

The Effects of Transfers on Intra-household Time Allocation: Evidence from Northern Uganda

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unite for children



Motivation & Background

- Dammert et al. (2018), review of public policy on child labor, programs:
 - ↓ household vulnerability & ↑ exposure to risk ⇒ ↓ child work
 - f adult labour & entrepreneurial activities is might f child labour
- De Hoop et al (2017): Two UCTs in Malawi and Zambia, expansion in household productive investments increased reliance on children work
- Existing literature on impacts of cash transfers:
 - •Baird et al. (2014) systematic review: Cash transfers typically increase child schooling

•De Hoop & Rosati (2014) review: No detrimental effects on child work, rather reductions



Study objectives

- Test whether a food and cash transfer intervention in Karamoja

 targeted to households with young children and aimed at
 increasing food security and early child development affect
 the *intra-household allocation of time*
- Focus on:
 - Non-primary objectives
 - Household members not explicitly targeted
 - Intra-household dynamics
 - 'Functional targeting'
 - Targeted to specific group/individuals within the household
 - Certain activities are encouraged



WFP food or cash transfers

- **Overall Aim**: Food security and early childhood development
- **Target Group**: households with children aged 3-5 years old enrolled in UNICEF-supported community-run ECD centres (since 2007)
- Location: 3 districts of the Karamoja sub-region
- Transfers: Unconditional (with messaging/ 'soft conditions'), paid/provided every 6 weeks:
 - Nutrition-dense take-home food ration, distributed by truck or
 - Cash transfers, paid electronically to cards
 - Transfer modalities were equivalent in value (roughly USD 12 per eligible child over 6 weeks) = ~10% of pre-program average consumption per month
- Recipient: Transfers provided preferentially to a woman in the household



Karamoja map





WFP Moroto compound & ECD centers



Key features & timeline of the evaluation

- Stratified cluster randomized control trial run by IFPRI
- Randomization at the ECD centre level
- 98 clusters randomly allocated to one of three arms:
 - 1. Food arm (35 clusters)
 - 2. Cash arm (31 clusters)
 - **3.** Control group (32 clusters)
- ~ 2,500 households
- Longitudinal from 2010 to 2012





Existing evidence on program impacts

- Significant impacts of the *cash* transfer on primary objectives:
 Consumption and food security (Gilligan et al 2013, 2014)
 ECD and young children outcomes (Gilligan and Roy 2015)
- Overall lack of or limited impacts of *food* intervention
 Due to ineffectiveness or lack of enforcement/implementation issues?
- In this presentation, focus on:
 - Cash impacts
 - •Primary school-age children and prime-age adults



Main outcome indicators by age group

Primary school-age children (7-12 at baseline)

School outcomes (currently enrolled, number of days attended, school expenditure) Activities & chores outcomes Participation (1/0); Average hours per day (logged) Productive work, last 7 days (looking after livestock, help with agricultural work, wage work) **Reproductive work**, last 7 days (looking after younger children, caring for sick household members, doing other chores outside, or near the home)

Any .

work

Prime-age adults (18-59 at baseline)

Time use outcomes

In the last six months (participation)

worked in agriculture, looking after livestock, wage work, non-agricultural self-employment

In the last two weeks (average hours per day, logged) domestic work, income-earning

activities#, leisure activities#



Main characteristics of sample at baseline

	Mean
Household head	
Age (years)	39.54
Female	0.11
Education: None	0.68
Marital status:	
Never married	0.00
Polygamous	0.54
Monogamous	0.38
Divorced/separated	0.01
Widowed	0.07
Household level	
Household size	6.32
Monthly consumption per capita, ('000 UGX)	31.14
Dwelling characteristics	
Roof: Thatched/vegetable matter/sticks	0.90
Floor: Cow dung/soil mix	0.77
Main source of lighting: Fire	0.83
Drinking water source: Borehole, well, spring	0.87
Sanitation: No toilet	0.46
Ν	2,357

Presence of several programmes in the study area:

- 83% of households received assistance from at least one programme
- No household was beneficiary of any other cash transfer intervention

Prime-age adults (past 6 months)

- 93% had worked in agriculture;
- 39% in wage work
- 27.5% in non-agricultural selfemployment
- 14% had spent some time looking after livestock.

Children's outcomes at baseline

Primary school-age children:

- 51 % currently enrolled and attend half of the days in which school is open (48 per cent)
- school expenditures per enrolled child in a year around UGX 5,744, or roughly USD 2.5

In the last 7 days:

- 88 per cent engaged in domestic work; 5 hours
- 57 per cent engaged in economic work; 1.5 hour



Empirical strategy

Analysis of Covariance (ANCOVA) model

 $y_{it} = \beta_0 + \beta_1 Food_i + \beta_2 Cash_i + \beta_3 y_{it-1} + \beta_4 X_{it-1} + \theta + \varepsilon_i$

- Strata fixed effects; gender and age controls
- OLS with robust standard errors clustered at the level of randomization (ECD centre)
- Account for multiple testing approach
 - Adjust p-values using the Sidak-Bonferroni adjustment
- Results robust to different specifications, models and samples



Validity of experimental setting

Successful randomization:

 Baseline balance carried out on over 50 household key characteristics and outcome variables

- Household attrition: 7.9%
 - No significant differences between arms;
 - No significant differential attrition
 - Results robust to Lee bounds



Results



Photo credit: Amber Peterman



Primary school-age children (1/3) No impact on schooling

	Currently enrolled	Number days attended school	Education expenditure, logged
	(1)	(2)	(3)
Food impact	-0.02	-0.03	-0.49
	(0.04)	(0.04)	(0.32)
Cash impact	-0.02	-0.01	-0.08
	(0.03)	(0.03)	(0.32)
R^2	0.22	0.20	0.22
Ν	2,478	2,432	2,448
Baseline Control mean	0.538	0.495	4.510



Primary school-age children (2/3) Positive impact on child productive work

	Any	work	Product	ive work	Reproductive work		
	Part. (1/0)	Hours (logged)	Part. (1/0)	Hours (logged)	Part. (1/0)	Hours (logged)	
Food impact	-0.02	-0.03	-0.03	-0.07	-0.02	-0.01	
	(0.02)	(0.06)	(0.05)	(0.07)	(0.02)	(0.05)	
Cash impact	0.03*	0.17***	0.27***	0.31***	0.02	0.07	
	(0.02)	(0.05)	(0.05)	(0.06)	(0.02)	(0.05)	
R^2	0.04	0.13	0.14	0.14	0.05	0.12	
Ν	2,273	2,207	2,244	2,213	2,273	2,258	
Baseline control mean	0.929	1.858	0.613	0.712	0.896	1.635	



Primary school-age children (3/3) ...driven by positive impact on child agricultural work

	Productive work						
	Last seven days						
	Looking aft	er livestock	Helping v agricultur own	vith other al work on land	Doing wage work		
	Part. (1/0)	Hours (logged)	Part. (1/0)	Hours (logged)	Part. (1/0)	Hours (logged)	
Food impact	-0.02	-0.03	-0.02	-0.04	-0.00	-0.01	
	(0.02)	(0.03)	(0.05)	(0.06)	(0.02)	(0.02)	
Cash impact	0.02	0.02	0.29***	0.31***	0.01	-0.01	
	(0.02)	(0.03)	(0.05)	(0.06)	(0.02)	(0.02)	
Ν	2,256	2,256	2,267	2,267	2,224	2,224	
Baseline control mean	0.104	0.137	0.575	0.607	0.044	0.045	



Prime-age adults: positive impact on (agricultural) work and time spent on income earning activities

	In last six months					In last two weeks		
	Worked in agriculture	Spent time looking after livestock	Did work that paid a salary or wages	Non-agric. self- employed work		Domestic work	Income- earning activities †	Leisure activities†
	Part. (1/0)	Part. (1/0)	Part. (1/0)	Part. (1/0)		Hours per day (logged)	Hours per day (logged)	Hours per day (logged)
Food impact	0.01	0.02	0.00	-0.00		-0.00	-0.02	-0.04
	(0.03)	(0.02)	(0.03)	(0.03)		(0.03)	(0.05)	(0.03)
Cash impact	0.09***	-0.01	0.00	-0.00		0.03	0.25***	-0.02
	(0.03)	(0.02)	(0.03)	(0.03)		(0.03)	(0.04)	(0.03)
R ²	0.06	0.08	0.03	0.07		0.38	0.11	0.15
Ν	4,401	4,387	4,391	4,395		4,402	4,399	4,371
Baseline (•) control mean	0.929	0.161	0.380	0.278		1.363	1.266•	1.165•



Mechanisms: Impact on land investments

	Any investment on land
	(1/0)
Food impact	0.006
	(0.044)
Cash impact	0.117***
	(0.044)
R^2	0.06
Ν	2,357
Baseline control mean	0.548

- No impact on irrigation, crop patterns, livestock or productive assets.
- No data on agricultural input use, etc.



Summary

Positive impact of the cash transfer on

 Investments in land
 Adults' participation in agriculture
 Children's involvement in productive activities – mainly agricultural
 No impact on long-working hours

- How to reconcile results with cash transfer literature?
 - Transfers not high enough to offset opportunity cost (de Hoop and Rosati, 2014; Dammert et al., 2018)
 - •Sufficient excess capacity to accommodate additional students
 - •Perceived returns to education -> under-investment in schooling?
 - Parents value on-the-job-learning
 - Importance of context



Research & Policy Implications

- For a comprehensive child impact assessment: broader indicators of child well-being & further info on type of work; long-term
- More research to understand the level of cash transfer needed to improve schooling and work outcomes
- How to better design programmes apart from conditionalities or larger transfers – to encourage human capital investment overall for the household, without children engaging in *hazardous* labour?
 - Cash plus?
- Invest in sensitization/communication
- Closely monitor possible unintended impacts on child labour



Thank you!

For more information

- Transfer Project website: <u>www.cpc.unc.edu/projects/transfer</u>
- Briefs: <u>http://www.cpc.unc.edu/projects/transfer/publications/briefs</u>
- Facebook: <u>https://www.facebook.com/TransferProject</u>
- Twitter: @TransferProjct email: Inatali@unicef.org



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