor in the area. The average monthly salary for helper positions (those our cohort was hired for) was around 715 Birr a month. Workers were promoted based on ability and experience (especially the operation of technical machinery and specialized tasks), and fast learners or those with previous experience may begin earning anywhere from 1,200 to 1,500 Birr a month within six months to a year of being hired. The firm would pay more skilled workers within a level a higher wage than others, even if this caused disgruntlement. There was a 300 Birr bonus for every employee after a year of work plus other bonus schemes contingent on the firm's profitability. Low-level workers could easily earn another 250 Birr per month in overtime pay per month.

The firm did not offer transportation assistance, but the salary was said to in-

clude a “transportation allowance”. Workers also had access to a clinic free of charge. Women received three months of maternity leave, and all received two weeks of annual leave, plus time off for emergencies.

When asked to explain the low starting wage level, managers explained that new workers are typically unskilled and therefore require training. During this training period, the firm incurs additional expenses (e.g., in extra materials needed for training) and the trainee does not produce at full capacity. He further noted that because a regular employee must assist the newcomer, this experienced worker is also slowed down, thereby negatively impacting the firm’s production and justifying the low wages new and unskilled laborers receive.

Unlike other study firms, turnover at the shoe manufacturer commonly came from (i) urban students taking temporary work until returning to school, and (ii) people going to work for other shoe firms. Because of the training investment, the firm viewed turnover as a major problem. This is one reason given for its complicated compensation scheme. Nonetheless, managers admitted that the cost of hiring and retraining a new unskilled worker was not that high.

**Health and hazards** According to a 2013 firm-led survey, 94 of the 103 workers polled (91 percent) believed working conditions at the factory were unfavorable to one’s health. Specifically, workers cited a (i) lack of sanitation in the office and toilet, (ii) lack of safety equipment to mitigate the inhalation of fumes (such as glues), (iii) lack of skilled medical personnel on-site, iv) standing the entire day while at work, (v) high temperatures in the factory, and (vi) chemical fumes and dust particles. All of the factory jobs, with the exception of sewing, require workers to stand the entire day, causing health issues such as swelling in the legs. Because of the equipment, there were previous experiences with serious injuries to fingers and hands. Many workers also complained of kidney problems.

**Recruitment and randomization** Advertisement by word of mouth, and a notice on the plant was deemed sufficient to attract a large pool of applicants. There were no education or gender requirements, though the firm prioritized candidates aged 18 to 38 and disqualified applicants who suffered from a history of epilepsy, kidney,

heart, or leg problems. Of 230 applicants, 190 were deemed eligible and were registered, and 158 appeared for the survey.

We randomized them via a computer algorithm: 50 to receive the job offer, 50 the grant, and 58 the pure control group.

**Grant intervention** The training commenced roughly two weeks after the jobs began. Grants were disbursed in one tranche. The intervention was handled by the parastatal partner.

## 6 Baseline characteristics by cohort

Table B.2 reports baseline summary statistics of cohorts by firm.

Table B.2: Summary Statistics by Firm

Baseline covariate	Garment &				
	Beverage	Horticulture		Textile	
	Producer	Farm	Flower Farm	Factory	Shoe Factory
	(1)	(2)	(3)	(4)	(5)
Age	22.60	22.61	22.05	20.90	23.68
Female	0.53	0.78	1.00	0.90	0.66
Unmarried	0.81	0.69	0.66	0.86	0.66
Muslim	0.06	0.10	0.13	0.00	0.06
Household size	3.66	6.45	3.51	4.40	4.06
Household head	0.34	0.18	0.24	0.22	0.21
Proportion household dependents	0.33	0.74	0.42	0.45	0.37
Total years of education and training	10.80	6.07	5.75	10.06	10.00
Executive function, z-score	0.24	-0.65	-0.38	0.17	0.10
Weekly cash earnings (2010 birr)	4.23	4.73	2.36	11.92	18.40
Durable assets, z-score	0.03	-0.67	-0.71	0.09	0.81
Ever worked in a large firm	0.55	0.36	0.28	0.12	0.32
Average weekly hours of work	3.67	7.52	4.59	7.76	14.05
No hours in the last X weeks	0.68	0.46	0.67	0.73	0.64
Highest - lowest earnings, past month	249.83	150.63	152.23	193.47	222.30
Could borrow 3000 birr	0.36	0.25	0.28	0.32	0.34
Ability to do activities of daily life (0-15)	14.54	14.39	14.45	14.50	13.82
Disabled	0.01	0.04	0.00	0.00	0.03
Risk aversion, z-score	0.07	-0.41	0.04	0.10	-0.12
Future orientation, z-score	0.77	0.27	0.14	-0.26	-0.17
Locus of control index, z-score	-0.03	-0.30	-0.24	0.22	-0.18
Self-esteem index, z-score	-0.08	0.02	-0.20	0.13	-0.12
Family relations index, z-score	-0.12	0.35	0.26	-0.10	-0.10
Friends and neighbors relations index	0.08	0.52	0.49	-0.20	-0.29
Change in subjective well being, past yr.	0.26	0.46	0.13	0.34	0.30
Symptoms of depression, z-score	0.15	-0.29	0.07	0.04	-0.14
Symptoms of anxiety, z-score	0.05	-0.18	0.07	0.03	-0.10
Aggressive or hostile behaviors, z-score	-0.54	-0.26	-0.14	0.20	0.14
Conscientiousness index, z-score	0.16	0.42	0.27	-0.05	-0.46
Years experience, private firm	0.87	0.56	0.53	0.14	0.60
Years experience, workshop	0.05	0.01	0.00	0.00	0.02
Years experience, government/NGO	0.13	0.15	0.03	0.04	0.18
Probability of better job, next month	0.70	0.62	0.70	0.70	0.60
Probability of full-time work, next month	0.50	0.54	0.58	0.58	0.60
Number of Participants	121	89	152	427	158

XX

Notes: Medians are imputed for baseline variables with missing observations.

## IX Comparison of study firms to other firms

Firm data come from the 2014 Addis Ababa Large Employers Survey (Abebe et al., 2014), a representative sample of all small to large firms in the greater Addis area. We collaborated with this survey and supplemented it by surveying all five study firms, 8 manufacturers in Mekelle (in northern Ethiopia, the location of one of the study firms), and 9 flower and vegetable farms. We call this the supplemented sample of large manufacturing and farming firms.

In table C.1 below, we compare our firms to the supplemental sample, restricting the comparison to firms in the manufacturing and farming sectors with at least 50 employees. Our five study firms are significantly larger than the typical Ethiopian firm, with over four times as many employees as the typical firm in the sample. Workers in study firms are paid less than workers in other firms, but they are also less educated than workers at other firms in the sample.

Table C.1: Comparison to Large Manufacturing and Farm Firms

	Full Sample		Blattman-Dercon	
	Mean	Median	Mean	Percentile
Number of years the firm has been in business (as of 2014)	29.14	21.00	29.60	0.71
In Addis Ababa	0.86	-	0.40	-
Majority share government owned	0.04	-	0.00	-
Majority share domestically owned	0.72	-	0.60	-
Majority share foreign owned	0.18	-	0.40	-
Certified international quality	0.29	-	0.40	-
Average annual sales revenue (2004-2006), 000s ETB	148,675	46,063	206,987	0.79
Average annual profits (2004-2006), 000s ETB	22,083	3,998	4,345	0.52
Number of competitors within 15 minute walk	2.2	1	2	0.58
Number of persons employed	340	167	790	0.89
Number of persons employed in production	202	99	569	0.91
Average monthly starting salary of production workers (2010 ETB)	2,931	2,379	1,654	0.28
Average monthly starting salary of production workers, 12 months ago (2010 ETB)	2,649	1,983	1,426	0.25
Share of production workers who completed high school	0.62	0.69	0.44	0.30
Typical new production hire completed high school	0.64	-	0.40	-
Would participate in study using randomization	0.40	-	0.80	-
Observations	0.14		0.05	

Given that low wages are likely correlated with other worker characteristics or sector norms, we want to know if the study firms pay less, conditional on other firm and worker characteristics. In Table C.2, we report an OLS regression of each firm's reported production worker starting wages on an indicator for the five study firms, controlling for firm-reported characteristics. Columns (1) and (2) report this regression for all firms in the sample that report production salaries, including sectors such as finance, education, etc. Columns (3) and (4) report this regression for all manufacturing firms and commercial farms. Columns (5) and (6) report for all manufacturing firms and commercial farms with at least 50 employees. In each sample, the study firms pay production workers less than similar firms.

## X Supplementary analysis

### 1 Levels and correlates of attrition

Table D.2 reports response rates by round and study arm. Response rates were roughly 88 percent at the 11-month survey and 85 percent at the 13-month survey.<sup>57</sup> There is no association between the treatments and emigration. Household attrition is lower because individuals who were away temporarily or unavailable typically had household members available. Table D.1 reports correlates of attrition, via an OLS regression of attrition on select covariates (pooling the 11- and 13-month surveys).

### 2 Distribution of hours and earnings by treatment arm

Figure D.1 displays histograms of average weekly hours and estimated earnings in the past month for the job offer and control groups. They are broadly similar.

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<sup>57</sup>Reasons for individual attrition include 32 who had moved and could not be found, 42 refusals, 54 people who moved abroad, typically to the Middle East for domestic or construction work, one who died and one who went to prison.

Table C.2: Conditional Wage Differences

	Full Sample		Manufacturing & Farms		Large Manufacturing & Farms	
	$\beta$	S.E.	$\beta$	S.E.	$\beta$	S.E.
	(1)	(2)	(3)	(4)	(5)	(6)
In Blattman-Dercon Sample	-585.5	[1177.786]	-658.4	[1200.902]	-885.9	[1044.924]
Number of years the firm has been in business (as of 2014)	6.8	[9.170]	10.0	[9.924]	16.0	[11.668]
In Addis Ababa	625.3	[1134.348]	460.7	[1154.741]	515.3	[997.437]
In Tigray region	1842.7	[1408.870]	1517.5	[1439.959]	1408.3	[1256.033]
Firm is in agricultural sector	-2044.1	[1366.665]	-1484.5	[1417.507]	-514.9	[930.847]
Produces garments, apparel, textiles, or shoes	-642.6	[562.204]	-526.1	[603.652]	-568.6	[535.276]
Produces food or beverages	-219.4	[543.227]	-31.8	[627.579]	-161.7	[544.277]
Majority share foreign owned	1119.0	[593.901]*	832.2	[635.163]	549.4	[598.531]
Certified international quality	-107.0	[380000]	-173.1	[404.597]	508.1	[442.250]
Log of average sales revenue	260.0	[99.116]***	140.6	[123.287]	200.6	[155.411]
Number of competitors within 15 minute walk	5.8	[15.410]	5.9	[18.513]	-36.9	[47.057]
Number of persons employed in production	-2.0	[.947]**	-1.5	[1.001]	-1.3	[.970]
Share of production workers who completed high school	380.1	[274.868]	1638.7	[604.445]***	806.6	[708.563]
Would participate in study using randomization	247.9	[293.750]	460.0	[337.477]	344.8	[417.753]
Constant		Sector Fixed Effects	875.4	[2087.804]	-521.7	[1912.004]
R-Squared		0.20		0.21		0.19
Observations		310		246		122

Note: Firms with <10 employees dropped. Firm age is imputed for 3 firms, revenue is imputed for 46 firms, number of competitors is imputed for 22 firms, share of workers who completed high school is imputed for 3 firms, and international certification is imputed for 1 firm.

Table D.1: Correlates of attrition, selected covariates

Baseline covariate	Unfound at endline	
	Coeff.	Std. Err.
Assigned to job	-0.020	[.025]
Assigned to grant	-0.024	[.026]
Age	-0.001	[.003]
Female	0.271	[.087]***
Unmarried	-0.002	[.027]
Household head	0.003	[.026]
Disability indicator	0.052	[.095]
Total years of education and training	0.002	[.004]
Cognitive ability, z-score	0.011	[.010]
Mental health, z-score	0.014	[.011]
Conscientiousness index, z-score	-0.031	[.013]**
Risk aversion, z-score	0.008	[.011]
Future orientation, z-score	0.003	[.011]
Income and wealth, z-score	-0.024	[.010]**
Years experience in formal work	-0.026	[.006]***
Ever worked in industrial firm	0.045	[.029]
Prospects for employment in next month (0-1)	0.067	[.050]
Dependent variable mean	0.138	
p-value from F-test of joint significance	0.000	
Observations	1841	

Notes: This table reports results of an OLS regression of an indicator for not being found at endline on baseline covariates as well as a dummy for the 13 month endline and gender-cohort fixed effects (not displayed). 11- and 13-month endline data are pooled in this regression with robust standard errors clustered by individual.

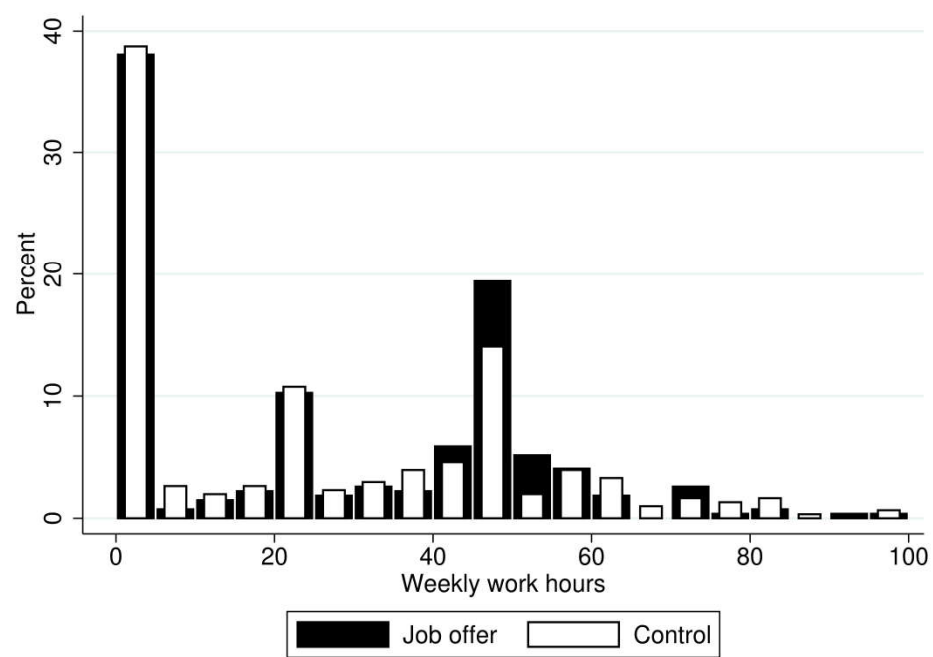


Table D.2: Survey response and attrition

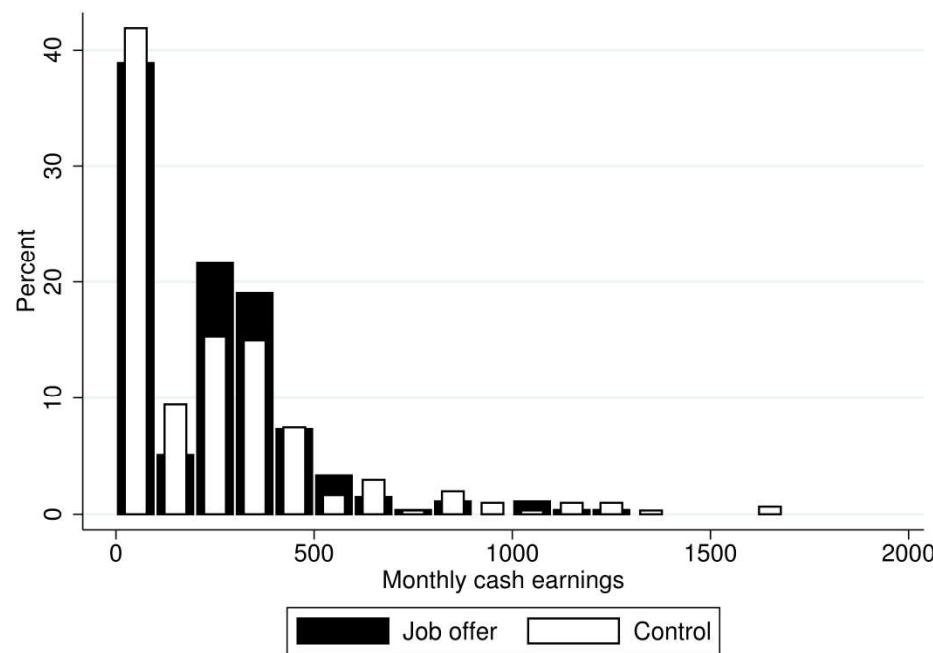
Respondent	Round	Response rates			By treatment group				Job-Control		Grant-Control	
		Sought	Respond	%	Job	Grant	Control		Diff.	p-value	Diff.	p-value
		(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)	(10)
Applicant	Baseline	947										
	11 mo.	947	832	87.9%	90.1%	87.7%	86.0%	3.58%	0.157	0.39%	0.883	0.883
	13 mo.	894	755	84.5%	84.4%	87.0%	82.2%	1.80%	0.552	4.68%	0.106	0.106
Household head	11 mo.	947	856	90.4%	91.8%	90.9%	88.8%	2.66%	0.256	1.46%	0.551	0.551

*Notes:* This table pools people in all eight cohorts with available endline data. Columns (7) to (10) reports the coefficient on assignment to treatment from an OLS regression of the response rate on the treatment indicator and block fixed effects, with heteroskedastic-robust standard errors.

Figure D.1: Outcome distributions, by treatment assignment



(a) Weekly hours of work



(b) Monthly cash earnings

### 3 Adjusting across treatment arms

In table D.3 we adjust p-values of our family indices for 16 comparisons (eight outcomes and two treatments). The results are qualitatively similar to when we adjust for 8 comparisons (eight outcomes and one treatment). The effects of the job on physical health and of the entrepreneurship program on mental health are still significant after these adjustments., while the effect of the entrepreneurship program on income is now only marginally significant ( $p = 0.095$ ).

### 4 Other outcomes

In Table D.4 we report other outcomes measured in the survey we did not include in the main family indexes.

### 5 Robustness of disability results

Our measure of disability is based on answers to 5 questions about difficulty in daily activities. For each activity (walking 2 kilometers, carrying 20 liters, performing daily activities, working outdoors for a full day, standing at a workbench for a full day) respondents are asked if they can complete the activity easily, with some difficulty, with great difficulty, or not at all. Based on this, we create an additive index of the 5 difficulty scores as well as a disability indicator. In our preferred disability indicator, we define disabled as having great difficulty performing more than one of the 5 tasks. However, in Table D.5, we report ITT effect estimates for alternative constructions of the indicator, as well as for responses to individual questions. Overall, the pattern of effects is consistent with the preferred disability indicator that we report in the main text, but the reader should beware that there are some alternate constructions that reduce the magnitude and statistical significance of our results, as well as alternative constructions that strengthen our results.

### 6 Two rounds of data collection versus one

Our estimation strategies pools together data from two rounds of collection. In table D.6, we display the results if we only collected one round of data. In general,

Table D.3: Program impacts on standardized family indexes, with p-values adjusted for 16 comparisons

Outcome (z-score)	Control mean (1)	ITT estimate (N = 1587)					
		Job offer			Entrepreneurship program		
		Coeff.	Std. Err.	Adj. p	Coeff.	Std. Err.	Adj. p
		(2)	(3)	(4)	(5)	(6)	(7)
Employment/occupational choice	-0.04	0.078	[.074]	0.985	0.040	[.076]	0.997
Income	-0.01	0.014	[.052]	0.997	0.150	[.058]**	0.095
Physical health	0.06	-0.193	[.066]***	0.037	-0.098	[.062]	0.820
Mental health/Subj. well being	-0.12	0.072	[.071]	0.987	0.228	[.065]***	0.003
Anti-firm/pro-union attitudes	0.00	0.05	[.085]	0.997	-0.09	[.089]	0.987
Social integration	0.10	0.01	[.018]	0.997	0.00	[.018]	0.997
Autonomy	0.04	-0.06	[.064]	0.990	-0.05	[.062]	0.997
Non-cognitive skills	0.10	-0.04	[.033]	0.952	0.03	[.035]	0.997

Notes: Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort-gender fixed effects. 11- and 13-month survey responses are pooled. Standard errors are robust and clustered by respondent. P-values are adjusted for 16 comparisons (8 family outcomes and 2 treatment arms) using the Westfall-Young approach described in section 5.1. Some outcomes contain fewer observations than the listed number of observations because a very small number of respondents were not asked certain questions.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table D.4: Economic impacts of the job offer and entrepreneurship program

Outcome	Control	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship program	
		Coeff	Std. Err.	Coeff.	Std. Err.
		(1)	(2)	(3)	(4)
TIME USE AND ENROLLMENT					
Commuting, hours/week <sup>y</sup>	3.94	0.269	[.429]	0.015	[.432]
Leisure, hours/week <sup>y</sup>	21.15	-0.620	[1.550]	-3.580	[1.473]**
Chores, hours/week <sup>y</sup>	20.10	0.115	[1.197]	0.214	[1.224]
Returned to school, past year	0.16	-0.012	[.019]	0.024	[.020]
Currently enrolled <sup>y</sup>	0.07	-0.032	[.019]*	-0.015	[.021]
ANNUALIZED EMPLOYMENT AND EARNINGS					
Estimated total annual hours worked	1,167.94	289.581	[71.197]***	91.052	[66.881]
Estimated total annual earnings, 2010 Birr	2,365.14	164.454	[162.789]	824.141	[192.509]***
SAVINGS					
Savings in past month, 2010 Birr	45.68	-3.410	[6.212]	35.365	[8.505]***

Notes: Column (1) reports the control group mean. Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort-gender fixed effects. 11- and 13-month survey responses are pooled. Standard errors are robust and clustered by participant. Observation counts displayed in the table report the maximum observation count for both types of outcome variables. Some outcomes contain fewer observations than these counts as a very small number of respondents were not asked certain questions.

<sup>y</sup>denotes outcome variables that were measured during only one of the endline surveys.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table D.5: ITT estimates for different health outcomes

Outcome	ITT estimate (N=1587)				
	Control	Job offer		Grant	
	mean	b	S.E.	b	S.E.
	(1)	(2)	(3)	(4)	(5)
Ability to do activities of daily life (0-15)	14.07	-0.289	[.123]**	-0.228	[.127]*
Workplace has serious health risks (0-1)	0.14	0.084	[.032]***	0.004	[.032]
Disabled (great difficulty doing $\geq 1$ activity)	0.11	0.052	[.022]**	0.034	[.022]
Disabled (great difficulty doing $>1$ activity)	0.04	0.036	[.015]**	0.016	[.014]
Has great difficulty walking 2 kilometers	0.01	0.007	[.005]	0.018	[.007]***
Has great difficulty carrying 20 liters	0.04	0.023	[.015]	0.025	[.014]*
Has great difficulty performing daily activities	0.02	-0.006	[.009]	0.001	[.008]
Has great difficulty working outdoors for a full day	0.06	0.040	[.016]**	0.016	[.016]
Has great difficulty working on feet at bench for a full day	0.04	0.036	[.016]**	0.014	[.015]
Disabled (some difficulty doing $\geq 1$ activity)	0.04	0.023	[.015]	0.025	[.014]*
Disabled (some difficulty doing $>1$ activity)	0.02	-0.006	[.009]	0.001	[.008]
Has some difficulty walking 2 kilometers	0.01	0.007	[.005]	0.018	[.007]***
Has some difficulty carrying 20 liters	0.04	0.036	[.016]**	0.015	[.015]
Has some difficulty performing daily activities	0.06	0.041	[.016]**	0.018	[.016]
Has some difficulty working outdoors for a full day	0.32	0.046	[.028]	0.033	[.029]
Has some difficulty working on feet at bench for a full day	0.21	0.044	[.025]*	0.035	[.026]
Disabled (great difficulty doing $>1$ activity, excluding work bench)	0.04	0.020	[.014]	0.002	[.013]

Notes: Column (1) reports the control group mean. Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort-gender fixed effects. 11- and 13-month survey responses are pooled. Standard errors are robust and clustered by individual. Some outcomes contain fewer observations than the reported sample size as a very small number of respondents were not asked certain questions.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

the point estimates weakly decrease with two rounds of data, but the precision of the estimates increases pretty substantially, especially for our income family index. The one exception is that the point estimate of a job offer on physical health gets larger with both rounds of data collection.

## 7 Treatment effects on indirect outcomes

Here we elaborate on the secondary measures. Most were conceived as possible indirect effects of income gains or socialization as a result of becoming an industrial worker. Since we have a weak “first stage” relationship between the offer and factory employment, in general we see little ITT effect of the offer on these outcomes.

All endline survey questions are represented in these eight families, save for a set of exploratory political behavior questions not relevant for this study.

Table D.7: Treatment effects on secondary (indirect) outcomes

Outcome	Control	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship	
		Coeff.	Std. Err.	Coeff.	Std. Err.
	mean	(2)	(3)	(4)	(5)
	(1)	(2)	(3)	(4)	(5)
Anti-firm/pro-union attitudes, z-score	0.00	0.05	[.085]	-0.09	[.089]
Firms good for workers & country (0-24)	10.81	0.10	[.248]	-0.41	[.257]
Large scale farms detrimental to land fertility (0-4) (-)	2.30	0.01	[.099]	0.09	[.104]
Factories take away land from farmers (0-4) (-)	1.64	-0.01	[.103]	0.02	[.102]
Large factories are harmful to environment (0-4) (-)	1.15	0.15	[.093]	0.00	[.093]
Large factories are good for overall economic growth (0-4)	3.25	-0.05	[.071]	0.04	[.076]
Factories pay decent salaries (0-4)	1.86	-0.08	[.106]	0.21	[.105]**
Factories provide job opportunities that can lift people out of poverty (0-4)	2.98	-0.13	[.092]	0.06	[.089]
Foreign firms good for country (0-24)	9.81	0.39	[.258]	-0.32	[.268]
Foreign businessmen send profits to other countries (0-4)	2.24	0.14	[.093]	-0.05	[.094]
Foreigners have too much influence over government (0-4)	1.69	0.06	[.093]	-0.11	[.095]
Foreign-owned firms take land that belongs to Ethiopians (0-4)	2.22	0.04	[.097]	0.01	[.102]
Foreign-owned firms develop good infrastructure (0-4)	1.43	0.05	[.092]	0.01	[.091]
Foreign firms procudes products that benefit Ethiopia (0-4)	1.28	0.10	[.085]	-0.10	[.088]
Foreign-owned firms have a better work culture (0-4)	0.96	0.02	[.075]	-0.08	[.075]
Pro-unions (0-24)	14.13	-0.17	[.252]	-0.04	[.269]
Labor unions damage the employer-employee relationships (0-4)	2.43	-0.01	[.074]	0.01	[.076]
Labor unions are unable to bargain for safe workplace (0-4)	2.30	-0.12	[.073]	0.04	[.077]
Labor unions are effective in bargaining for better pay and benefits (0-4)	2.37	-0.16	[.076]**	-0.05	[.078]
Without labor unions, employers would take advantage of employees (0-4)	2.27	0.09	[.080]	0.00	[.081]
I would prefer to work in a place that has a labor union (0-4)	2.75	0.07	[.074]	-0.03	[.077]
Labor unions are independent and uninfluenced by government (0-4)	2.01	-0.02	[.077]	0.00	[.082]

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Table D.7 (continued)

Outcome	Control mean (1)	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship	
		Coeff. (2)	Std. Err. (3)	Coeff. (4)	Std. Err. (5)
Workers' rights protected (0–24)	12.49	-0.07	[.294]	0.35	[.320]
Factories provide workers with an environment that will not cause longer term health problems (0–4)	1.99	0.16	[.100]	0.17	[.103]*
Factories allow workers to take leaves of absence (0–4)	2.52	-0.04	[.094]	-0.06	[.092]
Factories allow their workers to join or form labor unions (0–4)	2.20	0.04	[.079]	0.02	[.083]
Factories pay workers the same if they do the same work (0–4)	2.06	-0.09	[.108]	-0.04	[.110]
Factories do not terminate employment unless there is a valid reason (0–4)	2.26	-0.06	[.096]	0.10	[.103]
Factories pay workers enough to provide for family's basic needs (0–4)	1.46	-0.05	[.103]	0.16	[.105]
Social integration, z-score	0.04	0.01	[.018]	0.00	[.018]
Family support (0–15)	12.31	-0.01	[.210]	-0.02	[.223]
How often family is caring and supporting (0–3)	2.65	0.00	[.060]	0.02	[.062]
How often can turn to family for advice (0–3)	2.42	-0.05	[.067]	-0.05	[.069]
How often can rely on family for help (0–3)	2.31	0.00	[.078]	-0.07	[.083]
How often feels like valued family member (0–3)	2.54	0.11	[.060]*	0.06	[.063]
How often has angry quarrels with family (0–3)	2.41	-0.08	[.072]	0.00	[.069]
Community support (0–15)	9.55	0.17	[.233]	-0.13	[.229]
How often friends and neighbors are caring and supporting (0–3)	1.89	0.06	[.076]	0.00	[.078]
How often can turn to friends and neighbors for advice (0–3)	1.78	-0.06	[.074]	-0.10	[.074]
How often can rely on friends and neighbors for help (0–3)	1.28	0.09	[.080]	0.05	[.082]
How often has angry quarrels with friends and neighbors (0–3)	2.64	-0.01	[.057]	-0.11	[.063]*
How often feels like valued community member (0–3)	1.97	0.09	[.078]	0.04	[.079]
Degree of community participation (0–8)	3.40	-0.15	[.151]	0.07	[.149]
Has official position in the Kebele (0–1)	0.01	0.01	[.010]	-0.01	[.009]
Is leader in other groups, community, or church (0–1)	0.05	0.01	[.018]	0.00	[.018]

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Table D.7 (continued)

Outcome	Control	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship program	
		Coeff.	Std. Err.	Coeff.	Std. Err.
	mean	(2)	(3)	(4)	(5)
	(1)				
People in community come to you for advice (0–1)	0.42	-0.01	[.043]	0.05	[.044]
Usually speaks up at meetings (0–1)	0.40	-0.04	[.040]	0.00	[.040]
Usually participating in community meetings (0–1)	0.45	-0.07	[.040]*	0.04	[.043]
Usually votes in elections (0–1)	0.69	-0.01	[.038]	0.01	[.038]
Voted in the 2002 national elections (0–1)	0.63	-0.02	[.038]	-0.02	[.038]
Attends religious services regularly (0–1)	0.74	-0.01	[.038]	-0.01	[.039]
Trust (0–12)	5.72	0.25	[.195]	0.08	[.204]
Most people are basically honest (0–3)	1.13	0.06	[.072]	-0.02	[.078]
Most people can be trusted (0–3)	1.14	0.05	[.068]	-0.02	[.074]
Government officials can be trusted to do the job (0–3)	1.37	0.11	[.070]	0.08	[.073]
Neighbors can be trusted to watch the house (0–3)	2.07	0.04	[.073]	0.04	[.075]
Autonomy	0.05	-0.06	[.064]	-0.05	[.062]
Independent decision-making (0–36)	27.32	-0.53	[.368]	-0.14	[.415]
Wife has right to express her opinion when she disagrees with husband (0–3)	2.59	-0.01	[.054]	0.00	[.058]
Wife has right to buy clothes for herself (0–3)	1.59	0.01	[.083]	0.13	[.087]
Wife is justified in refusing sex with husband if he sleeps with other women (0–3)	2.13	0.02	[.090]	-0.03	[.095]
Wife can refuse to have more kids even if husband wants more (0–3)	1.96	-0.15	[.082]*	-0.06	[.086]
Woman equally capable of taking managerial positions (0–3)	2.62	-0.05	[.053]	-0.06	[.056]
Women with same qualifications should have equal pay (0–3)	2.63	0.06	[.055]	-0.01	[.061]
Wife doesn't have right to buy/sell things (0–3)	1.79	-0.09	[.085]	-0.10	[.088]
Wife not justified to request condom even if she knows husband has STD (0–3)	2.58	-0.10	[.061]*	0.01	[.061]
Appropriate for husband to beat wife if she refuses to have sex with him (0–3)	2.65	-0.03	[.054]	0.03	[.058]
Wife shouldn't divorce husband even if he has a mistress (0–3)	2.36	0.04	[.069]	0.09	[.070]
Men have more right to jobs than women when they are scarce (0–3)	2.29	-0.15	[.077]**	-0.13	[.080]
Wife should not be encouraged to work if she has young kids (0–3)	2.13	-0.08	[.077]	-0.01	[.079]

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Table D.7 (continued)

Outcome	Control	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship program	
		Coeff.	Std. Err.	Coeff.	Std. Err.
	mean	(2)	(3)	(4)	(5)
Involvement in spending decisions (0–10)	5.43	0.16	[.265]	0.29	[.262]
Who decides to pay school fees for relatives? (0–2)	1.15	-0.02	[.057]	0.08	[.058]
Who decides to purchase small household items? (0–2)	1.10	0.04	[.057]	0.10	[.058]*
Who decides to purchase small household assets? (0–2)	1.07	0.05	[.057]	0.04	[.057]
Who decides to purchase expensive household items? (0–2)	1.07	0.05	[.056]	0.02	[.056]
Who decides to purchase expensive household assets? (0–2)	1.04	0.05	[.056]	0.04	[.056]
Money freedom (0–12)	4.25	-0.02	[.209]	-0.07	[.217]
Expresses opinion when disagrees with partner (0–3)	2.32	0.01	[.067]	0.00	[.074]
Refuses to give money to partner when earns it (0–3)	1.68	0.13	[.096]	0.20	[.096]**
Allowed to buy/sell in market without partner permission (0–3)	1.32	0.10	[.089]	-0.02	[.088]
Abuse received (0–21)	1.00	-0.12	[.150]	-0.17	[.136]
Partner threatens to hurt you (0–3)	0.09	-0.03	[.028]	-0.02	[.027]
Partner humiliates you in front of others (0–3)	0.06	-0.01	[.024]	-0.01	[.023]
Partner beats you badly (0–3)	0.03	-0.01	[.017]	-0.01	[.016]
Partner kicks or hits you (0–3)	0.07	0.02	[.029]	-0.01	[.024]
Partner has accused you of unfaithfulness (0–3)	0.03	0.00	[.015]	0.01	[.016]
Partner limits contact with family (0–3)	0.08	-0.01	[.030]	-0.03	[.024]
Partner insists on knowing where you are at all times (0–3)	0.64	-0.08	[.084]	-0.10	[.088]
Noncognitive skills	0.08	-0.04	[.033]	0.03	[.035]
Locus of control (0–24)	17.09	-0.05	[.238]	0.22	[.254]
You can determine your future through your own actions (0–3)	2.45	-0.02	[.055]	-0.03	[.055]
When you make plans, you are confident you can make them work (0–3)	2.24	0.03	[.061]	0.04	[.062]
You have little influence over the things that happen to you (0–3)	1.46	-0.03	[.072]	-0.06	[.075]
In the long run people get the respect they deserve (0–3)	2.10	-0.08	[.076]	0.02	[.075]
If you try hard, you can improve your situation (0–3)	2.73	-0.02	[.042]	0.02	[.042]
It is not always wise to plan too far ahead (0–3)	1.15	-0.05	[.078]	-0.07	[.079]

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Table D.7 (continued)

Outcome	Control	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship program	
		Coeff.	Std. Err.	Coeff.	Std. Err.
	mean	(2)	(3)	(4)	(5)
	(1)				
Many of the bad things in people's lives are partly due to bad luck (0–3)	1.11	0.00	[.075]	-0.01	[.076]
Becoming successful is a matter of hard work (0–3)	2.28	-0.02	[.068]	0.03	[.068]
Self esteem (0–24)	16.47	-0.39	[.258]	-0.11	[.276]
On the whole, you are satisfied with yourself (0–3)	2.29	-0.02	[.064]	0.04	[.066]
You feel useless at times (0–3)	0.61	0.06	[.072]	0.06	[.072]
You are inclined to feel that you are a failure (0–3)	0.55	0.02	[.065]	0.05	[.068]
You wish you could have more respect for yourself (0–3)	2.43	-0.03	[.064]	0.08	[.066]
You feel you are a person of worth (0–3)	2.42	-0.09	[.057]	0.00	[.057]
At times you think you are no good at all (0–3)	0.60	0.13	[.065]**	0.09	[.067]
You are able to do things well as most other people (0–3)	2.50	-0.11	[.055]*	0.02	[.053]
You feel you do not have much to be proud of (0–3)	1.54	0.02	[.082]	-0.09	[.082]
Patience (0–8)	2.91	-0.06	[.073]	0.08	[.078]
When you earn money, you save some for the future (0–1)	0.88	0.01	[.028]	-0.02	[.029]
Prefers 100 birr each week for 10 weeks over 1000 birr now (0–1)	0.27	0.03	[.038]	0.03	[.039]
Prefers 100 birr each week for 15 weeks over 1,000 birr next week (0–1)	0.48	-0.01	[.044]	0.01	[.044]
Prefers 100 birr each week for 12 weeks over 1000 birr now (0–1)	0.41	-0.02	[.043]	0.04	[.044]
Prefers doing hard task over easy task first (0–1)	0.62	-0.05	[.044]	-0.14	[.046]***
Spends money quickly (0–1)	0.00	0.00	[0000]	0.00	[0000]
Postpones most planned activities until later (0–1)	0.00	0.00	[0000]	0.00	[0000]
Prefers 700 birr per month indefinitely over 1000 birr per month that can end anytime (0–1)	0.93	-0.01	[.024]	-0.01	[.024]
Risk aversion (0–6)	1.79	0.03	[.055]	-0.02	[.058]
Likes to find out risks before doing an activity (0–1)	0.79	0.00	[.035]	-0.01	[.035]
Would rather have 400 birr for sure over flipping a coin for 1000 birr (0–1)	0.70	0.06	[.040]	0.03	[.041]

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Table D.7 (continued)

Outcome	Control	ITT estimate (N = 1587)			
		Job offer		Entrepreneurship program	
		Coeff.	Std. Err.	Coeff.	Std. Err.
	mean	(2)	(3)	(4)	(5)
	(1)				
Gets anxious if uncertain about risks of job (0–1)	0.42	-0.05	[.044]	-0.03	[.044]
Gets disturbed when uncertain of effects of a decision (0–1)	0.41	0.01	[.044]	-0.07	[.044]
Prefers to reduce pain but not cure it over surgery to cure with death risk (0–1)	0.34	0.07	[.042]*	0.09	[.044]**
Prefers low, safe profits over high, risky profits (0–1)	0.83	-0.01	[.035]	-0.06	[.038]
More willing to take risks relative to friends (0–1)	0.74	-0.06	[.040]	0.04	[.039]
Does dangerous things for fun (0–1)	0.01	0.00	[.009]	0.01	[.010]
Self control index (0–6)	2.35	-0.02	[.054]	0.02	[.056]
Continues doing something after starting it and it becomes difficult (0–1)	0.75	-0.02	[.040]	-0.04	[.042]
Good at resisting temptation (0–1)	0.93	-0.01	[.022]	-0.01	[.025]
Often spends money on things and regrets it later (0–1)	0.08	0.05	[.028]	0.08	[.030]***
Wish you had more self-discipline (0–1)	0.92	-0.01	[.024]	-0.01	[.025]
Puts money into safe place to avoid spending it (0–1)	0.83	-0.01	[.034]	-0.01	[.035]
Prefers to wait and see instead of buying something you like right away (0–1)	0.88	-0.05	[.031]	-0.05	[.030]*
Has trouble getting started when having a job to do (0–1)	0.09	-0.02	[.026]	0.00	[.029]
Speaks often before thinking (0–1)	0.08	0.02	[.024]	-0.02	[.023]
Punctuality and time consciousness (0–12)	11.04	-0.24	[.168]	-0.08	[.171]
It is not okay to be late to appointments with friends (0–4)	2.10	0.00	[.129]	-0.01	[.131]
It is okay to leave work and go home even if not finished all tasks (0–4)	4.51	-0.18	[.075]**	-0.08	[.066]
It is okay to be late to work in the morning (0–4)	4.47	-0.05	[.075]	-0.05	[.074]

Notes: Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort-gender fixed effects. 11- and 13-month survey responses are pooled with robust standard errors clustered by individual.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Labor and firm attitudes** We hypothesized that long term participation in industrial work would change attitudes to firms, self-identification as a worker, and possibly tensions between the two. Naturally short term exposure could have some

effect as well. Perhaps because of the weak first stage, however, we see little effect of either treatment on attitudes to labor rights, unions, or firms. Table 7 reports treatment effects. We asked six questions per index, on a 0–4 Likert scale, for a 0–24 scale per index. We see little change in an index of pro-union attitudes (e.g. prefer to work in a place with labor unions, or unions protect workers from firms); of attitudes supportive of large firms (e.g. they are good for growth, they pay fair salaries); are that workers rights are protected and respected (e.g. have safe environments, are free to quit jobs or join labor unions). We do see a weak decrease in whether large foreign firms are good for the country (e.g. they benefit Ethiopia, they pay taxes and invest in Ethiopia).

**Social integration** In Ethiopia, as in much of Africa, social standing is tied in part to being a net contributor to the household rather than a dependent. We hypothesized that large income increases would increase standing in the household and community. In general we see no effect on five measures of family connectedness and support (e.g. how often can the respondent turn to his/her family for help), five measures of concrete social support received from family and friends (e.g. how often can the respondent rely on neighbors for help), eight forms of community participation (e.g. attending community meetings or holding official position in the Kebele), or 4 measures of in-group and out-group trust levels (e.g. believing most officials could be trusted).

**Autonomy** We hypothesized that large income increases and long term participation in industrial work could increase workers' autonomy. However, we observe no changes in eight measures of independent decision-making (e.g. whether someone has the right to buy or sell things in the market without asking for the permission of a spouse or family member); five measures of involvement in spending decisions (e.g. who decides to purchase expensive household items); three measures of freedom in money and market access (e.g. refusing to give earned money to partner to purchase alcohol); and seven measures of domestic abuse received (e.g. how often the respondent was kicked or punched by partner).

**Non-cognitive skills** We hypothesized that long term participation in industrial work could socialize workers to be more docile or orderly. We see little effect on self-reported psychometric scales that measure personality and character traits such as locus of control (e.g. believing that you can determine your own future through your own actions and choices), self-control (also known as conscientiousness, e.g. spending money on things now and regretting it later ), or self-esteem (e.g. being satisfied with yourself). Each is measured using eight standard questions from personality scales, locally adapted to Ethiopia, using a Likert scale for a 0–24 index. We also measured economic preferences through self-reported patience (e.g. preferring 1000 birr now or 100 birr each week for the next 12 weeks) and risk aversion (e.g. having 400 birr for sure or flipping a coin for 1000 birr). We also assess self-reported punctuality (e.g. whether it is okay to be late to work in the morning).

## **8 Treatment effects by gender and firm**

**Impacts by gender** Table D.8 reports ITT estimates by gender. The effects are broadly consistent across genders, with a few exceptions. Women are much more likely to stay employed in industrial work as a result of the job offer than their male counterparts. The ITT effects on disability are also concentrated in the female subsample. On the other hand, the point estimates for the effect of the grant on earnings is nearly 3 times as high for men as it is for women.

**Impacts by firm** Tables D.9 and D.10 investigate heterogeneity of job offer effects by firm in two ways. First, Table D.9 reports ITT estimates when we restrict the sample to individual firms. Second, Table D.10 reports the impact when individual firms are excluded from the sample. It is important to note that this study is underpowered for this firm level analysis. Consequently, the absence of statistical significance at the firm level should not be taken as fatal to the overall finding. Instead, we focus on patterns of point estimates across firms. Effects on earnings are mixed across firms, while positive effects on rates of disability are consistent among firms. The magnitudes of the health effects vary considerably, and in Table

D.10 we can see that the negative health are concentrated in the industrial farms.

## 9 Correlates of earnings and industrial employment

Table D.11 regresses endline earnings and industrial employment on a Mincerian-style set of baseline covariates, including of age, gender, health, education, and work experience. The table examines three subgroups: those who (endogenously) are in an industrial job at endline, and those randomly assigned to the job or control group.

In no instance is prior industrial experience associated with higher earnings, nor is tenure with the firm. Moreover, if we take everyone in the sample working in a factory or commercial farm at endline and add to the regression months of tenure in that industrial job (Columns 1 and 2), the coefficients on baseline experience remain negative, and the coefficient on months in the firm is positive but is small and not statistically significant—equal to about a 3.5 percent increase in real wages per month worked (or about 12 percent in total given that the average person spent 3–4 months in the job). If we extrapolate to a worker who remained for a year, this amounts to a one third increase in the wage. But we need to remember that this estimate is endogenous, in that it reflects workers who choose (or were encouraged) to stay because they were a better fit.

## 10 Other heterogeneity analysis

Another interpretation of the high quit rates that we observe is that job applicants are viewing industrial jobs as temporary responses to negative income shocks. Indeed, incomes in both the control and treatment groups rise throughout the study period, so the Ashenfelter dip is a factor here. But if these job applications are a response to negative income shocks, then the better-off applicants should be in a better position to quit the job if the job is undesirable. In Table D.12 we report heterogeneity in treatment effects by baseline wealth (index of consumer durables). We do not see wealthier applicants responding differently to the job offer treatment.



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Table D.6: Two rounds of data collection versus one

Family index	Pooled results			
	Job offer		Grant	
	11 & 13 month	11 month only	11 & 13 month	11 month only
	(1)	(2)	(3)	(4)
Employment	0.08 [.074]	0.09 [.087]	0.04 [.076]	0.03 [.092]
Income	0.01 [.052]	-0.06 [.085]	0.15 [.058]**	0.17 [.093]*
Physical health	-0.19 [.066]***	-0.16 [.076]**	-0.10 [.062]	-0.13 [.075]*
Mental health	0.07 [.071]	0.05 [.097]	0.23 [.065]***	0.27 [.087]***
Observations	1587	832	1587	832

Notes: Columns (1) and (3) pool the 11- and 13- month surveys so that there are two observations per person and clusters standard errors by individual. Columns (2) and (4) use only the 11-month survey and do not cluster standard errors.

Table D.8: Impacts of job offer and grant by gender, all firms

	Men (N=174)			Women (N=773)		
	ITT			ITT		
	Mean (1)	Job (2)	Grant (3)	Mean (4)	Job (5)	Grant (6)
Worked at least a month in study firm	0.089	0.522 [.074]***	-0.016 [.057]	0.155	0.549 [.038]***	-0.059 [.034]*
Worked at least a month in any industrial firm	0.348	0.389 [.084]***	-0.168 [.082]**	0.377	0.350 [.037]***	-0.157 [.037]***
Was working in any industrial firm at endline	0.179	-0.014 [.074]	-0.203 [.068]***	0.203	0.113 [.038]***	-0.121 [.033]***
Emigrated to Middle East	0.000	0.003 [.011]	0.041 [.022]*	0.053	0.031 [.020]	0.029 [.021]
Weekly earnings, 2010 Birr	50.270	7.893 [12.881]	30.937 [13.120]**	30.313	7.990 [4.694]*	12.986 [5.457]**
Ability to do activities of daily life (0–15)	14.491	0.170 [.164]	0.285 [.141]**	13.969	-0.283 [.142]**	-0.232 [.139]*
Disabled	0.009	0.001 [.017]	-0.015 [.015]	0.048	0.029 [.017]*	0.013 [.016]

*Notes:* Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort fixed effects. 11- and 13-month survey responses are pooled with robust standard errors clustered by individual.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



Table D.9: Impacts of job offer, by firm

Outcome	ITT for each firm alone:					
	ITT, all firms		Beverage		Horticulture	
	(1)	(2)	Producer	Farm	Flower Farm	Garment & Textile Factory
Worked at least a month in study firm	0.541 [.034]***	0.677 [.124]***		0.472 [.143]***	0.478 [.101]***	0.501 [.054]***
Worked at least a month in any industrial firm	0.357 [.034]***	0.444 [.146]***		-0.106 [.239]	0.192 [.102]*	0.458 [.096]***
Was working in any industrial firm at endline	0.107 [.034]***	-0.004 [.096]		-0.073 [.153]	0.185 [.103]*	0.074 [.050]
Emigrated to Middle East	0.016 [.017]	0.048 [.088]			0.064 [.077]	-0.015 [.059]*
Weekly earnings, 2010 Birr	3.614 [4.442]	12.078 [9.637]		-15.503 [9.488]	13.030 [16.240]	4.847 [6.621]
Ability to do activities of daily life (0–15)	-0.289 [.123]**	-0.208 [.510]		-1.939 [.603]***	-0.079 [.400]	-0.234 [.167]
Disabled	0.036 [.015]**	0.000 [.030]		0.056 [.071]	0.008 [.040]	0.014 [.016]
Observations	1587	153		176	246	740
						272

Notes: Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort-gender fixed effects for each firm. 11- and 13-month survey responses are pooled with robust standard errors clustered by individual.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table D.10: Impacts of job offer, excluding one firm at a time

Outcome	ITT, all firms	ITT estimate of job offer excluding:				
		Beverage Producer	Horticulture Farm	Flower Farm	Garment & Textile Factory	Shoe Factory
	(1)	(2)	(3)	(4)	(5)	(6)
Worked $\geq$ 30d in a study firm	0.541 [.034]***	0.525 [.037]***	0.538 [.037]***	0.542 [.037]***	0.568 [.046]***	0.535 [.038]***
Worked $\geq$ 30d in any factory or farm with > 10 emp.	0.357 [.034]***	0.379 [.036]***	0.382 [.036]***	0.387 [.037]***	0.252 [.051]***	0.335 [.038]***
Working in any factory or farm with > 10 emp. at endline	0.107 [.034]***	0.111 [.036]***	0.104 [.036]***	0.095 [.037]**	0.119 [.051]**	0.101 [.038]***
Emigrated (typically to Middle East)	0.016 [.017]	0.019 [.017]	0.018 [.019]	0.008 [.017]	0.040 [.029]	0.007 [.018]
Mean weekly cash profits, 3/2010 Birr	3.614 [4.442]	2.493 [4.810]	4.205 [4.991]	1.216 [4.557]	5.070 [6.203]	4.388 [4.770]
Ability to do activities of daily life, 0-15 scale	-0.289 [.123]**	-0.308 [.134]**	-0.121 [.128]	-0.243 [.133]*	-0.382 [.183]**	-0.421 [.124]***
Disability	0.036 [.015]**	0.039 [.016]**	0.025 [.015]*	0.033 [.016]**	0.043 [.024]*	0.036 [.014]***
	1587	1434	1411	1341	847	1315

Notes: Columns (2) to (5) report the results of an OLS regression of each outcome on treatment indicators, baseline covariates, and cohort-gender fixed effects where each firm is removed from the sample. 11- and 13-month survey responses are pooled with robust standard errors clustered by individual.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table D.11: Correlates of endline earnings and industrial employment

Baseline covariate	Dependent variable (and sample)									
	Weekly earnings, 2010 Birr					Employed in an industrial job at endline				
	In industrial job	Assigned to job		Assigned to control		Assigned to job		Assigned to control		
	Coeff. (1)	Std. Err. (2)	Coeff. (3)	Std. Err. (4)	Coeff. (5)	Std. Err. (6)	Coeff. (7)	Std. Err. (8)	Coeff. (9)	Std. Err. (10)
Age	-3.067	[1.336]**	0.963	[1.152]	0.066	[0.790]	0.014	[0.008]*	-0.004	[0.005]
Female	-18.110	[13.302]	-17.843	[11.248]	-23.608	[11.165]**	0.120	[0.088]	0.020	[0.064]
Disabled	-31.482	[8.920]***	-3.010	[27.217]	11.993	[16.063]	-0.250	[0.107]**	-0.101	[0.101]
Education	0.554	[1.567]	1.091	[1.274]	1.276	[1.275]	-0.005	[0.010]	0.003	[0.008]
Formal, non-industrial work experience, years	-1.995	[6.752]	-5.278	[3.934]	8.273	[4.084]**	-0.075	[0.022]***	-0.028	[0.021]
Industrial work experience, years	-2.757	[3.596]	-3.634	[2.782]	-2.633	[2.665]	-0.051	[0.021]**	-0.009	[0.016]
Months of tenure in industrial job (endline)	1.313	[1.093]								
Mean of dependent variable	54.6		35.6		34.2		0.320		0.198	
Observations	321		517		571		518		571	

*Notes:* The entrepreneurship arm is omitted from this analysis. 11- and 13-month survey responses are pooled. Standard errors are robust and clustered by individual. Columns 1 and 2 include only people who are employed by a factory or commercial farm at endline.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table D.12: Heterogeneity of treatment by initial wealth

	Dependent variable (N=1587)				
	Working in any factory or farm with > 10 emp. at endline (1)	Mean weekly cash profits, 3/2010 Birr (2)	Has major disability (3)	ADL Index (0-15) (4)	One year change in subjective well-being (5)
Assigned to job offer	0.107 [.035]***	3.446 [4.370]	0.037 [.015]**	-0.291 [.122]**	-0.057 [.074]
Consumption assets $\times$ Assigned to job offer	-0.015 [.035]	-4.820 [4.613]	0.001 [.016]	0.057 [.132]	0.024 [.072]
Assigned to cash grant	-0.120 [.029]***	12.511 [5.414]**	0.015 [.013]	-0.231 [.128]*	0.239 [.071]***
Consumption assets $\times$ Assigned to cash grant	0.000 [.028]	5.877 [6.859]	-0.005 [.016]	0.006 [.136]	-0.030 [.073]
Consumption assets	0.010 [.023]	4.455 [3.831]	0.016 [.010]	-0.106 [.092]	-0.014 [.052]

Notes: Columns (1) to (5) report the results of an OLS regression of each outcome on treatment indicators, interactions of treatment and consumption assets, baseline covariates, and cohort-gender fixed effects. 11- and 13-month survey responses are pooled with robust standard errors clustered by individual.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1