# Work Rather than Just Cash: Informal Redistribution Among Employers and Workers in Kampala, Uganda

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#### Abstract

This paper explores the phenomenon of "giving via work" in small and medium enterprises in Kampala, Uganda, and investigates the drivers. In a real-stakes experiment, we find that employers systematically choose to hire, and workers to work, when the alternative is giving/receiving a cash transfer. Notably, employers' decisions are inelastic to the wage, and their willingness to pay for work is over two times the market wage, pointing at firms paying above the marginal product of labor. Our analysis reveals that a combination of an economic value of work and frictions cannot explain these decisions, nor relational or signaling benefits. Instead, both employers and workers motivate work redistribution with social preferences, primarily reciprocity, and secondarily a psycho-social value of work for workers. Giving via work in the experiment predicts increased hiring in the firm. We find no evidence of increased revenues, sales, or profits associated with the extra work, indicating that work redistribution is unlikely to be productive.

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### 1 Introduction

Firms in developing countries typically have low productivity and rely heavily on labor (McKenzie & Woodruff, 2017). Since efforts to improve business practices by providing information, training or access to credit have yielded mixed results (Atkin et al., 2019; McKenzie, 2021), this suggests non-profit maximizing behavior for reasons beyond resource constraints. Models of surplus labor provide one potential explanation for such behavior: in contexts where labor supply is abundant ("unlimited"), work is a means to provide subsistence consumption, rather than an input to profit maximization, so that providing employment becomes a social norm and in turn, workers are paid above the marginal product of labor (Bardhan, 1979; Gollin, 2014; Lewis, 1954; Ranis and Fei, 1961; Sen, 1966).

The use of work as a means of redistribution in developing countries resonates with anecdotal evidence. For instance, in our setting, over 90% of respondents identify employment provision as the primary channel of redistribution (Figure 1). However, there is a lack of rigorous evidence regarding whether people actually prefer to give/receive via work and whether employers actually pay above the marginal product of labor. Furthermore, it remains unclear why firms wouldn't focus solely on profit maximization and redistribute through separate means, raising additional questions. Is there giving via work? If so, can productivity consideration or market frictions explain paying above the marginal product of labor? And how does Lewis' explanation of a social value of work fit into this framework?

Our study is designed to answer these questions experimentally in the context of grain processing firms in urban Uganda. Our experiment involves employers (owners and managers) and workers from 399 small and medium enterprises. The empirical strategy exploits a novel modification of the dictator game, the Main Game, in which employers (workers) are asked to make decisions about giving (receiving) part of an initial payoff of UGX 15,000 to an anonymous worker (from an anonymous employer). We employ a multiple price list setup, where respondents choose between redistributing via unconditional cash transfer or a work arrangement at a predetermined wage. To make our test non-trivial, we vary the relative price of redistribution by letting the wages and transfers vary between 3% and nearly 70% of the initial payoff.<sup>2</sup> In addition,

 $<sup>^1</sup>$ The payoff is the result of a lottery. UGX 15,000 (USD 3.95 at the time of writing) is equivalent to 129.8% of the workers' and 109.2% of the managers' average daily income in our sample.

<sup>&</sup>lt;sup>2</sup>We note that, as our primary interest is in understanding people's preferences for the channel of redistribution rather than measuring their generosity, the multiple price list does not include an option for not giving.

the work arrangement task is randomized at the employer-worker pair level. Decisions are made privately.

Our first contribution is to show that employers systematically choose to give via work rather than via unconditional cash transfers, and that this is an equilibrium outcome, as workers' preferences are aligned with employers. In the Main Game, employers choose to hire a worker to perform a task at their firm 86.5% of the time, and workers, who are employed full-time, opt for working rather than simply receiving cash in 87.8% of cases. Most employers (97.7%) and workers (87.3%) have a positive willingness to pay to hire, and to work.<sup>3</sup> Notably, our results also show that employers' decisions regarding work redistribution exhibit a minimal elasticity to the offered wage, with 79.6% of employers willing to hire at UGX 10,000 (over three times the market wage). Given such a high wage ceiling, the low elasticity provides evidence in support that employers indeed are willing to pay above the marginal product of labor.<sup>4</sup>

A concern is that the absence of an opt-out option in our experiment may alter respondents' preferences for redistribution, relative to a real life scenario. We argue that our design reflects realistic sharing expectations in poor countries, which are difficult to escape based on recent research on social taxation (Carranza et al., 2022; Jakiela and Ozier, 2016; Squires, 2018). Indeed, in our sample, 93.4% of employers normally face redistribution requests and 68.2% state that these requests constrain their businesses' productivity. Moreover, we find no evidence that employers use work redistribution to give as little as possible. When the transfer gets very close to zero (UGX 500, USD 0.13), we find that the vast majority of employers (96.2%) choose to give via work.<sup>5</sup> Another concern is that decisions may be driven by experimenter demands. Since in the experiment, pairs are anonymous and decisions are private, our setting minimizes social pressures relative to real life. Additionally, when we replicate the experiment by offering a choice between in-kind and cash transfers, a much smaller percentage of employers (26.3%) choose in-kind transfers. We conclude that our experimental results provide meaningful evidence of giving via work.

 $<sup>^3\</sup>mathrm{A}$  direct comparison between workers' and employers' average willingness to pay for work is not meaningful because we limit ourselves to positive wages in our study.

<sup>&</sup>lt;sup>4</sup>We believe that, given that workers show a strong preference for receiving via work, it is unlikely that demand for busywork would reflect the employer's attempt to create a hurdle mechanism against redistribution.

 $<sup>^5</sup>$ Preferences for redistribution may be discontinuous around zero, which could limit the informativeness of this test. To better understand how the experimental preferences align with actual generosity, we elicited unconstrained preferences for redistribution in private. Depending on the phrasing of the question, the percentage of employers who believed that redistribution should be zero ranged from 2% to 30%.

We now examine the drivers of work redistribution decisions. We identify and explore three broad categories of motivations. The first is productivity considerations. The idea is that work has a non-zero economic value for the firm and/or the worker, and employers or workers choose to redistribute via work due to various frictions such as training costs, hiring frictions, or, for employers, a desire to minimize social requests by giving less in net terms or avoiding holding cash. The second is instrumental relational or signaling considerations. Work can be a way to build valuable social connections and relationships, or, because work realizations are observable, to signal generosity or success on the employers' side, or effort on the workers' side. The third, closest to Lewis's perspective, is internalized social preferences, whereby workers value non-monetary benefits of work, such as a sense of purpose, and personal growth as in (Hussam et al., 2022), and employers recognize the importance of these non-monetary benefits for workers. Also, employers/workers may have a preference for reciprocity in giving arrangements, especially if they do not know each other and have little chances to interact in the future (Townsend, 1995).

To test for productivity considerations, we leverage the fact that in the experiment we randomly assigned tasks from a set of typical grain processing activities which are heterogeneous in piece-rate, tenure requirements and effort, plus a busywork task with zero marginal product.<sup>6</sup> To test for relational drivers, in a separate game, we ask employers and workers to make the very same redistribution decisions but for someone else, as third-party spectators with no stakes (Spectator Game) and compare giving via work decisions between the Main Game and Spectator Game. If productivity considerations were the driving factor behind work redistribution, we would expect to observe more work redistribution for pairs assigned to higher-value tasks, and especially, a decreased demand for work that has no marginal product (i.e., busywork) among employers. If relational motives were driving decisions, we would expect work redistribution choices to be less frequent in the Spectator Game.<sup>7</sup>

Our findings highlight that neither productivity-based justifications nor a relational or signaling value of work can explain giving via work. Focusing on the productivity-value test, the task associated with the work arrangement does not have a significant impact neither on employers' decisions to give through work nor on workers' decisions to receive via work. Most notably, employers are as likely to give via work if they are

<sup>&</sup>lt;sup>6</sup>The busywork task requires the worker to load and immediately offload the same three sacks of product on a truck.

<sup>&</sup>lt;sup>7</sup>The power of the test rests on the assumption that respondents do not fully internalize the preferences of persons with their role in the other pair.

assigned to a busywork task, as to any other valuable task. The willingness to pay for work redistribution of employers is, if anything, larger for busywork. Most employers (97.7%) prefer to hire a worker to do busywork for UGX 3,000 (about 20% of the initial payoff) as opposed to giving a UGX 500 cash transfer (3% of the payoff). We interpret these results as evidence against productivity considerations driving employers' or workers' choices. Focusing on the relational-value test, we find that employers make more work redistribution decisions (and their willingness to pay for work is significantly higher) in the Spectator Game as compared to when making decisions for themselves in the Main Game. Workers' decisions are not statistically different in the Spectator and Main Games.

The experimental results suggest that internalized social preferences (e.g., reciprocity, fairness, or altruism) are the most likely driver of work redistribution decisions. To provide evidence in support of our conclusion, we ask respondents to motivate the experimental redistribution decisions. Once again, employers' and workers' preferences are aligned. Reciprocity in redistribution is the primary driver of work redistribution choices for both employers and workers, explaining roughly 60% of giving and 45% of receiving. Most of the remaining work redistribution choices, about 30%, are explained by the fact that work is good for workers (either to build skills, or for dignity and mental health). In addition to showing that psycho-social benefits of work are perceived also by full-time employed workers, our results suggest that employers also perceive these benefits.<sup>8</sup>

Our findings have implications for the way we think about firm productivity in poor countries. Indeed, giving via work in the experiment is positively and significantly correlated with the extent to which firms in our sample are labor-intensive, but not with firm sales, revenues, or profits. While these results are not to be interpreted as causal, the fact that the extra hiring resulting from work redistribution does not appear to correlate with firm productivity or profits is consistent with our experimental results. We additionally find that overall generosity in the experiment positively correlates with firm revenues, variety of machines, and number of workers (including permanent workers). This suggests that observably bigger firms tend to redistribute more, and together with the previous results, tend to give more via work and, in turn, may have a more distorted input mix. In addition, our results showing that people value reciprocity in redistribution on both giving and receiving side are relevant to the debates on workfare vs. welfare

<sup>&</sup>lt;sup>8</sup>The fact that respondents are not more likely to take up or offer work when the task has larger training value in the experiment, but later motivate a non-trivial share of their choices with skill building is interesting. We hypothesize that this inconsistency is explained by respondents referring to personal development skills, rather than productive skills for the firm.

(Bertrand et al., 2021; Besley and Coate, 1992), and conditional vs. unconditional cash transfers (Baird et al., 2014; Haushofer and Shapiro, 2016, 2018) in poor countries.

First, our study connects the long-standing literature on low factor productivity in developing countries (see Cyert, March, et al., 1963; Hsieh and Klenow, 2009; McKenzie and Woodruff, 2017; Restuccia and Rogerson, 2008; Tremblay and Xiao, 2020 and Atkin et al., 2019 for a recent review) to a more recent work on behavioral labor economics. We show experimentally that unproductive hiring can occur due to a social value of work which reflects both employers' and workers' social preferences. Thus, we provide a new behavioral perspective on why firms in poor countries tend to be labor-intensive and inefficiently organized, beyond the constraints related to credit, human capital, and information previously studied (Atkin, Chaudhry, et al., 2017; Atkin, Khandelwal, et al., 2017; De Mel et al., 2008, 2010; Foster and Rosenzweig, 1995; Hanna et al., 2014; Hardy et al., 2017; Hsieh and Olken, 2014). Relative to the literature on social preferences on the workplace (Bandiera et al., 2005; Breza, Chandrasekhar, et al., 2019; Breza et al., 2018), which focuses on labor supply and workers' effort, we study the implications for labor demand and firm productivity. Relative to the literature on the social value of work (Jahoda, 1981; Morse and Weiss, 1955) and Hussam et al., 2022 in particular, we investigate the social value of working in a more general setting (full-time employed workers in a real labor market), and test for the first time for the social value of employment provision.

Our second contribution is to the development economics literature on informal redistribution/taxation. Existing work has focused on establishing the existence and effectiveness of various informal redistribution arrangements in improving welfare (Banerjee and Duflo, 2019; Barr et al., 2012; De Mel et al., 2008; De Weerdt and Dercon, 2006; Egger et al., 2019; Fafchamps, 1992; Foster and Rosenzweig, 2001; Townsend, 1994, 1995). Despite this attention, we know little about poor people's preferences for how to share or receive resources, and what drives them. We present field-experimental evidence that, in a poor country setting, people exhibit a strong and general preference for giving and receiving via work, and we investigate the mechanism. Because we show that work redistribution does not reflect productivity considerations, our work contributes to the recent literature on the distortions associated to kinship taxation (Carranza et al., 2022; Jakiela and Ozier, 2016; Squires, 2018) by showing that informal taxation can lead to distortions absent social pressures, due to internalized social preferences.

Finally, we relate to the behavioral economics literature on preferences for redistribution and fairness concerns. Existing work examines variations in generosity levels across individuals, groups, or countries (Alesina & Giuliano, 2011; Alesina et al., 2018; Almås et al., 2020; Bazzi et al., 2020; Falk et al., 2018). Alesina and Angeletos, 2005, in particular, show that fairness influences redistribution preferences (in terms of generosity). We show that fairness also affects preferences for the channel of redistribution, and second, we look at preferences from both givers' and receivers' perspectives.<sup>9</sup>

### 2 Setting and Sample

#### 2.1 Sample Selection

Our study focuses on owners, managers, and workers of small and medium enterprises (SMEs) in Kampala involved in grain processing for human food and animal feed. We focus on this sector because it is a significant sector in the Ugandan economy and employs a substantial proportion of workers in Uganda. Moreover, unlike other labor-intensive service sectors like beauty salons or restaurants, workers in grain processing firms receive a wage from their employer, as shown in Table 1. Finally, the tasks performed in grain processing firms require varying levels of skills, offering an excellent opportunity to manipulate the value of work in our experiment.

In August and September 2022 we conducted a listing exercise of grain processing firms in the Greater Kampala area and identified 491 firms within a radius of 30 km from the city center. Conditional on employers giving consent to participate in the study and excluding firms where the owner/manager self-reports not employing any worker, our sample includes 427 firms. For each firm, we interview an employer — a person qualifies as an employer if they have hiring discretion, so if they either the manager or the owner — and up to two workers, for a total of 427 employers' and 451 workers' interviews.

Note that we are able to interview workers only in 412 firms. The reason is that to identify workers, we ask employers to refer up to two workers who are working or have worked for the firm during the day, and some employers refuse. Also, due to a

<sup>&</sup>lt;sup>9</sup>Another paper who studies experimentally preferences for redistribution channels among givers is Bursztyn and Coffman, 2012, showing that parents are willing to pay for the conditionality of Progresa transfers in Brazil because of intra-household frictions.

<sup>&</sup>lt;sup>10</sup>For instance, grain processing is one of the three sectors studied in Bassi et al., 2022, together with carpentry and metal fabrications.

<sup>&</sup>lt;sup>11</sup>As shown in Figure A.8, grain-processing firms are clustered geographically. Therefore, we adopted a listing approach that involved identifying major clusters in the city center through focus groups, and then moving outwards from these central clusters along the main roads leading to the countryside.

programming error in our main experiment (the task assigned to the work arrangement came up as blank), we restrict our sample to 399 firms/employers and 449 workers.

In March 2023, we conducted supplementary phone interviews with a random subset of 99 employers and owners from our main sample, with the objective to further qualify our main results.

### 2.2 Summary Statistics

Firms, employers, and workers' characteristics are in Table 1. Firms in our sample employ five to six workers on average — a number comparable to the grain milling firms interviewed in Bassi et al., 2022 — depending on whether we consider the number of workers employed on the day of the interview or the number of workers employed on a typical day in August 2022. Based on their main production activity, the firms we interview can be classified into three groups: firms dealing in grain milling for human food, firms using maize milling by-products to produce animal feed and firms that focus on animal feed processing and/or trading with non-maize products. About 31.1% of the firms belong to the first group, mostly producing maize flour (24.3%, 97 firms). Of the remaining 68.9% belonging to the second group, most firms (49.9%, 199 firms) deal in maize grain processing.

Our findings align with an ecdotal evidence indicating that grain processing firms have diverse activities with varying piece rates and tenure requirements, indicating that the firms hold significantly different values. Table A1 provides an overview of the common tasks performed by workers and firms in our sample, along with the corresponding piece rate and tenure requirements. For the experimental design, we selected four tasks: sealing, loading, weighting, and sweeping. These tasks were chosen because they were heterogeneous in terms of the skills required and their relevance to the firms. Additionally, they did not require special machines to perform, making them accessible and valuable to all firms in our sample. Table 2 evaluates the balance of firms', employers', and workers' characteristics across tasks. Only hours worked (p-value = 0.014) and days worked (p-value = 0.022) show significant differences when comparing the busywork and value tasks subsamples, while controlling for the firm's location and main activity fixed effects. Offloading has the highest average tenure requirements at 8.87 days, while sweeping has the lowest, with an average of just 0.76 days. The effort exerted for tasks varies, with offloading perceived as very effortful by most employers and sweeping seen as not effortful at all. Weighing has the lowest reported piece rate of UGX 190, while the piece rates for all other tasks range between UGX 500 and UGX 850.

In the employers' sample, 47.6% are owners and 52.4% are managers. Managers are a family member of the owner 16.3% of the time. Most employers are men (70.4%) and all but two are Ugandans. The median educational achievement is 6 years. 15.3% of employers have completed a bachelor's degree. Managers' reported monthly salary at the time of the interview is USD 96.08.<sup>12</sup> To put this number into perspective, Uganda's GDP per capita in 2021 was USD 74 (World Bank, 2021).

The worker sample primarily comprises men (95.6%), with roughly equal representation of permanent and casual workers. All respondents report being employed full-time, working an average of 6 days per week for 10.4 hours per day. However, these figures mask a significant amount of idle time, with over 30% of employment time being spent idle. As expected, the workers are predominantly low-skilled, with a median education level of 6 years. The self-reported average monthly wage for workers is USD 77.16, which translates to a daily wage of approximately USD 3 based on the number of days worked.

Finally, Table 2 shows that employers', workers' and firms' characteristics are balanced across random task assignments. In particular, firm and employers characteristics are balanced once controlling for geographic location and firm main activity.<sup>13</sup> Two of the workers' characteristics, tenure at the firm (years) and hours worked, are statistically different across task treatments even conditional on the fixed effects. Thus, we include them as controls in the workers' regression analysis.

#### 2.3 Patterns of Informal Redistribution

In our setting, as common in developing countries, informal redistribution and mutual insurance arrangements are widespread, taking many forms, such as cash or in-kind gifts, loans, or labor assistance. Indeed, a significant proportion of the employers in our sample reported receiving requests for cash, work, or in-kind assistance from family and friends (85%), and even more commonly from acquaintances and strangers (89%).<sup>14</sup>

<sup>&</sup>lt;sup>12</sup>Note that because a manager's pay is a sensitive topic, we ask respondents about the wage of a person in their position.

<sup>&</sup>lt;sup>13</sup>Absent any controls, firms assigned to busywork or weighting had, for example, fewer revenues and sales. The reason is in the way we implemented task randomization. Initially, we cross-randomized three tasks — loading, sealing, and sweeping — which we identified as common and having a substantial variation in value, with loading being the most valuable and sweeping the least valuable. Half-way through the data collection, realizing that there was no variation in the outcomes by value of the task, we changed the tasks' combination to loading, weighting, and busywork. Because we proceeded sequentially, and the data collection exercise was conducted in parallel to the listing exercise, firms which are interviewed in the second half of the data collection are more likely to be in the peripheries of Kampala, where the firms are smaller.

<sup>&</sup>lt;sup>14</sup>Data from the follow-up phone survey in March 2023, N = 99.

While most research in this area has focused on bundled sharing arrangements, credit, or gifts (among others: Fafchamps, 1992; Townsend, 1994, 1995; Udry, 1994), our study is motivated by the observation that employment is a salient channel of redistribution in our setting. In fact, in our experimental survey of 399 employers and 449 workers in September 2022, more than 90% of respondents mention employment as the most salient channel of redistribution (Figure 1). This highlights the importance of understanding the role of employment in informal redistribution and its potential impact on labor markets and productivity.<sup>15</sup>

While cash requests were more common among family and friends, work requests were more prevalent for acquaintances and strangers. Notably, 30% of employers reported being asked for work by family and friends, while over 51% were approached by acquaintances and strangers seeking support via job opportunities (Appendix Figure A.19). On average, employers who give stated to have given about 27% of their income in their month (81.2% of respondents reported to give to non family members or friends). These numbers are in line with the corresponding self-reported estimate in Carranza et al., 2022. Conditional on giving at all, the total value of work redistribution exceeds that of cash redistribution by 67.1% (refer to Appendix Figure A.20).

These findings suggest that employers frequently face redistribution requests that are difficult to avoid. Consistent with this view, 58.9% of employers state that cash and job requests are a problem or a serious problem (Figure A.13). For comparison, only 29.8% of employers think that finding employees with skills is a problem for the productivity of their firm. Overall, this suggests that in our context, there exists a trade-off between generosity and productivity, as highlighted in previous studies such as Squires, 2018 and Carranza et al., 2022.

# 3 Experimental Design

#### 3.1 Main Game

Our primary experiment is a modified version of a dictator game, where respondents (employers and workers) choose between redistributing part of a payoff via unconditional cash transfer or via work. In particular, employers make decisions about giving, while workers about receiving. In what follows, we describe the experiment in detail.

<sup>&</sup>lt;sup>15</sup>In the follow-up phone survey, we ask the question again in an open-ended fashion to limit the effect of potential order effects in the close-questions, and the answers are qualitatively unaffected as shown in Appendix Figure A.18.

Employers and workers are anonymously matched in pairs. In each pair, the employer receives an initial payoff of UGX 15,000 (USD 3.95) while the worker's initial payoff is UGX 1,000 (USD 0.26). All participants are made aware that the initial payoffs are not final, and that one person — within or outside the pair — will be tasked with redistributing a portion of the initial earnings to determine the final payoffs. Before eliciting redistribution decisions, both employers and workers are presented with a task randomly selected from activities commonly performed at grain processing firms.

Then, employers are asked whether they want to give an unconditional cash transfer to the worker or whether they pay the worker to perform the pre-specified task at their firm. Similarly, workers are asked whether they want to receive an unconditional cash transfer or they want to be paid to perform the task. To make the experimental choices non-trivial, we vary the relative price of redistribution so that the wage is equal to, higher or lower than the transfer. We also vary whether the wage is above or below the market wage for the task, which we calibrate to be about UGX 3,000 based on focus group discussions with local employers and workers.

We use a multiple price list approach to elicit decisions, as exemplified in Figure 2. The approach involves presenting a series of questions (up to 22) to each respondent, with the wage and transfer amounts varying across questions. We start with a question where both wage and transfer amounts are set at UGX 3,000 (the market wage for the task). In the subsequent question blocks, either the wage or the transfer are adjusted dynamically. In the first block of questions, the wage amount ranges from UGX 3,500 to UGX 10,000, while the transfer amount remains constant at UGX 3,000. The second block varies the wage amount between UGX 500 and UGX 2,500, while still keeping the transfer at UGX 3,000. In the third block the wage is fixed at UGX 3,000 and the transfer varies from UGX 500 to UGX 2,500. In the fourth and final block, the wage is again fixed at UGX 3,000 while the transfer varies from UGX 3,500 and UGX 6,500. If a respondent indicates a preference switch from redistribution via a work arrangement to an unconditional transfer (or vice versa), we assume that the respondent similarly prefers all unconditional transfers (or work arrangements) worth more to minimize the time spent on the survey (Bursztyn & Coffman, 2012). All choices are made privately.

Our experiment is designed such that redistribution cannot be zero or negative. We argue that this design choice reflects expectations about giving in poor countries, which are sizable, widespread, and hard to escape as demonstrated by recent research

 $<sup>^{16}</sup>$ We use a binary search-like method. In practice, this involves first presenting extreme values of the amount to be varied, and then successively halving or doubling these values to efficiently narrow down the range where the preference choice switches occur.

on social taxation (Carranza et al., 2022; Jakiela & Ozier, 2016; Squires, 2018) as well as by our descriptive evidence on support requests (Appendix Figure 6), earnings shared (Appendix Figure ??), and taxation (see Appendix Figures A.13). However, a concern with this choice is that employers may choose to give via work in an attempt to give as little as possible. This may lead to an overestimation of the share of work redistribution if positive redistribution is imposed. To test this concern, we set up the experiment to allow both the transfer and wage to be very small (UGX 500, USD 0.13), which effectively simulates scenarios where no redistribution can occur and can test whether respondents' choice are consistent with employers trying to give as little as possible.

We use between-subject randomization to assign different tasks with varying values to different pairs. We select four activities commonly performed at grain processing firms: loading/offloading, sealing, weighting, and sweeping. Table A1 summarizes the characteristics of these tasks, including their piece rates, tenure requirements, and perceived effort levels. The selected activities have different values for the firm, with loading having the highest average piece rate of USD 0.34 and being the most effortful, while sweeping has the lowest piece rate of USD 0.04 and is the least effortful. The required tenure ranges from 0.95 days (for sweeping) to 10.03 days (for loading).

For each activity, we define a task that would take approximately 30 minutes and for which the plausible market wage is UGX 3,000. For example, in the case of sealing the task is "sealing ten sacks", or in the case of loading it is "loading three sacks". On top of the standard loading task, we also include an extreme case, the busywork task, which involves loading and immediately offloading the same three sacks from a truck. Thus, we have five tasks in total.

Incentives Participants are offered monetary incentives in the form of a lottery.<sup>17</sup> At the start of the experiment, participants are informed that 5% of the pairs will be selected, and the experimental endowments will be realized. Additionally, one decision maker per pair will be randomly selected, and one of their redistribution choices will be implemented. Employers and workers make their choices anonymously and privately, before the lottery results are announced. We clearly communicate to employers (and workers) that if they choose work redistribution, they must hire the worker (be hired) for the pre-specified task; otherwise, they will not receive their lottery winnings.

<sup>&</sup>lt;sup>17</sup>Note that in this setting, the fact that earnings come from luck works against us finding preferences for redistribution via work. Existing literature has explored how the source of income affects distribution preferences, in particular showing that the fact that income is earned by effort or luck affects individuals' perceptions about fairness (Alesina & Giuliano, 2011).

Outcomes We focus on two experimental outcomes. The respondent's work redistribution choices — equal to the dummy of work redistribution choices made by each respondent at each choice point. The respondent's maximum willingness to pay for work — equal to the largest difference in shared amount, where the respondent chooses work redistribution as opposed to a cash transfer.

#### 3.2 Variations of Main Game

Spectator game Respondents in the experiment play two versions of the game, in random order. In the Main Game version, described above, respondents make decisions about redistribution for their pair. In another version, the Spectator Game, respondents make decisions about redistribution for another pair. Both games are incentive-compatible. At the end of the experiment, we select 20 pairs, 20 decision makers (employer or worker), 1 game (Main Game or Spectator Game) per person and 1 decisions per game-respondent which are implemented.

The variation in stakes between the Main Game and the Spectator Game allows us to test whether work redistribution decisions are driven by instrumental social benefits such as a signaling value or networking value of work.

Food vs. cash game We conducted a follow-up phone interview to implement a different version of the experiment. In this version, participants choose between receiving in-kind giving, such as a snack or a meal, and an unconditional cash transfer. The aim is to differentiate between a preference for work redistribution and a dislike of cash transfers. The multiple price list approach used in the Main Game is also utilized here, with three potential choices available. We start with a choice between a snack or meal for UGX 3,000, or the same value transfer. Then we change the value of the in-kind options to UGX 500, UGX 3,000, and UGX 10,000, while the cash transfer value remains constant at UGX 3,000.

The variation in the outside option to cash transfers between the Main Game and the Food vs. Cash Game allows us to test whether work redistribution decisions reflect a preference for giving via work, or hide an aversion to giving via cash. Moreover, given that in-kind/food redistribution is not a salient channel of redistribution for our respondents (see Figure 1), the comparison between the Main game and the Food vs. Cash Game games helps us to test to what extent respondents' choices are driven by experimenter demands.

### 4 Empirical Analysis

The first part of our empirical strategy focuses on estimating mean outcomes and making mean comparisons for various experimental choices across prices, groups (employers vs. workers), treatments (value work vs. busywork), and games (Main Game vs. Spectator Game). The second part exploits regression analysis to estimate the elasticity of decisions to prices, as well as treatment effects.

#### 4.1 Descriptive analysis

Giving via work We estimate the share of respondents, employers and workers, that chooses work redistribution as opposed to unconditional cash transfers. We compute this statistic both across all choices and for each wage and transfer combination, and can plot the choices across the wage and transfers. If we assume that there is no preference for work redistribution, we would expect that employers' demand for work redistribution would decrease as wages increase, especially when wages exceed the market wage of UGX 3,000. Additionally, employers' demand for work redistribution is expected to increase as the alternative transfer amount increases. For workers, in the absence of preferences for receiving compensation through work redistribution, we anticipate that the demand for work redistribution would increase as wages increase, and decrease as the transfer amount decreases.

Willingness to pay for work redistribution Respondents choose between work or cash, at varying relative wages and transfers. The variation in wages and transfers allowed us to calculate the maximum amount that each employer was willing to pay by choosing work over cash when the wage was strictly higher than the transfer, and the maximum amount each worker were willing to give up by choosing to work for a wage over receiving cash when the wage was less than the amount they would receive in cash.

Willingness to pay for in-kind redistribution A subsample of the employers (N=99) chooses between giving in-kind (food) or cash, at varying food values and transfers. The price variation enables us to compute the fraction of employers in our sample who prefer to give in-kind as opposed to give via cash. Computing this benchmark serves two purposes. First, it allows us to identify whether there exists an aversion to give cash. Second, because there is no evidence of in-kind transfers being a preferred channel of redistribution, it allows us to bound experimenter demands.

Value of task treatment Employer-worker pairs are randomly assigned to make decisions about giving via a specific work arrangement, or giving cash, allowing us to estimate outcome means by task to test whether productivity considerations drive work redistribution decisions. We are especially interested in the mean outcomes for the least valuable tasks, namely sweeping and busywork. In particular, as productivity considerations are different for employers and workers, we are especially interested in employers' decisions for busywork (zero marginal product, by construction), and workers' decisions for sweeping (nearly zero tenure days requirement, as shown in Table A1).

**Personal stakes treatment** Employers and workers make decisions both for themselves and for other pairs. When making decisions for other pairs, they do not incur any costs or receive any benefits of the work, including instrumental relational benefits. By estimating outcome means for the Spectator game, we learn whether stakes, and in turn instrumental relational benefits of work, drive work redistribution choices.

#### 4.2 Regression analysis

Elasticity of work decisions to prices We can estimate the elasticity of work redistribution decisions to changes in wages and transfers, via the following OLS regression:

$$Work_{ij} = \alpha + \beta_1 log(Wage)_j + \beta_2 log(Transfer)_j + \gamma_i + e_{ij}, \tag{1}$$

where Work is a dummy dependent variable indicating the decision of respondent i for decision j. The independent variables log(Wage) and log(Transfer) are the wage and cash transfer associated to a decision j;  $\gamma$  are fixed effects for firm geographic area, and main firm activity. Standard errors are clustered at the respondent level. We estimate the regression separately for employers and workers.

The wages and transfer payments offered can be lower or higher than the market wage, and this variation can result in discontinuous changes in the elasticity of hiring or working decisions. To account for this, we additionally estimate separate regressions for situations where the wage and transfer payments are below UGX 3,000 and situations where they are equal to or greater than UGX 3,000.

Value-of-task treatment effects We use a reduced-form approach to estimate the value-of-task treatment effects, which involves estimating the treatment effects for each specific task. This approach has the advantage of not requiring us to make assumptions about which tasks are more valuable to each individual firm or employer. We estimate the following OLS regressions:

$$Y_{il} = \alpha + \phi I_{task,i} + \gamma_i + \lambda_j + u_i, \tag{2}$$

where Y is outcome l of respondent i;  $I_{task}$  is a categorical variable indicating the task randomly assigned to the work arrangement; X are individual controls;  $\gamma$  are firm geographic location and main activity fixed effects; and  $\lambda$  are choice characteristics fixed effects. Standard errors are clustered at the firm/respondent level. We estimate the regression separately for employers and workers.

A potential limitation of the regression analysis in equation (2) is that it may not capture the effects of heterogeneity in firms' needs, which could result in an inability to detect the effect of task value on hiring decisions. To address this concern, we can estimate the correlation between measures of task value (such as self-reported tenure requirements, piece rate, and effort) and work redistribution.<sup>18</sup>.

It is worth noting that we do not estimate a two-stage-least-squares specification, as the randomly assigned task may affect hiring decisions through dimensions that are not captured by piece rate or tenure requirements. Instead, we estimate a simpler OLS regression, which is given as follows:

$$Y_{il} = \theta_0 + \theta_1 Piecerate_i + \theta_2 Effort_i + \theta_3 Tenure Requirement_i + \gamma_i + \lambda_j + \nu_{il}, \quad (3)$$

where Y is outcome l for respondent i. Piece rate (UGX), Effort (1-3), and Tenure Requirements (days) are task characteristics;  $\gamma$  are geographic location and main activity fixed effects;  $\lambda$  are fixed effects for choice characteristics (wage and transfer). Standard errors are clustered at the respondent level. We estimate the regression separately for employers and workers.

**Zero marginal product test** As the busywork task was randomly assigned, we can use this variation to directly test whether employers are willing to hire workers with zero marginal product and whether they are willing to pay for such work. To do this,

<sup>&</sup>lt;sup>18</sup>The first-stage regressions show that the randomly assigned task is a strong predictor of both piece rate (in the employers' regression, the F-stat is 38.67 and in the workers' 77.70) and tenure requirements (in the employers' regression, the F-stat is 11.74). See Appendix Table A7.

we estimate the following regression on the sample of employers:

$$Y_{il} = \alpha + \beta_1 I_{busywork,i} + \gamma_i + \lambda_i + v_i, \tag{4}$$

where Y is outcome l for respondent i, while  $I_{busywork}$  is a dummy variable indicating whether the task randomly assigned to the work arrangement was busywork or not.  $\gamma$  are geographic location and main activity fixed effects;  $\lambda$  are fixed effects for choice characteristics (wage and transfer). Standard errors are clustered at the respondent level. We estimate the equivalent regression for workers to ensure that employers' choices can be thought as equilibrium outcome.

Near zero skill building test We can use the randomization of the sweeping task variation to test whether employers are willing to hire workers for tasks with little screening value, as well as whether workers are willing to work when the task has a low skill-building value. To do this, we estimate the following regression on the sample of employers and workers, separately:

$$Y_{il} = \alpha + \beta_1 I_{sweeping,i} + \gamma_i + \lambda_j + v_i, \tag{5}$$

where Y is outcome l for respondent i, while  $I_{busywork}$  is a dummy variable indicating whether the task randomly assigned to the work arrangement was busywork or not. X are individual controls;  $\gamma$  are geographic location and main activity fixed effects;  $\lambda$  are fixed effects for choice characteristics (wage and transfer). Standard errors are clustered at the respondent level.

**Personal stakes test** To test whether respondents make different decisions in the Spectator Game, as compared to the Main Game, we exploit the following OLS regressions on the pooled Spectator Game and Main Game decisions:

$$Y_{il} = \alpha + \beta_1 Spectator_i + \gamma_i + \lambda_j + e_i, \tag{6}$$

where Y is a dependent variable indicating the outcome of respondent i for decision j in game k; Spectator is a dummy independent variable indicating whether decision j refers to the Spectator or the Main Game;  $\gamma$  are fixed effects for firm geographic area, main firm activity, task, and respondent;  $\lambda$  are fixed effects for choice characteristics (wage and transfer). Standard errors are clustered at the respondent level. We estimate the regression separately for employers and workers.

### 5 Results

### 5.1 Evidence of Giving Via Work

Our results indicate that employers consistently choose to give via work over unconditional cash transfers. This preference is in line with the choices made by workers, who also tend to choose work over receiving cash, suggesting that this is an equilibrium outcome. Moreover, we find evidence suggesting that employers pay wages that are above the marginal product of labor. Our analysis showed that employers were willing to pay well above the market wage, and that their preferences were not sensitive to price changes (especially increases in the wage). The main results are summarized in Figure 3 and Table 3.

Work redistribution decisions Our analysis of work redistribution choices in the Main Game reveals two important statistics. First, employers choose to share money by hiring an extra worker in 86.5% of cases on average, and more than 90% of cases when the wage equals the transfer. The range of employers giving via work is relatively constant across wage and transfer combination, ranging from 79.7%, when the wage is the highest (UGX 10,000), to 96.2% when the cash transfer is the lowest (UGX 500) and the wage is the market wage (UGX 3,000). We do not find any evidence that owners and employers make systematically different decisions (Appendix Figure A.15, Panel A).

Second, workers systematically choose to work in exchange for money, aligning their decisions with those of employers. Workers choose the work arrangement over an unconditional cash transfer 87.8% of the time, which is not statistically different from the employers' results (p-value: 0.758, see Appendix Table A2). The range of workers choosing to work varies from 57.0%, when the wage is the lowest (UGX 500), to 90.0% when the wage is the highest (UGX 10,000). Workers that are hired on a contract (permanent workers) and on-call workers (casual workers) make very similar decisions in the experiment (Appendix Figure A.15, Panel B).

These descriptive results provide experimental evidence that work is a relevant channel of redistribution in our context. Moreover, the alignment of employer and worker decisions suggests that employers are not pressured into hiring by workers, nor are they using work redistribution as a hurdle mechanism to avoid giving. Our findings also challenge the claim that employers may choose to give via work to avoid giving. This is supported by the fact that nearly all employers choose to give via work and pay the market wage of UGX 3,000, even when the alternative is a cash transfer close to zero

(UGX 500) as shown in Appendix Figure A.11). The fact that employers are willing to pay several times the market wage indicates that they are not solely motivated by market forces, and under the conservative assumption that the market wage equals the average marginal product of labor, it suggests that employers may be paying above the marginal product of labor.

Willingness to pay for work Regarding the willingness to pay analysis summarized in Figure 3, Panel B, the main finding is that employers display a strong willingness to redistribute via work, with an average value of UGX 6,085 as shown in Figure 3, Panel B. This represents 40.6% of their initial payoff, 19.3% of their daily income, and approximately twice the market wage. Furthermore, a significant proportion of employers (79.7%) are willing to pay a wage as high as three times the market wage to give via work.<sup>19</sup>

Workers are also willing to pay so that redistribution happens via work. On average, workers are willing to pay UGX 3,004 to work in exchange for money — about 25% of their daily wage.<sup>20</sup> This willingness to pay is reflected in their willingness to work for a lower wage than the alternative unconditional cash transfer. Most notably, 57% of workers choose to work for UGX 500, nearly zero, instead of receiving a six-time large unconditional cash transfer.

The willingness to pay analysis, on top of providing evidence of the strength of preferences, are the first piece of evidence in support of actual "giving" via work. In particular, willingness to pay does not appear to just mask employers' generosity towards workers because the employers' willingness to pay is symmetric around the point when the wage equals the transfer.

Elasticity of work redistribution choices to prices The insensitivity of employers' and workers' work redistribution choices to wages and transfers is intuitively shown in Figure 3 and Appendix Figure A.11. One way to interpret the graph is to view the employers' line in Figure 3 as aggregate labor demand and the workers' line as aggregate labor supply. Typically, labor demand would decrease in wages (especially above the market wage of UGX 3,000), and labor supply would increase in wages in the absence of a preference for giving via work. Instead, we observe that both curves are relatively flat, indicating a strong additive preference for giving/receiving via work.

<sup>&</sup>lt;sup>19</sup>The wage is UGX 10,000, and the alternative is a UGX 3,000 unconditional cash transfer.

 $<sup>^{20}</sup>$ We note that by design the workers' willingness to pay could not exceed UGX 3,500 because we do not allow for negative wages and we capped the transfer amount to UGX 6,500.

In particular, the flat labor demand curve in wages provides an additional piece of evidence, beyond the large marginal willingness to pay, that employers are paying above the marginal product of labor.

Table 3, Panel A, presents the regression analysis that estimates the semi-elasticity of work redistribution decisions to prices, specifically the wage and transfer offered. Column 1 estimates Equation 1. The results indicate that a small, not statistically significant association between wages and likelihood of giving via work (a 10% increase in the wage is associated with a 0.002 percentage points increase in the likelihood that an employer chooses to give via work, p-value 0.089). However, as shown in Column 3, this coefficient is mainly driven by the set of choices where the wage is below the market wage, in line with norms against paying below the market wage (Breza, Kaur, & Krishnaswamy, 2019). When focusing on the standard case of a wage above UGX 3,000, the semi-elasticity of work redistribution to wage is negative, but still very small, and not statistically significant (a 10% increase in the wage is associated with a 0.009 percentage points reduction in the likelihood that an employer chooses to give via work, p-value 0.000). Employers' decisions to give via work are similarly insensitive to prices, with the exception of the results in column 5, showing that when the transfer is lower than the market wage, a 10% decrease in the transfer is associated with a small (0.002 percentage points) but statistically significant increase in the likelihood of giving via work and pointing at some aversion to giving very small donations.<sup>21</sup>

Table 3, Panel B, shows that workers' experimental decisions similarly not very price-sensitive. Column 3 shows that, even if we focus on when the wage goes below the market wage, a 10% reduction in the wage is associated with a mere 0.016 percentage points decrease in the likelihood of a worker choosing to work. Importantly, work redistribution decisions and their willingness to pay to work are uncorrelated with workers characteristics like skills, employment, and income (as shown in Appendix Table A8).

#### 5.1.1 Addressing potential threats to validity

Preference to give work or aversion to give cash The interpretation that employers and workers may simply be averse to giving or receiving unconditional cash transfers is a valid alternative explanation for our findings in the Main Game. To explore this alternative interpretation further, we can look at the results of the Food vs. Cash Game, where employers could choose between giving via work or giving via food

<sup>&</sup>lt;sup>21</sup>Note that this is exactly the opposite to what one would have expected to see if employers were using work redistribution to give as little as possible.

(snack or meal), at different prices. As shown in Appendix Figure A.12, the majority of respondents (around 85% of choices) choose giving cash rather than in-kind contributions. At the equal choice (meal or snack worth UGX 3,000 vs. UGX 3,000 transfer), around 80% of employers chose to give cash. This supports our interpretation of the Main Game results as preference for work redistribution and in addition, it indicates these preferences are not simply driven by concerns about recipients' wasting cash.

Anonymity Our experimental design, in which employers and workers are not acquainted with each other, offers an advantage in controlling for extraneous variables that could confound the results, such as unobserved worker quality or the monitoring value of hiring (Heath, 2018; Pallais and Sands, 2016). However, the anonymous nature of the design may also limit the external validity of our findings since real-life situations if people in our sample normally would only share resources with close friends or family. Against this concern, both our survey evidence and previous literature (e.g., Carranza et al., 2022) suggest that individuals typically donate substantial amounts of money to people outside their social network. For instance, our follow-up survey reveals that 83.8% of employers report giving either cash or work to individuals outside their family or social network. Furthermore, our qualitative findings indicate that work redistribution is prevalent among close relationships and strangers, and it is relatively more common than cash transfers for acquaintances and strangers. While employers state to receive both cash and work requests, they receive systematically more work requests from from acquaintances or strangers, as compared to family and friends (see Appendix Figure A.19).

Constrained Redistribution The fact that our design imposes some positive, albeit small, redistribution could raise concerns that we may be overestimating the level of redistribution in real life. However, there are several factors that mitigate this concern. Firstly, our qualitative evidence shows that the vast majority of employers in our sample report to have shared earnings to help out someone in the past month (90.9%), and the average amount shared is sizable, over 25% of their monthly income. This suggests that in real life, most people either want to share, or face pressures to share. Additionally, we directly elicit preferences for redistribution in an unconstrained manner, and, the share of employers who state that an employer in their position should not share anything from the UGX 15,000 lottery win ranges from 2% to 30% (Figure A.14).<sup>22</sup> This suggests

<sup>&</sup>lt;sup>22</sup>We measure preferences for redistribution using two questions. The first is a first-order beliefs question that asks respondents how much a lottery winner should share with an anonymous loser,

that a non-negligible proportion of employers in our sample believe in the importance of redistribution.

Experimenter demands While our experimental design is incentive compatible, it is possible that employers may still want to signal to the experimenters. However, the results of our Food vs. Cash experiment provide some empirical evidence against this hypothesis. In this experiment, we asked employers to choose between giving via work or giving via food (snack or meal). The questions were worded as in the Main Game, with the only difference being the explanation of the non-cash option (work task/in-kind). Since as researchers we may be equally interested in studying in-kind or work redistribution from the respondent perspective, the low percentage of employers who chose in-kind redistribution suggests that experimenter demand is not a concern.

#### 5.2 Drivers of Work Redistribution

After establishing that employers and workers prefer giving and receiving via work, we aim to uncover the underlying drivers of this preference. We explore three hypotheses. First, work redistribution may have an economic value for the firm/the worker, either through direct or indirect means such as screening. Second, work redistribution has a relational value for the firm/the worker, either because it is more observable and it allows to signal, or because it allows to expand one's network. Third, employers and/or workers may place a social value on work redistribution.<sup>23</sup> Distinguishing between these explanations is crucial to understanding the implications of our findings, particularly to determine if work redistribution is an optimal response to existing market frictions or a form of tax.

using the same setup as the experiment. This question is asked sequentially, with a yes/no question followed by a conditional amount question. About 30% answer "no," and the average redistribution is 30.8% for employers and 28.2% for workers. The second is a second-order beliefs question that asks what respondents think others believe the lottery winner should share. This question is asked non-sequentially, and only 2% answer "no redistribution," with an average redistribution of 30.4%. The difference in results could be partly due to the sequential nature of the first method leading some respondents to answer "no" to the initial sharing question.

<sup>&</sup>lt;sup>23</sup>It is worth noting that while coordination or social pressures could also be a driver of work redistribution in real life, the fact that work redistribution choices in the experiment are private suggest that this is not the primary explanation of the experimental results.

#### 5.2.1 Economic Value of Work

One first explanation for employers' preference for work redistribution is that work has an economic value for the firm which justifies paying wages above the marginal product of labor, e.g., due to hiring frictions or difficulties in finding workers with the necessary skills.

To test the hypothesis that the economic value of work drives employers' preference for work redistribution, we leverage the random variation in task assignments across subjects. The tasks vary effort needed, skill requirements (proxied by the tenure days required to work on the task unsupervised), and value for the firm (proxied by the piece rate), as shown in Table A1. Our assumption is that if an economic value of work was driving giving via work, we expect employers to exhibit less work redistribution and lower willingness to pay for work when the tasks have lower value. Similarly, if workers are using work redistribution to enhance their skills, they should be more willing to work when the task is more complex. We include two special tasks with objectively lower value to address concerns about different employers and workers facing different production functions. The busywork task, loading and offloading the same three sacks on a truck, is designed to have zero marginal product. The sweeping task, sweeping the floor of a firm for 30 minutes, is a task which scores systematically lowest in terms of skill training (less than 1 day tenure requirement), effort, and piece rate.

The descriptive analysis, summarized in Figure 4, suggests that the value of tasks is not driving employers' preferences for work redistribution. Panel A shows that the distribution of work decisions by wage is similar across tasks, and the proportion of giving via work is always above 50%. Strikingly, the patterns of work redistribution decisions are nearly indistinguishable when the task is randomly assigned to be busywork. Indeed, a large proportion (86.4%) of employers are willing to pay UGX 10,000 – three times the market wage – to have a worker engage in busywork instead of giving this worker three times smaller unconditional cash transfer. Even for tasks with very little skill building value, like sweeping, most employers still prefer work redistribution to cash transfers. In addition, Panel B shows that there is no significant difference in employers' average or maximum willingness to pay for work redistribution when tasks have higher value compared to when they are busywork.

The regression analysis, in Table 4, Panel A, support the same conclusions as the descriptive analysis. In Column 1, we show that likelihood of an employer choosing work redistribution is not affected by the task assigned. In Column 2, we see that being assigned to busywork as a task does not affect work redistribution decisions (*p*-value

0.586), relative to being assigned any of the other tasks. Column 3 shows that the same is true on average for the sweeping task.<sup>24</sup> Finally, Column 4 shows that perceived effort levels, self-reported piece rate or tenure requirements for the task do not predict giving via work.<sup>25</sup> Column 5 to 8 show the equivalent results for the willingness to pay outcome.

Table 4, Panel B, employers' decisions are once again aligned with workers' as workers' willingness to pay for working in exchange for money is also unaffected by the value of the task. This evidence is also consistent with the fact that, as mentioned above, the average worker in our sample has been working in this sector for almost 2 years, the tasks are very common and relatively simple, as well as the fact that work redistribution decisions are not heterogeneous in terms of skills (measured with the number of machines that a worker self-reports to be able to use), income, or tenure at the job.<sup>26</sup>

To summarize, the results of the task treatment analysis show that employers do not take into account the value of the task when making work redistribution decisions, providing evidence that productivity considerations are not the drivers of work redistribution preferences. In addition, we find that workers are not less likely to take up jobs that have low skill building value or that are not meaningful to the employer suggesting that this is an equilibrium outcome.

#### 5.2.2 Relational or Signaling Value of Work

A second explanation for employers' and workers' preference for work redistribution is the hypothesis that they derive value from social interaction. This relational value of work reflects the importance of social connections and relationships that are formed in the workplace. Furthermore, because work outcomes are observable, individuals may use work redistribution as a means to signal generosity or success when giving, and effort or skills when receiving.

To test for the instrumental relational benefits of work redistribution, we compare employers' and workers' decisions when they have no stakes in the game. We do this by comparing their work redistribution decisions and willingness to pay for work in the

<sup>&</sup>lt;sup>24</sup>Although the effect is not statistically significant, there seems to be a pattern for which employers are less likely to choose work redistribution when the task is randomly assigned to be sweeping, especially at high wages. This may suggest either that the market wage for sweeping is lower than for the other tasks, as it may be likely, or of some training value of work for workers that employers' take into account. Nonetheless, even considering the comparison between respondents randomly assigned to sweeping and those randomly assigned to tasks with higher skill building value, we find that the training value of work could only explain about 7.8% of workers' choices and 2% of employers.

<sup>&</sup>lt;sup>25</sup>Appendix Table A7, in the first stage regressions, shows that task assignment is a strong predictor of both piece rate and tenure requirements.

<sup>&</sup>lt;sup>26</sup>The graphical results are in Appendix Figure A.16.

Main Game and the Spectator Game, where they make decisions for another pair. Our hypothesis is that if the preference for work redistribution is driven by instrumental social benefits, we would see fewer work redistribution choices and lower willingness to pay for work in the Spectator Game.<sup>27</sup>

Figure 5 illustrates that there is little difference in decisions across the Main Game and the Spectator Game. Furthermore, a regression analysis, presented in Table 4 columns 5 and 10, provides evidence that instrumental social benefits are unlikely to be driving work redistribution choices. Employers are even more likely to choose work redistribution when making decisions for another pair (1.3 percentage points, p-value 0.064). Workers are as likely to choose work redistribution when making decisions for themselves as when they make decisions for others. These results indicate that neither signaling nor networking motives are driving work redistribution decisions. Moreover, the results for employers suggest that work redistribution may be costly from the firm's perspective.

#### 5.2.3 Discussion on the Social Value of Work

Our results show that neither productivity nor economic considerations can explain employers' preference for giving via work or workers' preference for work over cash. Employers in our experiment are willing to pay wages over three times the market rate, which could be only rationalized with presence of extreme hiring frictions, yet most employers do not report difficulty in finding workers with the right skills (see Appendix Figure A.13). In addition, the value of the task did not influence giving via work, and employers were willing to hire for tasks with zero marginal product. Workers also consistently choose work over cash even for tasks without intrinsic or skill-building value. Taken together, this evidence suggests that social, rather than economic, considerations are the likely driving force behind employers' and workers' choices.

Our analysis rules out the influence of social pressures (by design) and signaling or relational benefits (via the mechanism analysis), leading us to hypothesize that work redistribution may have inherent social value linked to internalized preferences for fairness, reciprocity, or mental health and dignity value for workers. Evidence supports that fairness perception influences redistribution preferences (e.g., Alesina and Angeletos, 2005), while reciprocity considerations are associated with the choice of sharing arrangements

 $<sup>^{27}</sup>$ A caveat to the interpretation of this test is that another reason why we may not be able to detect a difference in the two games, is that employers and workers may fully internalize their role in the Spectator Game.

in poor countries (Townsend, 1995 looks at credit vs. gift giving). Recent research by Hussam et al., 2022 has confirmed that work provides psycho-social benefits to workers beyond income in an experiment with unemployed Rohingya refugees.

Ex-ante we cannot determine which of these mechanisms is most likely to play a role in our setting, if any. Since workers are employed full time, it is not obvious that performing an extra task would provide them with meaning. We lack evidence that employers recognize the psycho-social benefits of work for their workers, and it is unclear whether performing a non-valuable task would be considered fulfilling reciprocity. To explore this further, we examine the motivations provided by employers and workers for their work redistribution decisions.

Figure 6 presents a summary of these motivations, with note that respondents were asked to provide motivations for only five decisions in each game. The most common reason for choosing work redistribution, mentioned by 57.8% of employers and 43.2% of workers, is that Person B has to work in exchange for money and cannot receive free money. The second most common reason, mentioned by 17.9% of employers and 18.6% of workers, is that working is better for Person B as it helps for building skills, which we interpret as personal development.<sup>28</sup> The third most common reason, mentioned by 10.6% of employers and 12.6% of workers, is that working is good for Person B's mental health and dignity. The remaining 11 motivations account for the rest of the responses. For simplicity of interpretation, the percentages for the choices made when the wage equals the transfers are presented, but results are qualitatively unchanged when considering all responses. We conclude that most work redistribution can be explained by reciprocity consideration, and, to a smaller extent, by altruism and a recognition of the psycho-social value of work for workers.

## 6 Giving via Work and Firm Outcomes

To investigate the external validity of our findings, we link the experimental data to firm input and output data. Specifically, we examine whether the propensity to give via work in the experiment is associated with firms that are more labor-intensive and hire more workers. To separate preferences for giving via work from generosity, we control for the maximum amount given in the experiment.<sup>29</sup> Table 5, Panel A, indicates that

<sup>&</sup>lt;sup>28</sup>Our interpretation is based on the experimental results who show that neither any measure of workers' skill nor any measure of training value of the task predicts work redistribution.

<sup>&</sup>lt;sup>29</sup>We estimate the following regression specification:  $std(Firm\_output)_{ik} = \alpha + \beta_1 Giving\_via\_work_i + \beta_2 Max\_amount\_given_i + \gamma_i + e_{ik}$  where  $Firm\_output$  is a dependent vari-

one additional work redistribution decision in the experiment is associated with 0.018 standard deviations more workers (p-value 0.061) and 0.038 standard deviations more permanent workers (p-value 0.000). The correlation remains statistically significant and is actually stronger and more statistically significant when we also control for measures of firm size, such as sales and revenues, in Panel B.<sup>3031</sup> It is worth noting that we do not find any significant differences in the variety of machines used by firms, although the coefficient is negative (-0.018 standard deviations). However, our survey only elicited information on the types of machines owned, not the overall number. Therefore, we cannot rule out the possibility that giving via work in the experiments is associated with less machine-intensive firms. We can also investigate whether giving via work correlates with firm outputs. Here the most relevant outcome, given the results showing that owners and managers do not take into account profitability considerations when making redistribution decisions, is firm revenues, and in turn, sales and profits. Table 6 shows that propensity to give via work in the experiment is not associated with increased profits, nor revenues, or sales.

The correlational analysis is consistent with our experimental results and supports the idea that the extra work resulting from work redistribution is not productive or profitable for the firm. However, we should be cautious not to infer causality from these correlations. It is possible that a higher propensity to give via work preferences may lead to more hiring, but it could also be the case that firms with more workers face stronger labor market frictions. Furthermore, while the lack of correlation between giving via work and firm output may suggest that work redistribution is not productive or profitable, it could also be that firms that give more via work and, in turn, have more workers or more output are more likely to be taxed by their community.

### 7 Conclusions

Our study sheds light on the practice of using work arrangements to share in a low-income country context. We find that employers have a strong preference for giving via work

able indicating firm output k: number of workers, number of permanent workers, number of machine types workers' earnings, management score, or manager pay;  $Giving\_via\_work$  is the sum of the respondent's work redistribution choices;  $Max\_amount\_given$  is the maximum experimental redistribution among all individual choices;  $\gamma$  are fixed effects for firm geographic area, main firm activity and task. Standard errors are clustered at the respondent level.In Appendix Table A6, we use the average of work decisions rather than the sum as a robustness check.

<sup>&</sup>lt;sup>30</sup>These are potential bad controls, so we do not consider this our preferred specification.

<sup>&</sup>lt;sup>31</sup>These results remain robust even when altering the definition of preferences for giving via work. In Appendix Table A5, we utilize the average of work decisions rather than the sum.

and pay above the marginal product of labor, as evidenced by the small elasticity of work redistribution to wage (above and beyond the market wage). Employers' decisions are not driven by productivity considerations, nor by other relational or signaling benefits of hiring. Moreover, the alignment of workers' decisions with those of the employers suggests that giving via work is unlikely to be an effective hurdle mechanism to reduce giving. Preferences for redistribution via work appear driven by a social value attached to work that is shared by both parties and is shaped by internalized social preferences: primarily, reciprocity concerns, and a recognition of the psycho-social value of work for workers.

Our results provide empirical support to the hypothesis of separation failures in labor markets in poor countries, beyond the agricultural setting previously studied (Benjamin, 1992; LaFave and Thomas, 2016). Our mechanism is in line with previous literature showing that reciprocity helps sustain informal sharing arrangements (for example the seminal work of Coate and Ravallion, 1993), and adds to it by showing that work is one way people use to embed reciprocity in transfers.

Informal taxation patterns can have a significant impact on firm productivity and growth in poor countries. The qualitative evidence suggests that a substantial portion of employers are willing to give work to support others, even when they don't necessarily need the work. The amount given via work redistribution is sizable, equivalent to around 6% of firm profits, and larger than the equivalent amount shared unconditionally (in line with our experimental evidence). Hiring unproductive workers also implies a mechanical reduction in firm productivity, if measured as output per worker. Giving via work, in addition, may be distorting the input mix choice. Our survey evidence suggests that hiring an extra worker requires additional monitoring time (14.1%), additional tools or machines (18.2%) or more capital (19.2%). Additional distortions may be related to the fact that bigger firms appear more likely to receive taxation requests, and this is the same for giving via work or cash.<sup>32</sup>

Our results are also relevant to a long-standing discussion on workfare versus welfare, as well as development aid more generally. We show that recipients have a strong preference for receiving via work because they value reciprocity in giving. These results provide motivations in support of workfare programs beyond the standard efficiency argument (Bertrand and Schoar, 2006; Besley and Coate, 1992). A similar consideration applies to the debate on unconditional versus conditional cash transfers. Unconditional cash

<sup>&</sup>lt;sup>32</sup>Larger firms tend to face a higher expectation of redistribution (see Figure A.21) and generosity in the experiment correlates with measures of firm size (Appendix Table A4). Specifically, firm with more sales and workers face higher sharing expectations (see Figure A.22).

transfers are more cost-effective (see Haushofer and Shapiro, 2016), but are intrinsically not reciprocal. Conditional transfers may be preferred by recipients, if the conditionality of transfers is perceived as reciprocity. Notably, because our work focuses on peer-to-peer redistribution, our results are not immediately applicable to the workfare literature whose focus is government transfers. More research is needed to investigate whether the work redistribution preferences we observe also apply to government redistribution.

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# 8 Figures

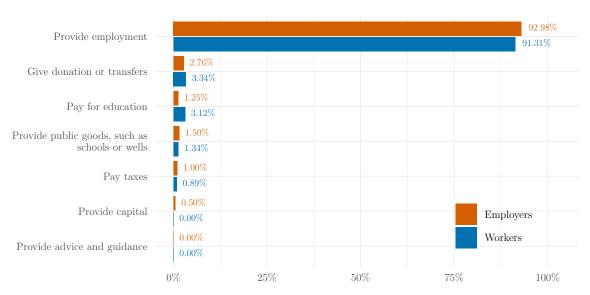


Figure 1: "What can rich people do to share earnings with poor people?"

*Note:* The figure presents responses from 399 employers and 449 workers. Using a pilot survey with open-ended questions, we established pre-coded answer options. In the main survey, respondents selected from these options or provided an alternative response.

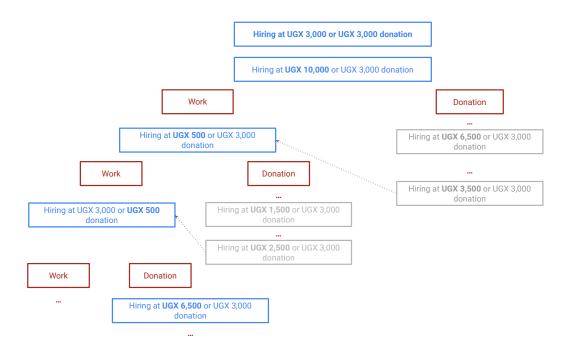
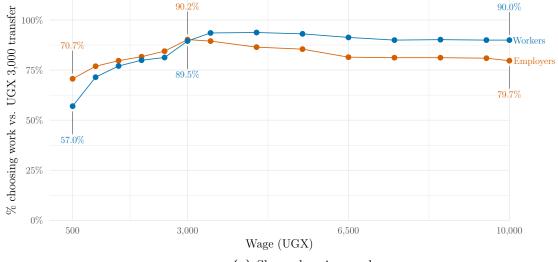
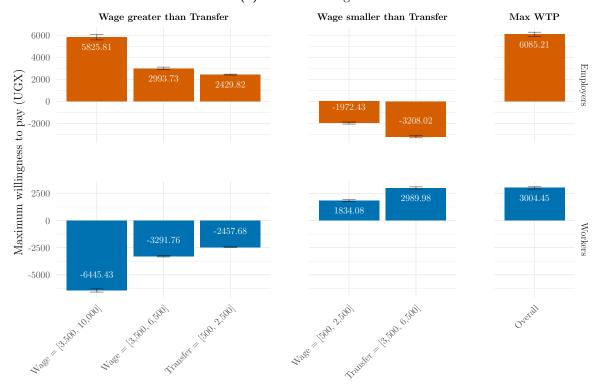


Figure 2: Redistribution choices flow chart

*Note:* The figure presents a visualization of the flow for redistribution choices. In this illustration, we assume that the respondent selects hiring at the equal choice. The blue boxes represent the extreme cases, which are posed to all participants. Subsequent decisions (indicated by red boxes) determine whether to proceed directly to the next extreme case or to identify the switching point by presenting choices found in the grey boxes.



(a) Share choosing work



(b) Willingness to pay for work

Figure 3: Main results

Note: The figures summarize the main results from the Main Game. 399 employers make up to 22 decisions each about giving and 449 workers make up to 22 decisions each about receiving. Panel A plots the share of work redistribution choices by wage, when the alternative is a UGX 3,000 unconditional cash transfer. Panel B plots the willingness to pay for work redistribution for employers and worker, by wage and transfer. Maximum willingness to pay is the largest difference between the wage associated to the work arrangement, conditional on choosing it, and the alternative cash transfer. Note that the maximum willingness to pay for workers is mechanically lower than for employers, because we do not allow for negative wages.

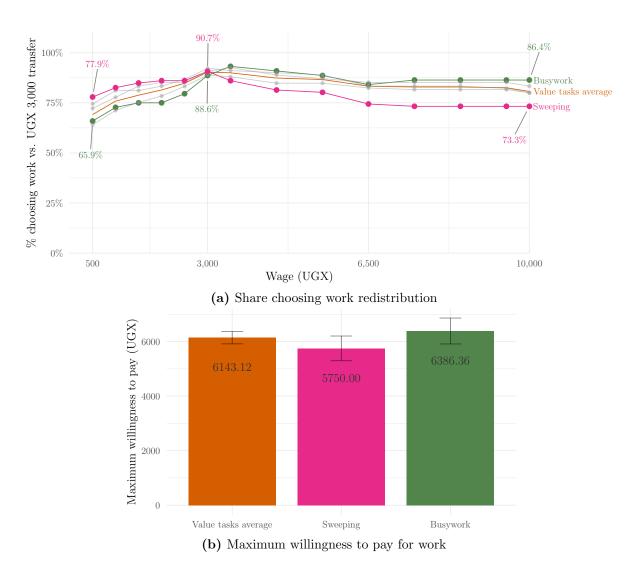


Figure 4: Employers' work redistribution decisions by task

Note: Panel A plots the share of work choices by wage, when the alternative is a UGX 3,000 unconditional cash transfer. The employers' data is split by task. The busywork task entails loading and immediately offloading 3 sacks from a truck. Value task average summarizes all tasks, except the busywork and sweeping tasks. Panel B depicts the overall maximum willingness to pay for work for the value tasks average, sweeping and busywork.

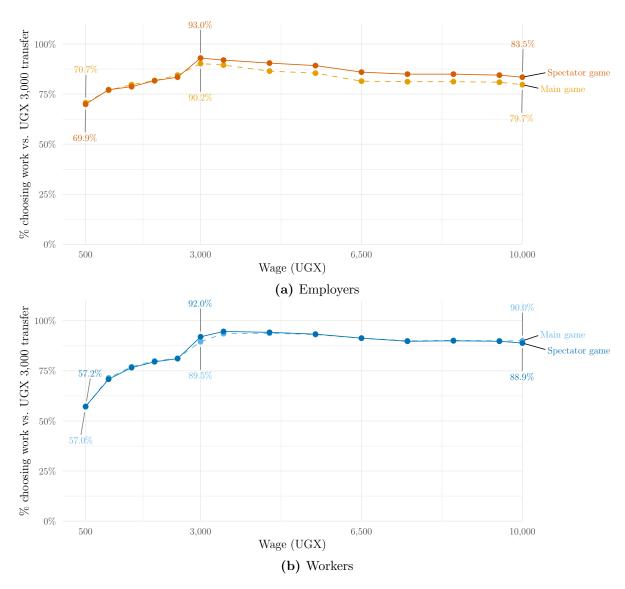


Figure 5: Main Game vs. Spectator Game.

Note: Data from the Spectator Game and the Main Game. In the Spectator Game, respondents make decisions for redistribution within an anonymous pair, where Person A wins the lottery and has to redistribute via work or just cash, while Person B loses the lottery and receives work or just cash. The figures plot the share of work choices by wage, when the alternative is a UGX 3,000 unconditional cash transfer. Panel A depicts differences for the employers (N = 399), whereas panel B shows them for the workers (N = 449).

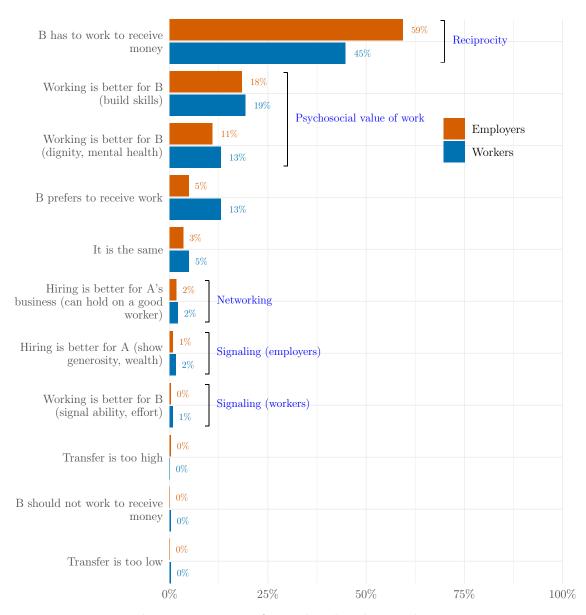


Figure 6: Reasons for work redistribution decisions

Note: The figure plots the motivation for work choices self-reported by employers (N = 399) and workers (N = 449), by task. We focus on the reasons for the "Wage UGX  $3{,}000$  - Transfer UGX  $3{,}000$ " choice. A stands for the anonymous giver, B stands for the anonymous receiver.

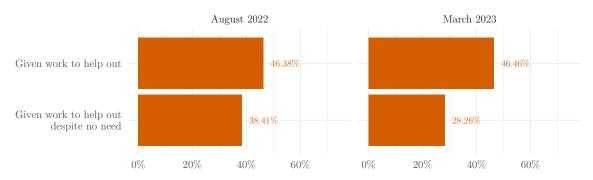


Figure 7: Giving work, and giving work despite no need

Note: The left hand side (August 2022) uses data from the main survey. We added this question halfway in the data collection of the main survey, so the figure contains the answers of 138 employers. A known person is either a family member, a friend, a member of the community or a past worker. The right hand side (March 2023) features data from a follow-up phone survey involving a random selection of employers (N = 99) from the primary sample. Employers are asked whether they helped sombody out financially by giving them a job within the past month, and whether the work provided was genuinely needed.

## 9 Tables

Table 1: Summary statistics

	Main	survey	Phone survey		Means difference	
	Mean	Median	Mean	Median	Difference	p-value
Firms						
N	399		99			
Number of workers (on day of interview)	6.42	3	6.86	3	-0.44	0.645
Number of workers (on typical day)	5.85	3	6.45	3	-0.6	0.53
Total revenue (monthly, USD)	8479.8	2631.58	7686.84	2500	792.96	0.705
Total profit (monthly, USD)	931.89	394.74	868.56	326.32	63.33	0.71
Profit per worker (monthly, USD)	230.13	131.58	195.49	115.6	34.64	0.392
Establishment (years)	6.14	5	6.79	5	-0.65	0.312
Share main product	0.69	0.7	0.69	0.7	0	0.858
Revenue from 65 USD input (USD)	75.84	73.68	78.01	73.68	-2.17	0.176
Profit from 65 USD input (USD)	10.84	8.68	13.01	8.68	-2.17	0.176
Sales (monthly, tonnes)	21.53	5	20.42	6	1.11	0.819
Management score	12.68	13	12.7	13	-0.02	0.972
Employers						
N	399		99			
Gender: male	70.43%		65.22%			
Age (years)	33.22	32	33.47	32	-0.25	0.812
Nationality: Ugandan	99.5%		100%			
Education (years)	8.91	6	8.36	6	0.55	0.373
Employment position						
Manager	52.38%		45.65%			
Owner	47.62%		54.35%			
Manager pay (monthly, USD)	96.08	105.26	102.99	105.26	-6.91	0.384
Workers						
N	449					
Gender: male	95.55%					
Age (years)	26.02	25				
Nationality: Ugandan	99.78%					
Education (years)	7.37	6				
Tenure firm (years)	1.93	1				
Employment type						
Permanent worker	49.22%					
Casual worker	50.56%					
Trainee	0.22%					
Hours worked (on typical day)	10.43	11				
Days worked (in typical week)	6	6				
Hours idle time (of 10h)	3.41	3.5				
Income (monthly, USD)	77.16	69.92				
Has written contract	10.96%	00.02				

Note: The table summarizes the characteristics of firms, employers, and workers in our sample and checks covariate balance for the follow-up phone survey. Column difference shows the differences in means, whereas column p-value denotes the corresponding p-values. Firm characteristics are self-reported by the employers. Manager pay is elicited asking what the pay of a manager in a comparable firm. Figures reported in US dollars are in nominal terms, and were converted from Ugandan shillings (UGX) to US dollars (USD) using an exchange rate of 3,800 UGX/USD. Total revenue, Total profit, Profit per worker, Sales, Age and Manager pay are trimmed at the 99th percentile. Hours idle time is reported by employers in the follow-up survey (N=99).

Table 2: Task characteristics and covariate balance by task

·		Iı	ndividual ta	sks		Average	Value t. vs. busywork		Value t. vs. sweeping	
	Offloading	Sealing	Sweeping	Weighing	Busywork	Value tasks	Difference	p-value	Difference	p-value
Firms										
N	125	90	86	54	44	269				
Number of workers (on day of interview)	7.67	7.22	6.69	4.13	3.50	6.81	0.76	0.236	0.63	0.445
Number of workers (on typical day)	6.90	6.66	6.12	3.83	3.16	6.20	0.79	0.194	0.60	0.444
Total revenue (monthly, USD)	10369.61	8490.92	7629.28	9761.47	3250.38	9588.11	753.19	0.570	3235.03	0.206
Total profit (monthly, USD)	1036.59	1097.08	851.49	873.48	533.28	1026.91	65.63	0.673	286.00	0.084
Establishment (years)	6.57	6.22	5.67	5.94	5.89	6.33	0.15	0.897	0.57	0.391
Share main product	0.71	0.67	0.68	0.69	0.66	0.69	0.02	0.510	0.02	0.346
Revenue from 65 USD input (USD)	75.63	78.94	77.26	70.20	73.66	75.72	-1.27	0.426	0.27	0.871
Profit from 65 USD input (USD)	10.63	13.94	12.26	5.20	8.66	10.72	-1.27	0.426	0.27	0.871
Sales (monthly, tonnes)	28.54	27.81	17.68	12.98	7.38	25.10	5.55	0.229	10.24	0.056
Management score	12.68	13.02	12.55	12.39	12.64	12.74	0.10	0.814	0.23	0.557
Employers										
N	125	90	86	54	44	269				
Gender: male	0.74	0.72	0.70	0.63	0.66	0.71	0.00	0.996	0.03	0.597
Age (years)	33.34	32.47	32.86	34.67	33.35	33.31	-0.91	0.548	0.80	0.516
Education (years)	8.95	8.09	8.76	9.89	9.55	8.85	-0.08	0.933	-0.35	0.632
Workers										
N	146	67	69	85	82	298				
Gender: male	0.94	0.96	0.96	0.96	0.98	0.95	-0.01	0.683	-0.01	0.772
Age (years)	26.68	26.74	25.44	25.89	24.91	26.47	1.18	0.078	1.20	0.238
Education (years)	7.14	8.40	6.93	6.92	7.78	7.36	-0.81	0.219	0.54	0.425
Tenure firm (years)	2.04	2.49	2.00	1.76	1.37	2.06	0.62	0.015	-0.04	0.873
Hours worked (on typical day)	10.64	10.56	10.72	10.40	9.76	10.55	0.61	0.122	0.00	0.993
Days worked (in typical week)	5.88	6.13	6.19	5.96	5.99	5.96	-0.06	0.736	-0.16	0.310
Income (monthly, USD)	81.02	85.76	78.34	67.88	72.27	78.28	1.55	0.814	2.49	0.736
Has written contract	0.10	0.04	0.05	0.23	0.21	0.11	-0.11	0.243	0.03	0.395
Tasks										
Tenure (days)	8.87	4.53	0.76	3.94	8.32	4.98				
Effort (1-4)	3.80	2.16	1.14	2.00	3.80	2.38				
Piece rate (employers, USD)	0.20	0.13	0.22	0.05	0.20	0.13				
Piece rate (workers, USD)	0.22	0.15	0.17	0.05	0.21	0.15				

Note: The table assesses the covariates' balance of firms', employers', and workers' characteristics across tasks. Value tasks' average is the combination of the offloading, sealing, and weighing tasks. Difference and the corresponding p-value refer to the difference between value tasks' average and busywork or sweeping, with location of the firm and main activity fixed effects. The task panel summarizes relevant task characteristics for each subsample (e.g., the offloading subsample contains tenure, effort, and piecerate for those assigned the offloading task in the experiment).

**Table 3:** Elasticity of work and transfer redistribution decisions by price

	(1) Overall	(2) W = [3,000, 10,000]	W = [500, 3,000]	T = [3,000, 6,500]	T = [500, 3,000]
	Work	$\frac{W = [5,000, 10,000]}{\text{Work}}$	$\frac{W = [500, 5,000]}{\text{Work}}$	$\frac{1 - [5,000, 0,500]}{\text{Work}}$	Work
	VVOIK	WOIK	WOIK	WOIK	WOLK
Panel A: Employers					
$\log(\text{Wage})$	0.017	-0.089	0.097		
- (-	(0.010)	(0.016)	(0.011)		
$\log(\text{Transfer})$	-0.064			0.008	-0.024
	(0.008)			(0.016)	(0.007)
Fixed effects					
Firm location	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y
Overall work share	0.865	0.865	0.865	0.865	0.865
Share hiring at $W = \min(W)$	0.707	0.902	0.707		
Share hiring at $T = \min(T)$	0.962			0.902	0.962
Obs.	8778	3591	2394	1596	2394
R2	0.045	0.079	0.083	0.039	0.025
Panel B: Workers					
log(Wage)	0.098	-0.020	0.164		
-, -,	(0.010)	(0.016)	(0.012)		
log(Transfer)	-0.086	, ,	` '	-0.051	-0.033
,	(0.008)			(0.015)	(0.007)
Controls					
Tenure firm (years)	Y	Y	Y	Y	Y
Hours worked	Y	Y	Y	Y	Y
Fixed effects					
Firm location	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y
Overall work share	0.878	0.878	0.878	0.878	0.878
Share hiring at $W = \min(W)$	0.570	0.895	0.570		
Share hiring at $T = \min(T)$	0.978			0.895	0.978
Obs.	9856	4032	2688	1792	2688
R2	0.085	0.031	0.127	0.141	0.037

Note: The table summarizes the relationship between hiring decisions and the price of redistribution (wage and transfer) in the Main Game. The dependent variable, Work, is a dummy for the respondent choosing the work redistribution. Wage is the wage associated to the work arrangement for a given decision and spans from UGX 500 to UGX 10,000. Transfer is unconditional cash transfer for a given decisions and spans from UGX 500 to UGX 6,500. The outside options are a UGX 3,000 transfer or wage, respectively, as shown in Figure 2. In total, 399 employers and 448 workers make up to 22 choices each: column (1): 8 choices, (2): 5 choices, (3): 3 choices and (4): 5 choices. The choice at wage equal to transfer is included in every quadrant. We split the sample around the cutoff when the wage equals the transfers to allow for heterogeneity in the response to prices as in Card et al., 2015. Regressions include firm location and main activity fixed effects, and control for tenure at the firm and hours worked. One worker did not report hours worked and is excluded from the sample. Standard errors are clustered at the respondent level.

**Table 4:** Mechanism: Work redistribution by value of the task and by personal stakes

	(1) Work	(2) Work	(3) Work	(4) Work	(5) Work	(6) WTP	(7) WTP	(8) WTP	(9) WTP	(10) WTF
Panel A: Employers										
Task: offloading	-0.040					-0.688				
	(0.045)					(0.350)				
Task: sealing	-0.008					-0.761				
	(0.048)					(0.374)				
Task: weighing	-0.003					-0.299				
	(0.043)					(0.367)				
Task: sweeping	-0.036					-1.150				
	(0.050)					(0.386)				
Busywork		0.021					0.531			
		(0.038)					(0.312)			
Sweeping			-0.014					-0.435		
			(0.031)					(0.256)		
Effort (1-4)				-0.012					0.086	
				(0.013)					(0.105)	
Piece rate task (thousand UGX)				-0.078					-0.536	
				(0.100)					(0.652)	
Tenure task (days)				0.001					0.003	
				(0.002)					(0.017)	
No stakes				, ,	0.013				,	0.20
					(0.007)					(0.07)
Fixed effects										
Choice type	Y	Y	Y	Y	Y	N	N	N	N	N
Firm location	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Respondent	N	N	N	N	Y	N	N	N	N	Y
Task	N	N	N	N	Y	N	N	N	N	Y
Mean outcome Obs.	0.865	0.869	0.864	0.865	0.865	6.085	6.177	6.048	6.085	6.08
R2	8778	6886	7810	6864	17556	399	313	355	312	798
	0.072	0.082	0.073	0.078	0.441	0.110	0.102	0.118	0.095	0.84
Panel B: Workers										
Task: offloading	-0.020					-0.097				
	(0.023)					(0.124)				
Task: sealing	0.017					-0.204				
	(0.031)					(0.191)				
Task: weighing	0.007					-0.089				
	(0.024)					(0.127)				
Task: sweeping	-0.054					-0.279				
D 1	(0.036)					(0.218)				
Busywork	(0.036)	-0.003				(0.218)	0.070			
Busywork	(0.036)	-0.003 (0.020)				(0.218)	0.070 (0.107)			
	(0.036)		-0.047			(0.218)		-0.133		
Sweeping	(0.036)					(0.218)				
Sweeping	(0.036)		-0.047 (0.031)	-0.063		(0.218)		-0.133 (0.199)	0.004	
	(0.036)			-0.063 (0.048)		(0.218)			0.004 (0.315)	
Sweeping Effort (1-4)	(0.036)			(0.048)		(0.218)			(0.315)	
Sweeping	(0.036)			(0.048) -0.337		(0.218)			(0.315) -1.690	
Sweeping Effort (1-4) Piece rate task (thousand UGX)	(0.036)			(0.048) -0.337 (0.104)		(0.218)			(0.315) -1.690 (0.724)	
Sweeping Effort (1-4)	(0.036)			(0.048) -0.337 (0.104) 0.023		(0.218)			(0.315) -1.690 (0.724) 0.039	
Sweeping Effort (1-4) Piece rate task (thousand UGX) Tenure task (days)	(0.036)			(0.048) -0.337 (0.104)	-0.004	(0.218)			(0.315) -1.690 (0.724)	0.01
Sweeping Effort (1-4) Piece rate task (thousand UGX)	(0.036)			(0.048) -0.337 (0.104) 0.023	-0.004 (0.005)	(0.218)			(0.315) -1.690 (0.724) 0.039	
Sweeping Effort (1-4) Piece rate task (thousand UGX) Tenure task (days) No stakes	(0.036)			(0.048) -0.337 (0.104) 0.023	-0.004 (0.005)	(0.218)			(0.315) -1.690 (0.724) 0.039	0.01 (0.02a
Sweeping Effort (1-4) Piece rate task (thousand UGX) Temure task (days) No stakes Controls		(0.020)	(0.031)	(0.048) -0.337 (0.104) 0.023 (0.014)	(0.005)		(0.107)	(0.199)	(0.315) -1.690 (0.724) 0.039 (0.090)	(0.02
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years)	Y	(0.020) Y	(0.031) Y	(0.048) -0.337 (0.104) 0.023 (0.014)	(0.005) Y	Y	(0.107) Y	(0.199) Y	(0.315) -1.690 (0.724) 0.039 (0.090)	(0.02 Y
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked		(0.020)	(0.031)	(0.048) -0.337 (0.104) 0.023 (0.014)	(0.005)		(0.107)	(0.199)	(0.315) -1.690 (0.724) 0.039 (0.090)	(0.02
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked  Fixed effects	Y Y	(0.020) Y Y	(0.031) Y Y	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y	(0.005) Y Y	Y Y	(0.107) Y Y	(0.199) Y Y	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y	(0.02 Y Y
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked	Y Y	(0.020) Y Y	(0.031) Y	(0.048) -0.337 (0.104) 0.023 (0.014)	(0.005) Y	Y	(0.107) Y Y	(0.199) Y Y	(0.315) -1.690 (0.724) 0.039 (0.090)	(0.02 Y
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked  Fixed effects	Y Y	(0.020) Y Y	(0.031) Y Y	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y	(0.005) Y Y	Y Y	(0.107) Y Y	(0.199) Y Y	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y	(0.02 Y Y
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Temure task (days)  No stakes  Controls  Temure firm (years)  Hours worked  Fixed effects Choice type	Y Y	(0.020) Y Y	(0.031)  Y Y Y	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y	(0.005) Y Y Y	Y Y	(0.107) Y Y	(0.199) Y Y	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y	(0.02 Y Y
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years)  Hours worked  Fixed effects  Choice type Firm location	Y Y Y	(0.020)	(0.031)  Y Y Y Y	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y Y	(0.005) Y Y Y Y	Y Y N Y	(0.107)  Y Y Y Y	(0.199) Y Y N Y	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y Y	(0.02
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked  Fixed effects Choice type Firm location Main activity	Y Y Y Y	(0.020)  Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	(0.031)  Y Y Y Y Y Y	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y Y	(0.005) Y Y Y Y Y Y	Y Y N Y Y	(0.107)  Y Y Y Y Y	(0.199) Y Y Y Y	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y Y	(0.02
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked  Fixed effects Choice type Firm location Main activity Respondent	Y Y Y Y Y	(0.020)  Y Y Y Y N	(0.031)  Y Y Y Y N	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y Y	(0.005)  Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	Y Y N Y N	(0.107)  Y Y Y N N Y N N N N N N N N N N N N N	(0.199) Y Y Y Y N	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y Y	(0.02 Y Y N Y Y Y Y
Sweeping  Effort (1-4)  Piece rate task (thousand UGX)  Tenure task (days)  No stakes  Controls  Tenure firm (years) Hours worked  Fixed effects Choice type Firm location Main activity Respondent Task	Y Y Y Y Y N N	(0.020)  Y Y Y Y N N	(0.031)  Y Y Y Y N N	(0.048) -0.337 (0.104) 0.023 (0.014) Y Y Y Y Y N N	(0.005)  Y Y Y Y Y Y Y Y Y Y Y Y Y	Y Y N Y Y N N	(0.107)  Y Y Y  N Y Y N N N	(0.199)  Y Y Y  N Y Y N N N	(0.315) -1.690 (0.724) 0.039 (0.090) Y Y Y N N N	(0.028 Y Y Y N Y Y Y Y

Note: The table summarizes the relationship between hiring decisions and the value of the task in the experiment. The dependent variable Work is a dummy for the respondent choosing the work redistribution. The dependent variable Work is the maximum willingness to pay of a respondent for choosing work redistribution, in a thousand UGX. Piece rate task (thousand UGX) is the self-reported wage of the assigned task. Effort level ranges from 1 (not effortful at all) to 4 (very effortful), as reported in the follow-up survey. Individual values are included for employers selected for the follow-up survey, while for the remaining respondents, the mean for each task is used. Tenure task (days) is the duration a worker needs to work on a task with minimal or no supervision. Missing observations for regressions including task piece rate and task tenure because respondents only reported piece rate and tenure requirements of the activities they would perform at their firm. By definition, we elicit tenure task requirements only from employers. Thus, tenure task in the workers' regression is calculated as the mean of the employers' answers. The sample consists of 399 employers and 448 workers. One worker did not report hours worked and is excluded from the sample. Standard errors are clustered at the respondent level.

**Table 5:** Giving via work and firm inputs

	(1)	(2)	(3)	(4)	(5)	(6)
	N workers	N permanent workers	N machines	Workers' earnings	Management score	Manager pay
	(std)	(std)	(std)	(std)	(std)	(std)
Panel A: Without controls						
Giving via work	0.016	0.036	-0.018	-0.010	0.072	0.012
	(0.011)	(0.010)	(0.011)	(0.017)	(0.015)	(0.023)
Max amount given (thousand UGX)	-0.006	-0.028	0.072	0.030	-0.050	0.103
	(0.020)	(0.018)	(0.025)	(0.034)	(0.034)	(0.059)
Fixed effects						
Task	Y	Y	Y	Y	Y	Y
Firm location	Y	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y	Y
Pre-standardization mean	6.419	1.857	2.496	276.869	0.000	365.115
Pre-standardization SD	7.636	2.979	1.330	204.004	1.001	134.280
Obs.	399	399	399	370	399	130
R2	0.377	0.176	0.494	0.247	0.192	0.240
Panel B: With controls						
Giving via work	0.022	0.037	-0.011	-0.001	0.073	0.011
_	(0.008)	(0.009)	(0.012)	(0.020)	(0.018)	(0.026)
Max amount given (thousand UGX)	-0.015	-0.045	0.059	0.018	-0.067	0.116
	(0.014)	(0.019)	(0.025)	(0.036)	(0.037)	(0.070)
Firm revenues (monthly, thousand UGX)	0.000	0.000	0.000	0.000	0.000	0.000
,	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm sales (monthly, tonnes)	0.010	0.006	0.002	0.004	0.002	-0.008
,	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.020)
Fixed effects						
Task	Y	Y	Y	Y	Y	Y
Firm location	Y	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y	Y
Pre-standardization mean	6.419	1.857	2.496	276.869	0.000	365.115
Pre-standardization SD	7.636	2.979	1.330	204.004	1.001	134.280
Obs.	334	334	334	311	334	103
R2	0.604	0.286	0.509	0.286	0.204	0.345

Note: The table documents the relationship between hiring preferences and the organization of firm inputs. The data is from the Main Game and all dependent variables are standardized. Giving via work is the sum of the respondent's work redistribution choices (range = [0, 22], mean = 19.03). Note that Max amount given (thousand UGX) refers to the maximum experimental redistribution among all individual choices (range = [3, 10], mean = 8.94). Firm revenues and firm profits are recorded for August 2022 and are reported in a thousand UGX. Firm sales are the monthly sales of a respondent firm in tonnes. N workers is the number of workers (permanent and casual) employed at the date of the interview. Similar to that, N permanent workers denotes the number of permanent workers employed on a typical day in August 2022 for the production of the firm's main product. N machines is the number of different machine types the respondent firm uses (either owned or rented). Wage workers captures the monthly wage of currently employed permanent workers in a thousand UGX. Note the reduced sample because not every firm employs permanent workers and pays fixed wages. A total of 15 questions on management practices are combined to calculate the Management score. Here, the total score is the standardized sum of all 15 questions. Because asking managers for earnings is a sensitive question, Manager pay (thousand UGX) is defined as the respondent's estimate of the monthly earnings of managers of nearby firms. Only 32% of our sample is asked this question. Standard errors are clustered at the respondent level.

**Table 6:** Giving via work and firm output

	(1)	(2)	(3)	(4)
	log(Firm profits)	log(Firm revenues)	log(Firm sales)	log(Revenues UGX 250,000)
Giving via work	0.003	0.027	0.016	0.002
	(0.028)	(0.030)	(0.024)	(0.002)
Max amount given (thousand UGX)	0.020	0.013	0.010	-0.014
	(0.052)	(0.053)	(0.051)	(0.007)
Fixed effects				
Task	Y	Y	Y	Y
Firm location	Y	Y	Y	Y
Main activity	Y	Y	Y	Y
Mean outcome	7.419	9.214	1.715	5.635
Obs.	303	338	387	372
R2	0.286	0.314	0.305	0.065

Note: The table summarizes the relationship between work redistribution preferences in the experiment and firm output data. The data is from the Main Game and all dependent variables are standardized. Giving via work is the sum of the respondent's work redistribution choices (range = [0, 22], mean = 19.03). Note that Max amount given (thousand UGX) refers to the maximum experimental redistribution among all individual choices (range = [3, 10], mean = 8.94). Firm revenues and firm profits are recorded for August 2022 and are reported in USD. Firm sales are the monthly sales for a firm in August 2022, in tonnes. Revenues UGX 250,000 refers to the self-reported revenue an employer would make from purchasing UGX 250,000 worth of inputs. Standard errors are clustered at the respondent level. The decline in observations is caused by employers choosing not to share information about their profits and revenues.

## A Appendix Figures

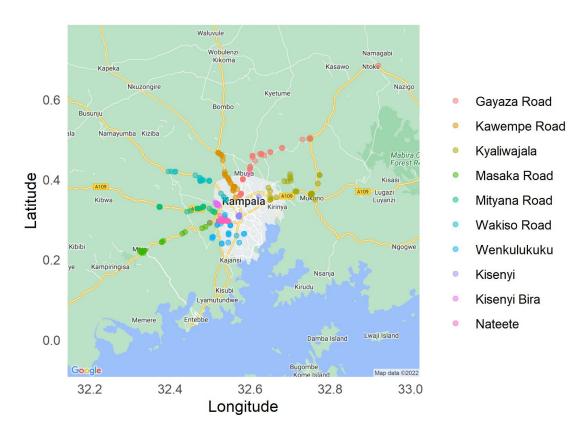


Figure A.8: Location of grain processing firms

*Note:* Locations of the 399 grain processing firms for which we interview either the owner or manager in August 2022. The colors identify the area or road the firm is located. For one firm the GPS coordinates were not captured accurately.

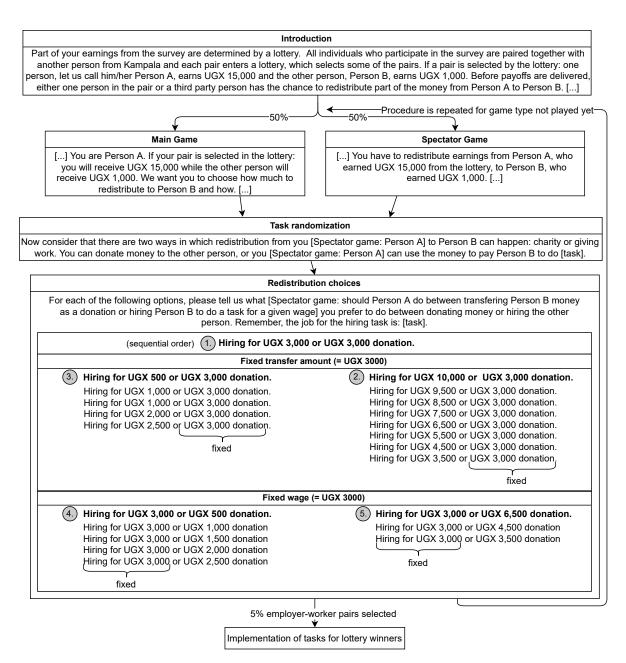


Figure A.9: Employers: experimental design flow

Note: The figure provides an overview of the experimental design for the employers. Each box contains the specific wording associated with each step in the preference part of the survey. The order of the Main Game and the Spectator Game is randomized. Task assignment is also randomized, with tasks including offloading, sealing, weighing, sweeping, and busywork. Consequently, the wording for the redistribution choice varies based on the game type and the assigned task. [task] offers a detailed description of the specific task assigned. All respondents are asked about the extreme cases of the redistribution choice (highlighted in bold), while subsequent choices are presented depending on the participant's previous responses. The numbers 1-5 (shown in gray) indicate the sequence in which the choice blocks are presented.

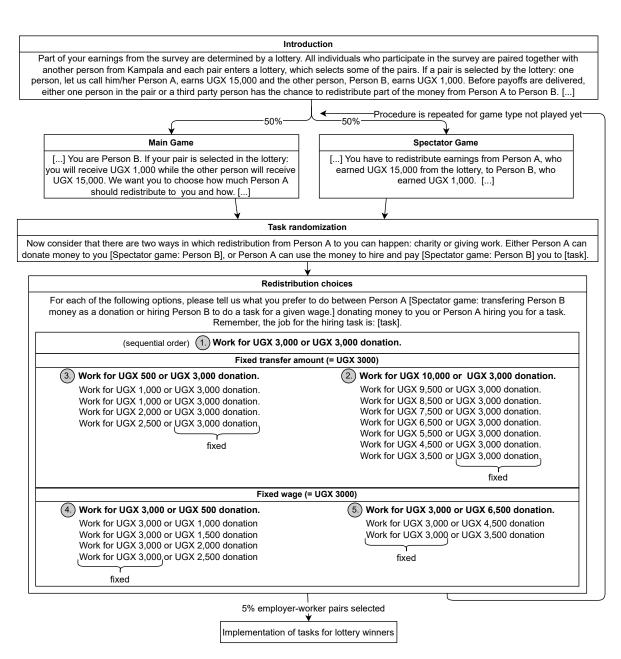


Figure A.10: Workers: experimental design flow

Note: The figure provides an overview of the experimental design for the workers. Each box contains the specific wording associated with each step in the preference part of the survey. The order of the Main Game and the Spectator Game is randomized. Task assignment is also randomized, with tasks including offloading, sealing, weighing, sweeping, and busywork. Consequently, the wording for the redistribution choice varies based on the game type and the assigned task. [task] offers a detailed description of the specific task assigned. All respondents are asked about the extreme cases of the redistribution choice (highlighted in bold), while subsequent choices are presented depending on the participant's previous responses. The numbers 1-5 (shown in gray) indicate the sequence in which the choice blocks are presented.

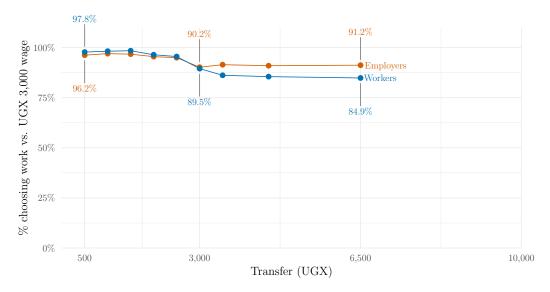


Figure A.11: Main game: Work redistribution choices by cash transfer amount

*Note:* The figure plots the share of work choices in the Main Game by transfer, when the alternative is hiring at UGX 3,000.

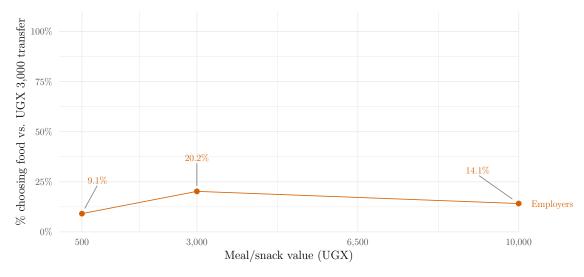
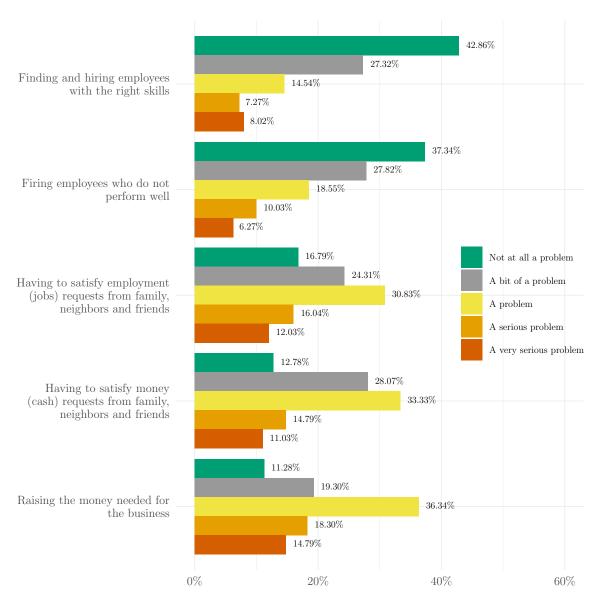


Figure A.12: Percentage choosing in-kind redistribution

Note: The figure plots the share of in-kind redistribution choices by wage, when the alternative is a UGX 3,000 unconditional cash transfer. The data is from our follow-up phone survey, which consists of a random selection of employers (N = 99) from the main sample.



**Figure A.13:** "How problematic is the following issue when thinking about increasing the productivity of this business?"

*Note:* Data are from the employers' survey (N = 399). We ask them to rank the magnitude of the problem on a scale from 1 ("not at all a problem") to 5 ("a very serious problem").

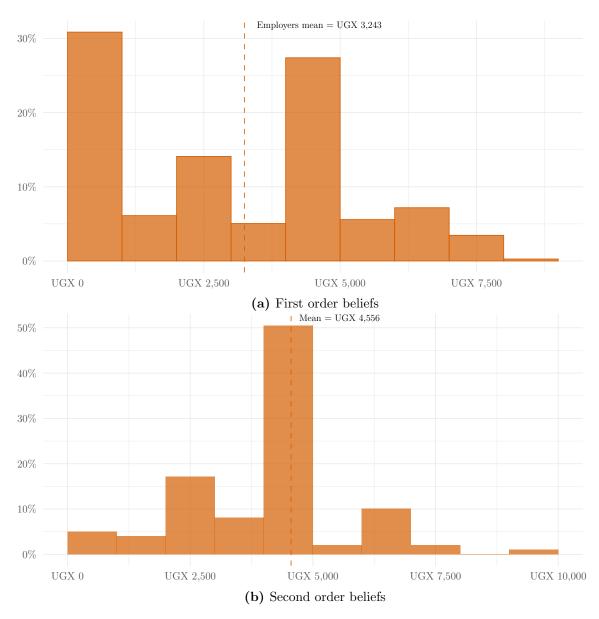


Figure A.14: Employers' unconstrained redistribution preferences

Note: Panel A uses data from our main survey. Respondents reported their unconditional redistribution preferences before participating in the experiment. We ask respondents how much a lottery winner whose payoff was UGX 15,000 should give to an anonymous loser whose payoff was UGX 1,000. The bunching at zero in panel A could be partially attributed to the manner the question was asked, as we initially inquire if participants want to redistribute at all. Panel B uses data from our follow-up phone survey, which consists of a random selection of employers (N = 99) from the main sample. Question wording: "If we asked 10 employers or owners in Kampala the following question: "Absent any constraints, how much money should Person A share?" What would be the most common amount?"

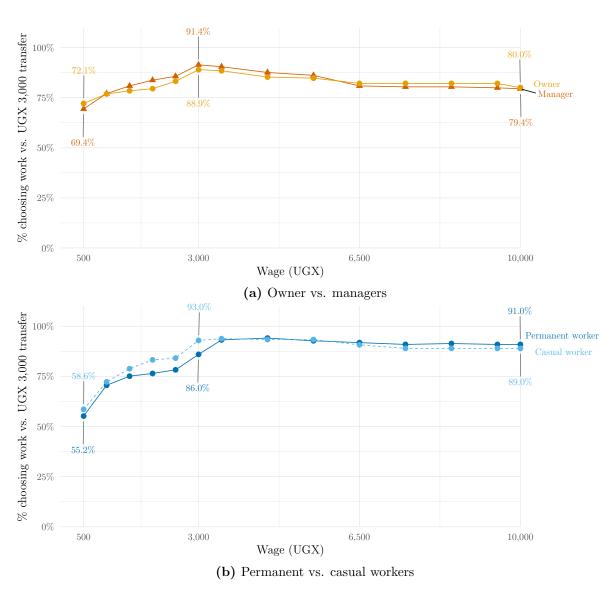


Figure A.15: Main Game: Work redistribution choices by employers' and workers' role.

Note: Data from the Main Game. The role in the firm is self reported. Both anels plot the share of work choices by wage, when the alternative is a UGX 3,000 unconditional cash transfer.

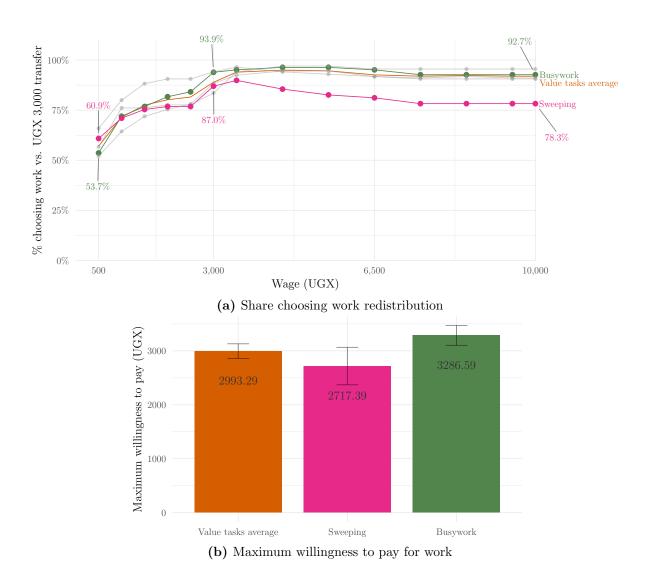


Figure A.16: Workers' work redistribution decisions by task

Note: Panel A plots the share of work choices by wage, when the alternative is a UGX 3,000 unconditional cash transfer. The workers' data is split by task. The busywork task entails loading and immediately offloading 3 sacks from a truck. Value task average summarizes all tasks, except the busywork task. The grey lines depict sealing, offloading and weighing. Panel B depicts the overall maximum willingness to pay for work for the value tasks average, sweeping and busywork.

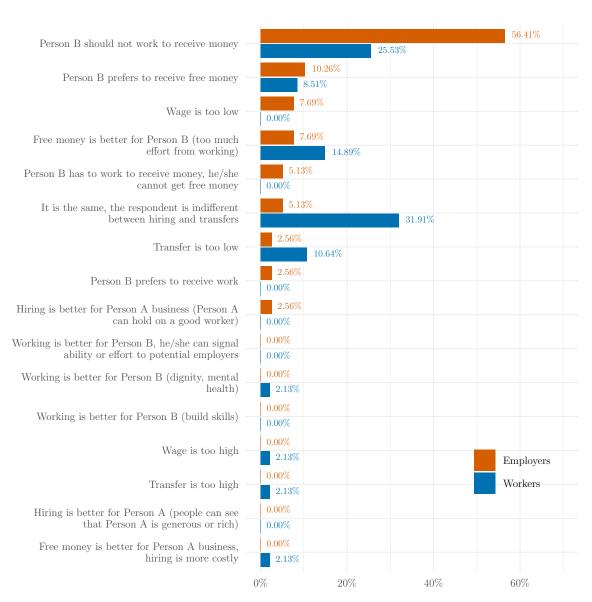
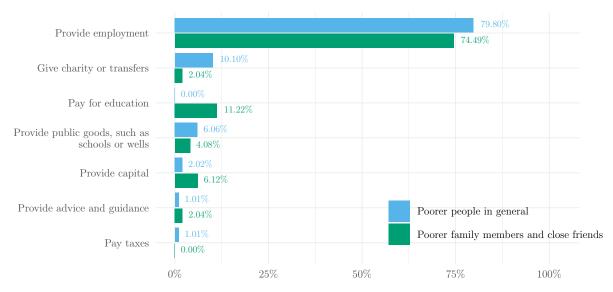


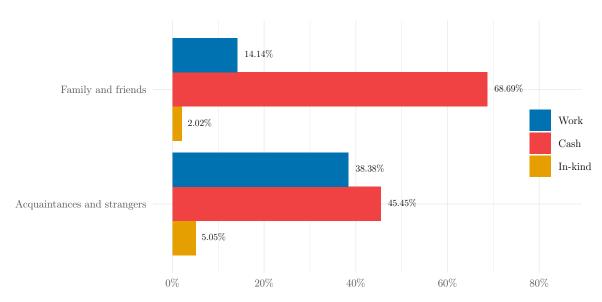
Figure A.17: Reasons for cash transfer choices by task

Note: The figure plots the motivation for transfer choices self-reported by employers and workers. We focus on the reasons for the "Wage UGX 3,000 – Transfer UGX 3,000" choice. As most respondent choose hiring, this figure only contains the reason for their transfer choice from 39 employers and 47 workers.



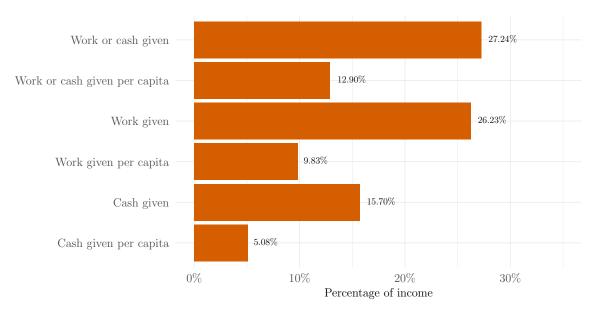
**Figure A.18:** What can rich people do to share earnings with poor people?

Note: We use data from a follow-up phone survey involving a random selection of employers (Poorer people in general: N = 99, Poorer family members and close friends: N = 98) from the primary sample. The questions ask about the most relevant actions rich people could take to share their earnings with poorer individuals in general and with poorer family members and close friends specifically.



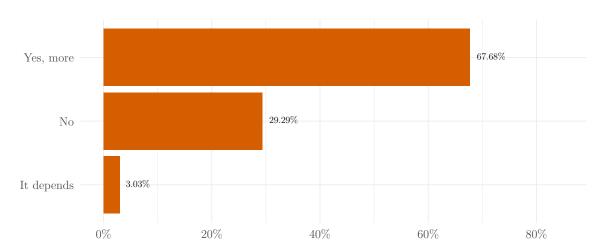
**Figure A.19:** What was the most frequent request you received from close family and friends (cash, work, or in-kind)?

Note: The data is from our follow-up phone survey, which consists of a random selection of employers (N = 99) from the main sample. This figure plots the distribution of the most frequent request types the respondents faced during the last month.



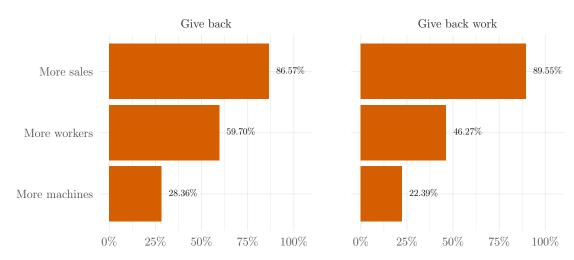
**Figure A.20:** "Last month, what is the total value of work (paid jobs) you offered [how much money did you offer] to anyone to support them financially? What is the number of people you offered work [gave/transferred/gifted money] to?"

Note: The figure displays the percentage of income redistributed through work or cash. The first two bars represent the overall and per capita values, conditional on giving either via work or cash. The third and fourth bars illustrate the same values, but specifically for giving work and conditional on doing so. The fifth and sixth bars provide the corresponding values for giving cash, conditional on giving cash at all. The data is from our follow-up phone survey, comprising a random selection of 99 employers from the main sample. Given any form of giving, employers on average offer work to 3.96 people and cash to 4.31 people. The average income, based on the follow-up survey, is UGX 788,281 (= USD 207.44), with values trimmed at the 99th percentile.



**Figure A.21:** "Do you think bigger firms should or are expected to give back more or less than smaller firms?"

Note: The data is from our follow-up phone survey, which consists of a random selection of employers (N = 99) from the main sample.



**Figure A.22:** "What are the characteristics that are associated with firms that give back more?"

Note: The data is from our follow-up phone survey, which consists of a random selection of employers (N = 67, only the respondents who think firm size has an impact) from the main sample.

## B Appendix Tables

Table A1: Grain processing activities: Tenure days, piece rate, and effort

	Tenure	(days)	Effort	(1-4)	4) Piece rate		e (USD)			
	Empl	oyers	Employers		Employers		Workers		Piece rate comparison	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Difference	p-values
Dehulling	29.58	24.39	NA	NA	0.20	0.12	0.22	0.15	-0.02	0.495
Milling	25.80	32.95	2.45	0.78	0.34	0.20	0.37	0.22	-0.03	0.176
Conditioning	20.76	26.34	1.83	1.15	0.12	0.11	0.13	0.07	-0.01	0.805
Mixing	11.77	19.46	2.96	0.75	0.34	0.14	0.40	0.18	-0.06	0.000
Loading	10.03	15.22	3.78	0.51	0.21	0.08	0.22	0.08	-0.01	0.004
Sealing	5.44	11.35	2.08	0.75	0.11	0.10	0.12	0.12	-0.01	0.177
Weighing	4.69	8.10	2.52	0.90	0.04	0.07	0.06	0.09	-0.02	0.018
Destoning	4.15	8.52	NA	NA	0.32	0.23	0.24	0.12	0.08	0.001
Shelling	3.29	4.89	NA	NA	0.13	0.13	0.26	0.00	-0.13	0.036
Drying	2.83	5.10	2.17	1.17	0.26	0.21	0.22	0.06	0.04	0.288
Sweeping	0.95	0.75	1.18	0.50	0.18	0.25	0.17	0.19	0.01	0.644

Note: The table summarizes the activities of grain processing firms. For each activity the table shows the average tenure requirements (tenure days required by the employer to the task with minimal supervision), as reported by the employers, the average piece rate in US dollars, as reported by employers and workers respectively, and the required effort. Effort levels range from 1 (not effortful at all) to 4 (very effortful). This information was obtained from a follow-up survey with a size of 99 (random subsample of the main survey), which resulted in some tasks having NAs for the effort level. To limit the influence of outliers, tenure and prices are trimmed (top and bottom 1%). Employers are only asked about the tasks which are normally performed at their firm. Similarly, workers are asked about tasks they can perform.

Table A2: Main Game: Employers vs. workers decisions

	(1) Work
Worker	0.004 $(0.018)$
Fixed effects	
Choice type	Y
Task	Y
Firm location	Y
Main activity	Y
Mean (main game, employers)	0.865
Obs.	18656
R2	0.067

Note: The table summarizes the differences in work redistribution choices between employers and workers. Standard errors are clustered at the respondent level.

Table A3: Work redistribution choices by respondent characteristics

	(1) Employers	(2) Workers
	Work	Work
Owner	-0.027	
	(0.034)	
Gender	0.015	0.007
	(0.026)	(0.051)
Age (years)	0.002	0.000
	(0.002)	(0.002)
Education (years)	0.000	-0.001
	(0.002)	(0.002)
Casual worker		-0.005
		(0.020)
Trainee		0.074
		(0.071)
Tenure firm (years)		-0.003
		(0.007)
Hours worked (on typical day)		-0.001
		(0.003)
Days worked (in typical week)		-0.001
		(0.010)
Income (monthly, USD)		0.000
		(0.000)
Fixed effects		
Choice type	Y	Y
Task	Y	Y
Firm location	Y	Y
Main activity	Y	Y
Obs.	8690	9526
R2	0.074	0.098

*Note:* The table shows that hiring choices are not correlated with respondent characteristics. The reference category for the employer respondent role (owner) is manager. For the workers the respondent reference category for casual worker and trainee is permanent worker. Standard errors are clustered at the respondent level.

Table A4: Generosity in Main Game and Firm Characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	N workers (std)	N permanent workers (std)	N machines (std)	$\log(\text{Firm sales})$	$\log(\text{Firm revenues})$	$\log(\text{Firm profits})$	Manager pay (std)
Max amount given (thousand UGX)	0.021	0.032	0.042	0.037	0.057	0.024	0.123
	(0.013)	(0.015)	(0.015)	(0.031)	(0.028)	(0.029)	(0.041)
Fixed effects							
Task	Y	Y	Y	Y	Y	Y	Y
Firm location	Y	Y	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y	Y	Y
Pre-standardization mean	6.419	1.857	2.496	21.809	32223.240	3552.851	365.115
Pre-standardization SD	7.636	2.979	1.330	51.640	67033.577	5031.563	134.280
Obs.	399	399	399	387	338	303	130
R2	0.374	0.162	0.490	0.304	0.311	0.286	0.239

Note: The table summarizes the relationship between the amount given and different input and output measures. N workers is the number of workers (permanent and casual) employed at the date of the interview. Similar to that, N permanent workers denotes the number of permanent workers employed on a typical day in August 2022 for the production of the firm's main product. N machines is the number of different machine types the respondent firm uses (either owned or rented). Firm sales (tonnes), firm revenues (thousand UGX) and firm profits (thousand UGX) are recorded for August 2022. Because asking managers for earnings is a sensitive question, Manager pay (thousand UGX) is defined as the respondent's estimate of the monthly earnings of managers of nearby firms. Only 32% of our sample is asked this question. Firm inputs are standardized. Standard errors are clustered at the respondent level.

**Table A5:** Robustness: work redistribution decisions and organization of firm inputs

	(1)	(2)	(3)	(4)	(5)	(6)
	N workers	N permanent workers	N machines	Workers' earnings	Management score	Manager pay
	(std)	(std)	(std)	(std)	(std)	(std)
Panel A: Without controls						
Average work decision	0.361	0.796	-0.399	-0.215	1.585	0.256
	(0.248)	(0.213)	(0.234)	(0.385)	(0.324)	(0.511)
Max amount given (thousand UGX)	-0.006	-0.028	0.072	0.030	-0.050	0.103
	(0.020)	(0.018)	(0.025)	(0.034)	(0.034)	(0.059)
Fixed effects						
Task	Y	Y	Y	Y	Y	Y
Firm location	Y	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y	Y
Pre-standardization mean	6.419	1.857	2.496	276.869	0.000	365.115
Pre-standardization SD	7.636	2.979	1.330	204.004	1.001	134.280
Obs.	399	399	399	370	399	130
R2	0.377	0.176	0.494	0.247	0.192	0.240
Panel B: With controls						
Average work decision	0.481	0.821	-0.236	-0.026	1.597	0.249
	(0.169)	(0.203)	(0.255)	(0.439)	(0.389)	(0.564)
Max amount given (thousand UGX)	-0.015	-0.045	0.059	0.018	-0.067	0.116
	(0.014)	(0.019)	(0.025)	(0.036)	(0.037)	(0.070)
Firm revenues (monthly, thousand UGX)	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm sales (monthly, tonnes)	0.010	0.006	0.002	0.004	0.002	-0.008
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.020)
Fixed effects						
Task	Y	Y	Y	Y	Y	Y
Firm location	Y	Y	Y	Y	Y	Y
Main activity	Y	Y	Y	Y	Y	Y
Pre-standardization mean	6.419	1.857	2.496	276.869	0.000	365.115
Pre-standardization SD	7.636	2.979	1.330	204.004	1.001	134.280
Obs.	334	334	334	311	334	103
R2	0.604	0.286	0.509	0.286	0.204	0.345

*Note:* Robustness check for Table 5. We consider an alternative measure of "Giving via work", namely the average of all hiring choices as the first regressor instead of the sum.

Table A6: Work redistribution decisions and firm productivity

	(1) log(Firm profits)	(2) log(Firm revenues)	(3) log(Firm sales)	(4) log(Revenues UGX 250,000)
Average work decision	0.061	0.602	0.360	0.042
<u> </u>	(0.609)	(0.649)	(0.537)	(0.055)
Max amount given (thousand UGX)	0.020	0.013	0.010	-0.014
,	(0.052)	(0.053)	(0.051)	(0.007)
Fixed effects				
Task	Y	Y	Y	Y
Firm location	Y	Y	Y	Y
Main activity	Y	Y	Y	Y
Mean outcome	7.419	9.214	1.715	5.635
Obs.	303	338	387	372
R2	0.286	0.314	0.305	0.065

Note: Robustness check for Table 6. We consider an alternative measure of "Giving via work", namely the average of all hiring choices as the first regressor instead of the sum.

Table A7: Work redistribution decisions and value of the task

	(1) First stage	(2) First stage
	Piece rate task	Tenure task
D 14 D 1	1 lece late task	Tellule task
Panel A: Employers	0.001	1.004
Task: offloading	0.001	1.604
T. 1. 1.	(0.014)	(2.746)
Task: sealing	-0.067	-2.553
	(0.020)	(2.828)
Task: weighing	-0.154	-4.260
	(0.014)	(2.569)
Task: sweeping	0.016	-6.566
	(0.037)	(2.496)
Fixed effects		
Firm location	Y	Y
Main activity	Y	Y
Mean outcome	0.167	5.636
F-statistic	38.670	11.742
Obs.	7326	7194
R2	0.228	0.131
Panel B: Workers		
Task: offloading	0.014	0.000
	(0.009)	(0.000)
Task: sealing	-0.065	-4.594
C	(0.012)	(0.000)
Task: weighing	-0.156	-5.344
3 3	(0.009)	(0.000)
Task: sweeping	-0.037	-9.086
rasin sweeping	(0.013)	(0.000)
Controls	,	,
Tenure firm (years)	Y	Y
Hours worked	Y	Y
Fixed effects		
Firm location	Y	Y
Main activity	Y	Y
Mean outcome	0.169	6.940
F-statistic	77.697	0.340
Obs.	9856	9856
R2	0.461	1.000

Note: This table shows the correlation between the assigned task and the related piece rate and tenure. Piece rate task (thousand UGX) denotes the piece rate of the assigned task, whereas tenure task (days) is the number of days a worker needs to perform a task with minimal or without supervision. Standard errors are clustered at the respondent level.

Table A8: Main Game: Heterogeneity by respondents' characteristics

	(1)	(2)
	Work choice	WTP
Skill (1-8)	0.008	0.019
	(0.006)	(0.038)
Tenure firm (years)	-0.005	-0.036
	(0.007)	(0.028)
Income (monthly, thousand UGX)	0.000	0.001
	(0.000)	(0.000)
Hours worked	0.000	-0.004
	(0.003)	(0.023)
Days worked per week	-0.002	0.022
	(0.010)	(0.055)
Fixed effects		
Choice type	Y	Y
Task	Y	Y
Firm location	Y	Y
Main activity	Y	Y
Obs.	9592	9592
R2	0.097	0.177

*Note:* The table summarizes the relationship between hiring preferences and worker skill. The data is from the Main Game. Skill refers to the number of different tasks a worker can perform. Max WTP is in thousand UGX. Standard errors are clustered at the respondent level.