Work Over Just Cash: Informal Redistribution Among Employers and Workers in Kampala, Uganda

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August 30, 2023 EEA-ESEM

#### Introduction

- Econ view of labor market: labor supply driven by consumption needs, labor demand driven by production needs
- Labor market as a social institution (Solow, 1990).
- Surplus labor models: in contexts with "unlimited labor supply," work is a way to share resources vs. profit max (Lewis, 1954; Sen, 1966; Ranis and Fei, 1961; Gollin, 2014)

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- Work provides psycho-social value beyond income (Hussam et al., 2022)
- Labor supply driven by social preferences and norms (Bandiera et al., 2005; Breza et al., 2018, 2019).

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#### Labor demand?

- Tend to assume profit max behavior.

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



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- No evidence that people give via work (pay above marginal product of labor).
- Unclear why not just maximize profits and then redistribute.

#### **RQ:** Is work a channel of informal redistribution in poor countries? Field experiment with 399 SMEs in Kampala (grain processing)

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- Large WTP for work on both sides

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**RQ:** Is work a channel of informal redistribution in poor countries? Field experiment with 399 SMEs in Kampala (grain processing)

Q1 Is there giving via work?

Q2 What drives work redistribution?

- Employers and workers systematically choose to give/receive via work (vs cash)
- Large WTP for work on both sides
- <u>NOT</u> driven by productivity, signaling or instrumental considerations.
- Motivations reflect fairness and social value of work:
  - 60%: "has to work to receive money"
  - 30%: dignity and personal development

Giving via work in the experiment predicts more hiring, but no difference in productivity or firm size.

# Related literature and contributions

#### 1. Labor markets in poor countries

**e.g.**, Lewis (1954); Sen (1966); Ranis and Fei (1961); Bardhan (1979); Gollin (2014) LaFave and Thomas (2016); Kaur (2019); Breza et al. (2019, 2021); Hussam et al. (2022)

On both sides of the labor market work has a social value, orthogonal to productivity, which drives labor demand and labor supply.

#### 2. Redistribution, transfers and sharing arrangements (in poor countries)

e.g., Fafchamps (1992); Townsend (1994, 1995); Foster and Rosenzweig (2001) : existence and welfare effects Jakiela and Ozier (2016); Squires (2021); Carranza et al. (2022): distortions Besley and Coate (1992); Bertrand et al. (2021): workfare vs. welfare. Haushofer and Shapiro (2016, 2018);

Bursztyn and Coffman (2012): CCT vs UCT

#### Employment relevant channel of informal redistribution in poor countries.

#### 3. Firm productivity and inefficient management practices in poor countries

e.g., Hsieh and Klenow (2009); De Mel et al. (2008); McKenzie and Woodruff (2014); McKenzie (2021); Atkin et al. (2017, 2019); Anderson and McKenzie (2022); Hardy and McCasland (2023) Bandiera et al. (2005); Breza et al. (2018) - social preferences and workers productivity

#### Explanation for why managers may not make prof max choices: social preferences.

# Empirical Strategy

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Goal 1: Experimentally measure work redistribution

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- Pair employers and workers of various firms.
- Give money to employers, induce redistribution.
  - Incentives: 5% randomly implemented
- Measure redistribution choices: work vs. cash
  - Employers: giving; workers: receiving.
- Non-trivial: multiple price list, vary wage/transfer.

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Design Features:

- Anonymous choices  $\rightarrow$  common to give to strangers
- Private and one-off decisions  $\rightarrow$  no social pressure
- Constrained redistribution  $\rightarrow$  follows expectations, can test thanks to price variation



Employer and worker characteristics

# Work tasks selected from common activities

Tasks: 30 min task, market wage UGX 3,000.







Loading

Sealing

Weighting

Initial payoffs: employer UGX 15,000/\$4; worker UGX 1,000/\$0.25.

Hiring at UGX 3,000 or UGX 3,000 transfer















#### Outcomes



- <u>Work</u>: dummy for work choice, for each binary choice.

### Outcomes



- <u>Work</u>: dummy for work choice, for each binary choice.
- Willingness to pay for work: largest difference between wage and donation, given work redistribution.

Experimental variations and goals

### Experimental variations and goals

#### Goal 2: Identify the drivers

- Economic value of work: Value tasks vs. non value tasks (sweeping, busywork)
  - random task, between subject in Main Game
- Signaling or relational value of work: Spectator Game (choices for other pair)
  - within subject, random order of Main and Spectator Game
- Aversion to giving cash: Food vs. cash game.
  - subset of 99 employers

# Results

#### Work redistribution choices



#### Work redistribution choices



### Inelastic to prices: Employers



#### Work redistribution choices



### Not just aversion to giving cash

Food vs. Cash Game (employers):



# Willingness to pay for work: Workers



# Drivers of Work Redistribution

# Is work redistribution explained by an economic value of work?



### Giving via work does not depend on value of task



#### Giving via work does not depend on value of task



#### Workers: Receiving via work does not depend on value of task



# Are decision driven by a signaling value of work?



# Spectator Game vs. Main Game, employers



# Spectator Game vs. Main Game, workers



# Motivations for work redistribution

#### Motivations for work redistribution: Employers



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#### Employers and workers motivations are aligned



# Conclusions, External Validity, and Implications

# External validity

Labor demand:

- Giving via work in the experiment predicts more hiring, but no difference in productivity or firm size.
  - ► Give work and firm input ► Give work and firm performance

# External validity

#### Labor demand:

- Giving via work in the experiment predicts more hiring, but no difference in productivity or firm size.
  - Give work and firm input Give work and firm performance

#### Labor supply:

- Job take up is very frequent in the experiment: previous literature finds often low take up of jobs.
  - $\Rightarrow$  short, one-off familiar jobs.
  - $\Rightarrow$  job amenities relevant for labor supply in poor countries.

# Conclusions

- Identify a strong willingness to pay to give/receive via work in low-income setting.
- Not explained by productivity concerns, signaling or personal instrumental benefits
  - $\Rightarrow$  Social function of work (redistribution):
    - Labor demand driven by profit-maximization.
    - Micro-foundation for disguised unemployment (surplus labor model assumption)

# Conclusions

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#### Implications

- Organization of production productivity:
  - Mechanically reduce output per worker
  - Large: 46% of employers say they gave work to help someone, 38% despite no need for work;
     4% of firm's profits
  - More workers  $\rightarrow$  more inputs (monitoring time, machines, capital)

- Social assistance programs:
  - Workfare vs. welfare: receiving work better aligns with preferences.
  - CCT vs. UCT discussion: cash transfers lack reciprocity, may be perceived as unfair.

# Thank you! jeremia.stalder@unisg.ch

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# Employers and Workers Characteristics

	Empl	oyers	Workers		
	Mean	Median	Mean	Median	
N	399		449		
Gender: male	70.43%		95.55%		
Age (years)	33.22	32	26.02	25	
Nationality: Ugandan	99.5%		99.78%		
Education (years)	8.91	6	7.37	6	
Employment position					
Manager	52.38%				
Owner	47.62%				
Income (monthly, USD)	96.08	105.26	77.16	69.92	
Tenure firm (years)			1.93	1	
Employment type					
Permanent worker			49.22%		
Casual worker			50.56%		
Trainee			0.22%		
Days worked (in typical week)			6	6	
Hours worked (on typical day)			10.43	11	
Hours idle time (of 10h)			3.46	3	
Has written contract			10.96%		

# Payoff maximization benchmark, employers



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### 50-50 split benchmark, employers



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### Employers' choices are inelastic to transfers



# Perception of work productivity



"In the past month, have you given anyone a job in order to help them out financially?"

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# Employers: Work redistribution decisions by task

Task does not affect giving via hiring: same choices when task has very little or no value.

	(1) Work	(2) Work	(3) Work	(4) Work	(5) Work	(6) WTP	(7) WTP	(8) WTP	(9) WTP	(10) WTP	
Task: offloading	-0.040 (0.045)					-0.688 (0.350)					
Task: sealing	-0.008					-0.761					
Task: weighing	-0.003					-0.299					Not
Task: sweeping	-0.036 (0.050)					-1.150 (0.386)					Stan
Busywork	· ,	0.021 (0.038)				, ,	0.531 (0.312)				► F
Sweeping		. ,	-0.014 (0.031)				, ,	-0.435 (0.256)			
Effort (1-4)				-0.012 (0.013)					0.086 (0.105)		
Piece rate task (thousand UGX)				-0.078 (0.100)					-0.536 (0.652)		
Tenure task (days)				0.001 (0.002)					0.003 (0.017)		
No stakes				. ,	0.013 (0.007)				. ,	0.203 (0.072)	<ul> <li>E</li> </ul>
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	0.865	0.869	0.864	0.865	0.865	6.085	6.177	6.048	6.085	6.085	
Obs.	8778	6886	7810	6864	17556	399	313	355	312	798	
R2	0.072	0.082	0.073	0.078	0.441	0.110	0.102	0.118	0.095	0.844	

*Note:* WTP is the maximum willingness to pay (thousand UGX). Standard errors are clustered at the respondent level.

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Regression specifications

#### Regression specifications

Task ATE:

$$Y_{ij} = \alpha + \phi I_{task,i} + \gamma_i + \lambda_j + u_{ij}$$
<sup>(1)</sup>

Busywork ATE:

$$Y_{ij} = \alpha + \beta_1 I_{busywork,i} + \gamma_i + \lambda_j + v_{ij}$$
<sup>(2)</sup>

Piece rate and tenure correlation:

$$Y_{ij} = \theta_0 + \theta_1 Piecerate_i + \theta_2 TenureRequirement_i + \gamma_i + \lambda_j + \nu_{ij}, \qquad (3)$$

where:

- $\gamma_i$  are fixed effects for geographic location and main activity fixed effects;
- $\lambda_i$  are fixed effects for wage and transfer.
- Standard errors are clustered at the respondent level.

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### Work redistribution decisions: Main game vs. Spectator game

	(1) Overall	(2)		(1) Overall	(2)
	Work	WTP		Work	WTF
Spectator game	0.013 (0.007)	0.203 (0.072)	Spectator game	-0.004 (0.005)	0.017 (0.028
Fixed effects			<b>Fixed effects</b>		
Choice type	Y	N	Choice type	Y	Ν
Respondent	Y	Y	Respondent	Y	Y
Task	Y	Y	Task	Y	Y
Firm location	Y	Y	Firm location	Y	Y
Main activity	Y	Y	Main activity	Y	Y
Mean (main game)	0.872	6.085	Mean (main game)	0.876	3.004
Obs.	17556	798	Obs.	19756	898
R2	0.441	0.844	R2	0.370	0.935

Employers

Workers

# Work redistribution and firm inputs

	(1)	(2)	(3)	(4)
	N workers	N permanent workers	N machines	Workers' earnings
	(std)	(std)	(std)	(std)
Giving via work	0.027	0.036	-0.016	0.003
	(0.010)	(0.011)	(0.015)	(0.019)
Max amount given (thousand UGX)	-0.023	-0.022	0.051	0.025
	(0.017)	(0.021)	(0.029)	(0.038)
Firm revenues (monthly, thousand UGX)	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Firm sales (monthly, tonnes)	0.011	0.008	0.002	0.003
	(0.003)	(0.005)	(0.003)	(0.002)
Revenue from UGX 250,000 input (thousand UGX)	0.000	0.006	-0.002	0.002
	(0.001)	(0.002)	(0.001)	(0.001)
Firm profits (monthly, thousand UGX)	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Task	Y	Y	Y	Y
Firm location	Y	Y	Y	Y
Main activity	Y	Y	Y	Y
Pre-standardization mean	6.419	1.857	2.496	276.869
Pre-standardization SD	7.636	2.979	1.330	204.004
Obs.	293	293	293	276
R2	0.588	0.380	0.514	0.302

Note: Choice type, task, firm location and main activity fixed effects. Workers' earnings are the average of the monthly earnings (thousand UGX) for all workers we interviewed at a given firm. Standard errors are clustered at the respondent level.

# Does work redistribution (extra work) predict firm performance?

	(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: Choice type, task, firm location and main activity fixed effects. Some employers refused to report their profits and revenues inducing a drop in observations. 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. Revenue from UGX 250,000 input 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.

### Experimental Wording

Part of your earnings from the survey are determined by a lottery. All individuals who participate in the survey are paired together with another person from Kampala and each pair enters a lottery, which selects some of the pairs. If a pair is selected by the lottery: one person, let us call him/her **Person A**, **earns UGX 15,000** and the other person, **Person B**, **earns UGX 1,000**. Before payoffs are delivered, either one person in the pair or a third party person has the **chance to redistribute part of the money from Person A to Person B**.

In the following questions, we ask you how you want to split the payoffs. You are going to make **two sets** of decisions. In one set of decisions, you are going to be the third party person who decides how to split the lottery payoffs for another pair; In another set of decisions, you are going to decide how to split the payoffs in your own pair as if you are the lottery winner. At the end of the survey, the lottery will select 20 pairs. For each pair, we will select one decision maker, and one choice. We will deliver the money to the people in the pair according to the decision maker's choices. If you are selected as the decision maker we will implement one of your choices.

#### Motivations for work redistribution: Employers, transfer varying UGX 3,000 transfer 90% Has to work to receive money 60% % choosing work vs. 30% /It is the same Networking B prefers work Transfer too high Transfer too low Signaling NA 0% 500 3.000 6.500 Wage (UGX)

# Are decision driven by a relational value of work?

- We rely on respondents acting as "social planners"
- Employers' side:
  - If they make decisions based on their personal benefit

 $\rightarrow$  less likely to choose redistribution in Spectator game, especially when it is valuable for themselves but costly for the worker

- Workers' side:
  - If they make decisions based on their personal benefit  $\rightarrow$  lower likelihood for work redistribution especially for low value tasks
- Main and Spectator Game not statistically different

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