GENDER INNOVATION LAB

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WORKING UNDER PRESSURE: IMPROVING LABOR PRODUCTIVITY THROUGH FINANCIAL INNOVATION

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KEY MESSAGES

- **In developing countries, financial transfers within social and kin networks are ubiquitous and frequent.** Though these transfers have social benefits, pressure to redistribute income can introduce a disincentive to work by reducing the payoff of exerting effort. This comes at a potential cost for the overall efficiency of the economy.
- **We developed a financial innovation to study the impact of this redistributive pressure on workers' labor supply and productivity.** This innovation, a direct-deposit commitment savings account, enabled workers to convert productivity increases into private savings which cannot be accessed by others.
- **In the first phase of our project, workers offered the direct-deposit commitment savings account increased their labor productivity and earnings by 10 percent, which translates into an 18 percent increase for workers who opened an account.** The effect appears to be driven by workers increasing effort while on the job.
- **Preliminary results show that the visibility of an account to one's social network and the degree of redistributive pressure a worker faces are strong determinants of account take-up.** This suggests that tackling the underlying cause for redistributive norms—the lack of consumption smoothing mechanisms—could improve output and growth in developing countries by addressing the root cause of the high demand for commitment savings products.

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GENDER INNOVATION LAB

The Gender Innovation Lab (GIL) conducts impact evaluations of development interventions in Sub-Saharan Africa, seeking to generate evidence on how to close the gender gap in earnings, productivity, assets and agency. The GIL team is currently working on over 50 impact evaluations in 21 countries with the aim of building an evidence base with lessons for the region.

The impact objective of GIL is increasing take-up of effective policies by governments, development organizations and the private sector in order to address the underlying causes of gender inequality in Africa, particularly in terms of women's economic and social empowerment. The lab aims to do this by producing and delivering a new body of evidence and developing a compelling narrative, geared towards policymakers, on what works and what does not work in promoting gender equality.

MOTIVATION

Social and family networks play an important role as informal safety nets in Sub-Saharan Africa and other development contexts, with relatives, friends, colleagues, and neighbors sharing financial resources. While these arrangements have important private and social benefits—for example, by enabling risk sharing among kin groups—they may potentially hinder economic transformation, labor productivity and output growth. For instance, individuals who take up more stable and higher-wage employment in the modern sector might face increased pressure to redistribute income to their social networks. Knowing they will not be able to keep their full earnings, those individuals may find it more profitable to stay in the traditional sector or become less motivated to work hard and increase their earnings.

While previous work provides tentative evidence that redistributive pressures can have large negative economic impacts on both men and women (Boltz et al. 2016; di Falco and Bulte 2011; Goldberg 2016; Jakiela and Ozier 2015; Squires 2017), the consequences might be particularly important for women due to their lower social and political standing—and thus higher risk of financial expropriation. For example, Anderson and Baland (2002) examine participation in rotating savings and credit associations (ROSCAs) in urban Kenya and find that women make a strategic decision to tie up their savings in a ROSCA to prevent their family from taking the money. In Chile, Kast and Pomeranz (2014) show that individuals who are not heads of household or who face demands from their social network to lend money were most likely to take up an offered individual savings account. More broadly, the micro-entrepreneurship literature finds that anticipation that a share of their income might be captured reduces women's incentive to invest and expand their economic activity (Campos and Gassier 2017).

HERE'S WHAT WE DID

In our study, we build on existing evidence—currently overly reliant on observational studies—by constructing an explicit experimental test for the effects of redistributive pressure on the labor productivity of women. Rather than focusing on the evasion strategies adopted by individuals, we examine forced redistribution as an impediment to increased productivity in the context of formal off-farm employment.

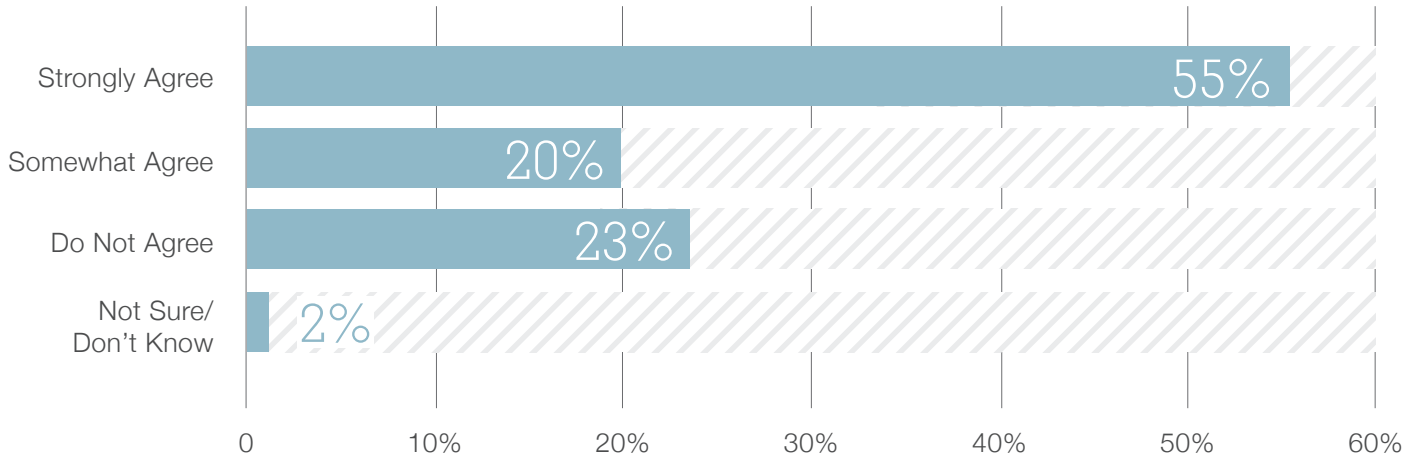
IMPLEMENTATION CONTEXT

We partnered with the Caisse Nationale des Caisses d'Épargne (CNCE), the largest savings bank in Côte d'Ivoire, and OLAM, a leading transnational agro-processing firm, to test a financial innovation among workers in cashew-processing plants: a direct-deposit commitment savings account designed to make it easier for workers to convert productivity increases into long-term savings which cannot be accessed by others. The NGO Innovations for Poverty Action (IPA) was contracted by the World Bank to coordinate the implementation and conduct surveys with study participants. The account allows workers to freeze for nine months a portion of their income above their current average earnings. This design feature leaves workers with the same level of disposable cash for daily expenses and redistribution to others on average, but makes it more likely that any *increases* in productivity are retained by workers for their own future use.

We chose to implement the program with cashew factory workers for several reasons. First, cashew processing is a crucial sector in Côte d'Ivoire. Although the country is one of the largest producers of cashew nuts in the world, it misses out on income from value addition by processing only a small proportion of cashews domestically, due in part to high unit-labor costs stemming from low labor productivity. Second, workers in cashew processing are paid piece-rate based on their individual daily productivity, meaning that changes

FIGURE 1: PROBLEMS SAVING MONEY

"I have difficulty saving for large goals because if I put money aside, someone else will ask for it."



in their productivity are easy to observe, and changes in effort translate directly into worker earnings and factory output. Lastly, cashew processing is a key industry for increasing women's economic empowerment, with the vast majority of workers involved in manual processing tasks being women.

Workers in our setting—often some of the few people in their social network to be employed in the formal sector—expressed facing heavy demands to share earnings with others. For example, 83 percent of workers reported giving money to someone multiple times a month, and 75 percent of workers agreed or strongly agreed with the statement that redistributive pressures make it difficult for them to accumulate savings (Figure 1). Although 78 percent of workers strongly agreed with wanting to save more than they currently save, none of them had an account in the formal banking sector. The most popular savings vehicle was an informal rotating savings and credit association (ROSCA), followed by mobile money and keeping money at home. Workers also felt discouraged to increase their effort at work by their inability to save, though 86 percent reported wanting to be more productive.

INTERVENTION ROLL-OUT

Of the 107 eligible workers in the factory with regular attendance, about half were randomly selected for the program. While workers in the control group continued to receive their earnings in cash, workers in the treatment group only received wages under a certain cutoff in cash, and all excess wages over the cutoff as a direct deposit into their commitment savings accounts. Workers had the opportunity to choose their cutoffs to correspond to their budgeting needs. Because we were interested in observing productivity effects on earning *increases*, workers could choose an earnings threshold equal to or greater than their average historic fortnightly earnings. Take the example of a woman who earns $40 per fortnight on average and sets her threshold at $45. She proceeds to earn $30 in her next paycheck, and $50 in the one after. In this case, she would receive the entire $30 in cash for the first paycheck (no deposit) and would receive $45 in cash ($5 deposit) the fortnight after.

Workers discreetly received receipts confirming that the deposit had been made so that the program remained private, meaning that only the worker would know how much was saved in her account. The account pays out

deposited savings in a lump sum after 9 months (at a private date). During the blocked period, deposits cannot be accessed—making it possible to credibly deny transfer requests. Once the blocked period ends, workers can use the saved funds or leave them in the (now liquid) bank account.

Selected workers were invited to participate in a brief sensitization session in which a representative from the bank ensured that workers understood the program and how the accounts work. Afterwards, a short individual survey was administered to gauge each worker's comprehension of key program features. Interested workers then met individually with team members from IPA to choose an earnings threshold and to set up their account. These individual sessions—and the continual availability of project team members to answer any questions or concerns about the program—contributed to the fact that among workers who were offered the direct-deposit accounts, 55 percent decided to take them up. This is 9 percentage points higher than the average take-up rate found by Knowles (2018) in a meta-analysis of 13 randomized controlled experiments with interventions designed to remove the costs of opening and using a savings account.

HERE'S WHAT WE FOUND

Nine months post-intervention, workers who were offered the direct-deposit accounts (treatment group) increased their earnings by 9.9 percent on average relative to workers who were not offered the accounts (control group). This estimate implies a remarkably high effect on earnings of 18 percent among workers who actually opened an account.

We do not find significant effects on attendance, suggesting that treatment effects are driven by workers increasing effort while at the factory. In addition, it appears that rates of job quitting do not differ between treatment and control workers, indicating that our intervention does not operate through constraining workers to remain at the plant longer that they would have liked to stay.

Moreover, we find that take-up of the commitment accounts is concentrated among those who report higher redistributive pressure at baseline using two indicators: those who had any uninvited guests show up to their house for a meal in the past 7 days—indicating the presence of kin and network members in close physical proximity—and those who report

FIGURE 2: FORTNIGHTLY EARNINGS (FCFA)

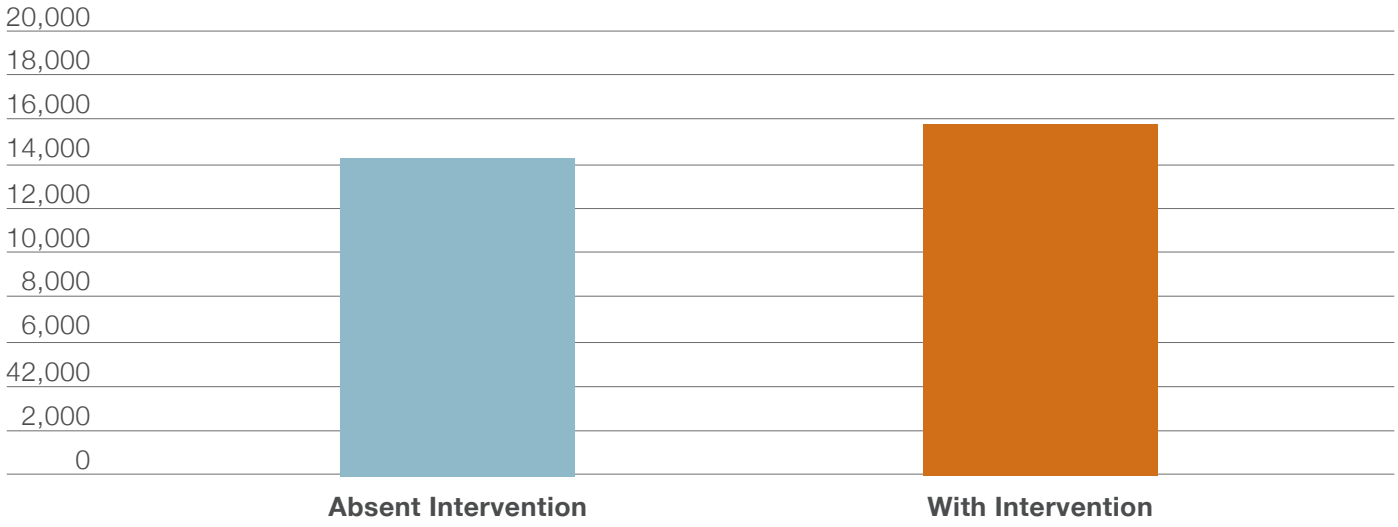
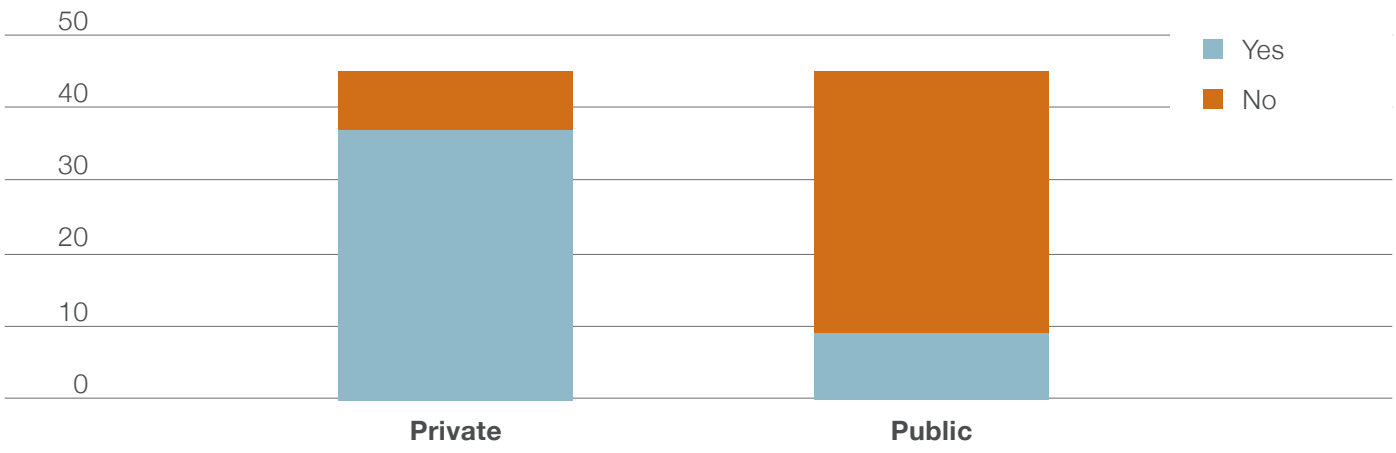


FIGURE 3: RESPONDENT INTEREST IN PRIVATE VS PUBLIC ACCOUNT (N=44)



having to pay school fees for others—a common redistribution request. These individuals were 56 and 33 percentage points more likely to take up the direct-deposit accounts, respectively.

In addition, we asked a separate sample of workers if they would take up a blocked savings account if (i) its existence was private to themselves or (ii) its presence was advertised to their kin network. Figure 3 below shows that expressed demand for the direct-deposit accounts plummets if workers expect that others in their kin networks will be aware of the account. Moreover, when respondents were asked why they declined take-up of public blocked accounts, the most frequent response was wanting to keep the savings for themselves—consistent with our hypothesis of the importance of redistributive pressure.

NEXT STEPS

Building on the above evidence, the team will offer the commitment accounts to a larger sample of workers to see how our results hold up. We will also allow current workers with savings accounts to renew their commitment period for another 9-month round and look at how effects change over the longer term.

We will complement these interventions with a series of tests to isolate redistributive pressure from one's social network as the driver of our results—versus competing explanations such as workers wanting to constrain future temptation to spend their savings on themselves. Lastly, we plan to examine whether the impact of redistributive pressure on workers' productivity is reduced when more people in their social network have jobs, which would imply positive social externalities from increased employment. We will test this by randomizing job offers for factory jobs and varying the fraction of individual members in the workers' network that get a job offer.

Our findings suggest that redistributive pressures might constitute a barrier to economic growth in sub-Saharan Africa, since new economic activities—from adopting cash crops in agriculture to gaining employment in modern sector jobs—can be undermined if individuals do not capture the returns from their efforts. This also indicates that tackling the likely underlying cause for redistributive norms—the lack of consumption smoothing mechanisms—could improve output and growth. For example, support provided by government social safety net programs could be bolstered so that kin networks reduce pressure on employed family members to redistribute earnings. This could not only improve the

welfare of the unemployed, but also boost the productivity of individuals with jobs by reducing their responsibility for redistribution. Similarly, improving access to formal health- or livelihood-insurance might have externality benefits by increasing the aggregate output of others in the same kin network.

More broadly, our study will offer evidence relevant for a variety of sectors, from how to improve the viability and productivity of agro-processing to how financial instruments can increase labor productivity—and offer new solutions for policymakers seeking to empower women and lift workers out of poverty.

The Jobs Group was created to support World Bank Group (WBG) client countries in the design and implementation of integrated, multi-sector, jobs strategies to reduce poverty and ensure inclusive growth. These jobs strategies articulate policies and programs which address three main challenges most countries face to varying degrees: creating jobs in the formal, private sector; improving the quality of informal jobs; and expanding access to (better) jobs for certain population groups (e.g., women, youth, the poor). The Jobs Group develops solutions to the main jobs challenges and measures the impact of these solutions on jobs outcomes.

www.worldbank.org/en/topic/jobsanddevelopment

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