





The Impact of a Graduation Program on Livelihoods in Refugee and Host Communities in Uganda

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Data collection supervision and analysis at IPA/NU: Antoine Guilhin, Javier Madrazo, Leah Kim, Peter Lugthart, Patrick Malone + *many* enumerators and field managers

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Motivation

- Promising earlier results of the "Graduation" approach in a number of countries on a range of outcomes
 - "Graduation" = asset transfer, coaching, other support
 - Banerjee et al (2015); Bandiera et al. (2017)
- Ultimate goal: inclusive scale
 - How to improve outcomes for a broader set of populations
 - Viability in different settings (e.g. conflict settings Chowdhury et al. 2017, Bedoya et al. 2019, Brune et al. 2022)
 - What components are necessary, at what intensity?
 - Ways to reduce cost / increase cost-effectiveness

Research questions

- How does the approach work in a refugee population (in Uganda)?
- Can group-coaching work as effectively (or better) as individual coaching?
- How important is the asset transfer for the success of the program?

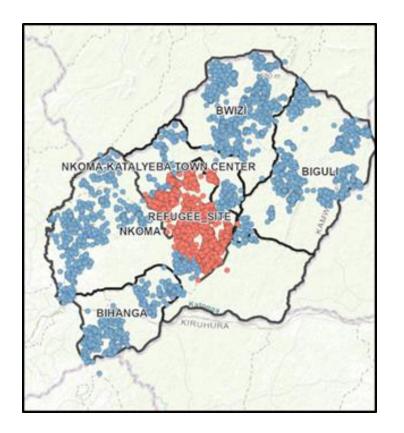
Research questions and answers

- How does the approach work in a refugee population (in Uganda)?
 - → well but note the context!
- Can group-coaching work as effectively (or better) as individual coaching?
 - → yes more cost-effective!
- How important is the asset transfer for the success of the program?
 - → Cash asset transfer has high marginal impact (under certain assumptions about persistence of impact)

Context and sample

- Location: Kamwenge refugee settlement (50% of sample) and surrounding host communities
- Implementer: AVSI Foundation
- Primary target participants: economically active women
- Eligibility: 92% (refugees) / 60% (host) of all households
- Refugees are from the DRC, arrival on average 5 years prior
- Existing refugee support: in-kind transfers (UGX31K/person/month or \$8); small plot for house and garden; initial support for shelter/housing; free movement and ability to engage in commerce
- At baseline: 69% have livestock; 67% have income from paid work; 25% have biz; ~100% farming (similar rates for refugees and hosts)

Implementation in the Rwamwanja refugee settlement and in the surrounding host communities



Source: AVSI

Rwamwanja refugee settlement in Kamwenge





Interventions

Intervention	T1: Full program individual coaching
	(N=2,200)
Consumption support (12 m)	•
VSLA, FFBS, more	•
Individual coaching	•
Group coaching	
Cash "Asset" Transfer	•
-	-

Participants are organized in groups of ~25 households

Value of consumption support in total over time, on average: UGX 1M-1.2M (US\$280-320)

Value of "asset" transfer: UGX1.1M (US\$300), ~7 months into the program

Coaching: first weekly, then two-weekly sessions (changed after 6 months, only in individual coaching arm)

Interventions and experimental design

Intervention	T1: Full program individual coaching	T2: Full program group coaching	
	(N=2,200)	(N=2,200)	
Consumption support (12 m)	•	•	
VSLA, FFBS, more	•	•	
Individual coaching	•		
Group coaching		•	
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Interventions and experimental design

Intervention	T1: Full program individual coaching	T2: Full program group coaching	T3: Individual coaching, no asset
	(N=2,200)	(N=2,200)	(N=2,200)
Consumption support (12 m)	•	•	•
VSLA, FFBS, more	•	•	•
Individual coaching	•		•
Group coaching		•	
Cash "Asset" Transfer	•	•	

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Cluster-level and hh-level randomization

<u>Treatment village clusters</u> (21 refugee / 36 in host)

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Control village clusters (21 refugee / 36 in host)

Cluster-level and hh-level randomization

<u>Treatment village clusters</u> (21 refugee / 36 in host)



Intervention groups T1, T2, T3

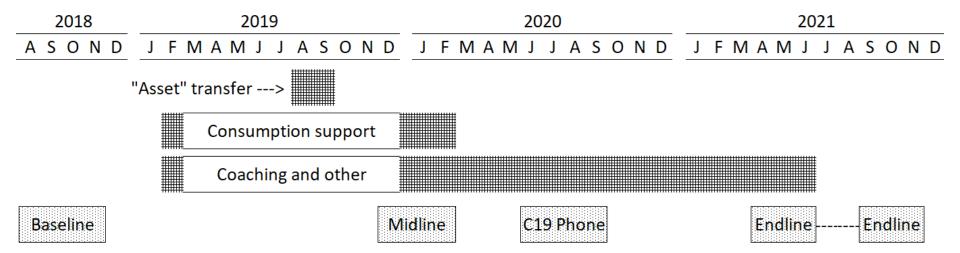
N=2 x 1,100 per group

Control village clusters (21 refugee / 36 in host)

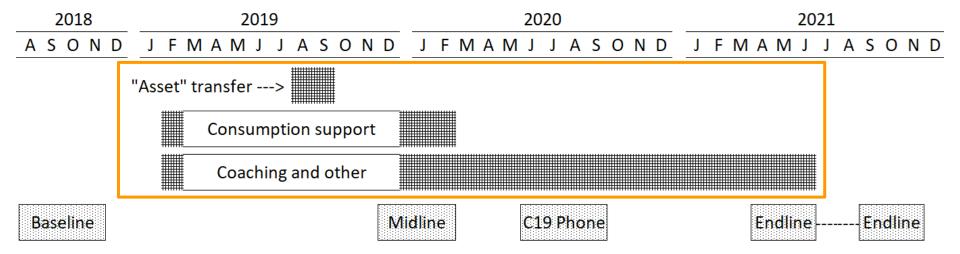
Pure Control

 $N=2 \times 1,100$

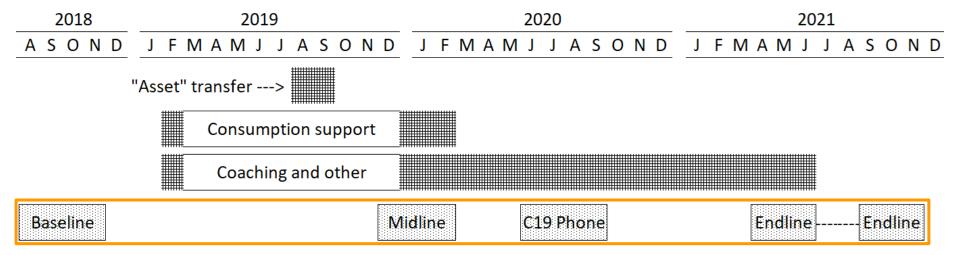
Timing of activities and data collection



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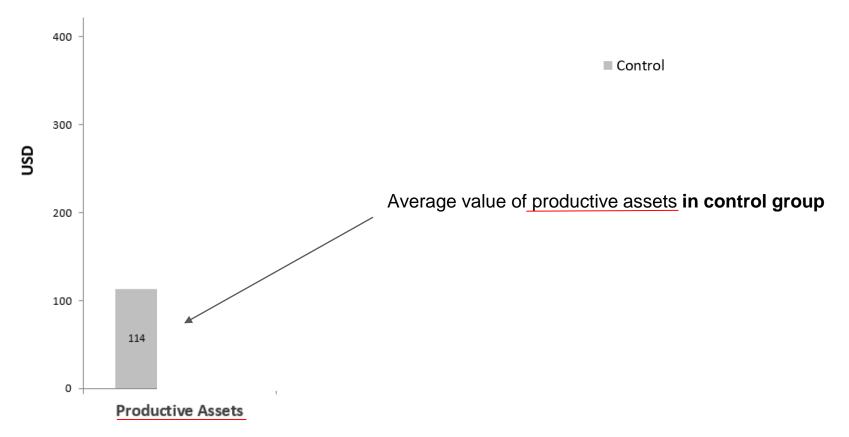


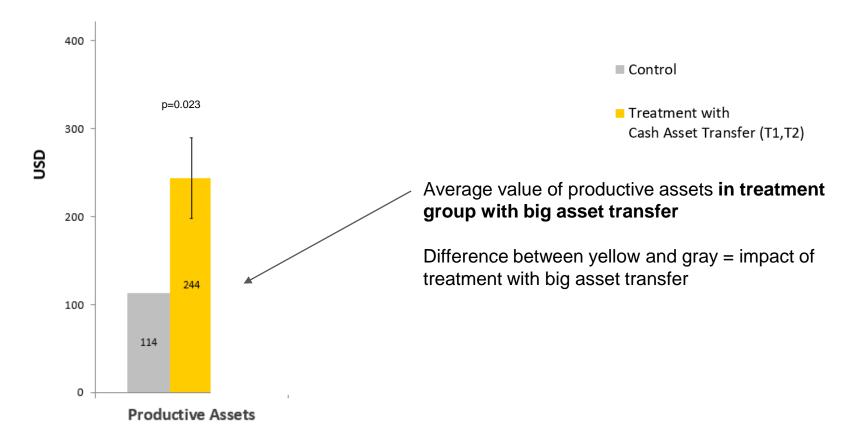
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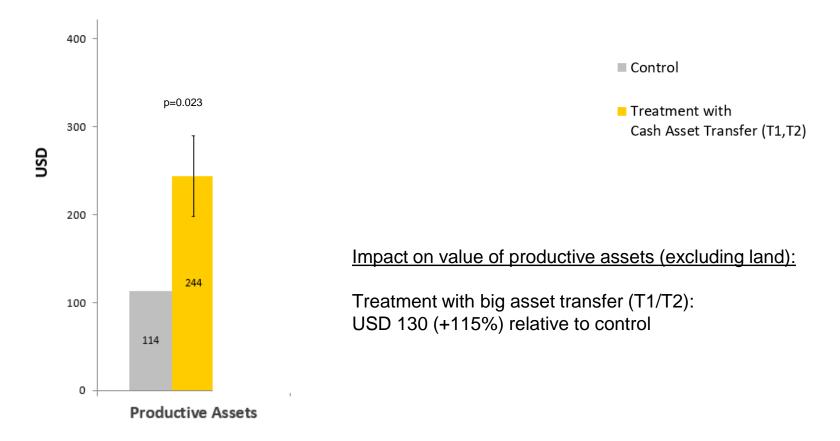


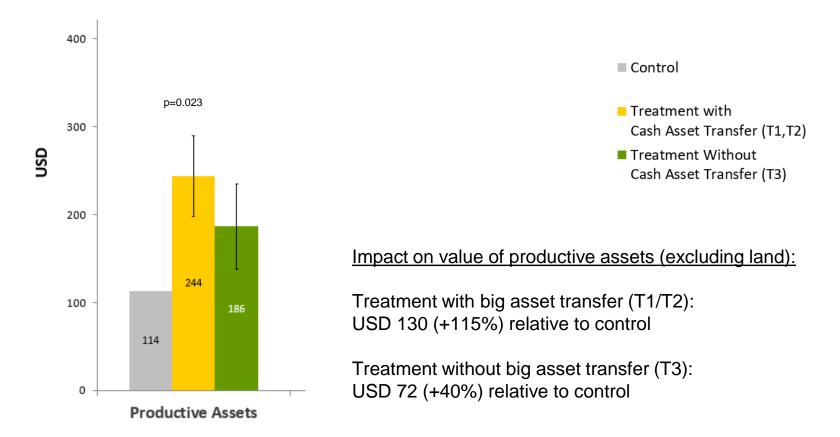
Endline data collection

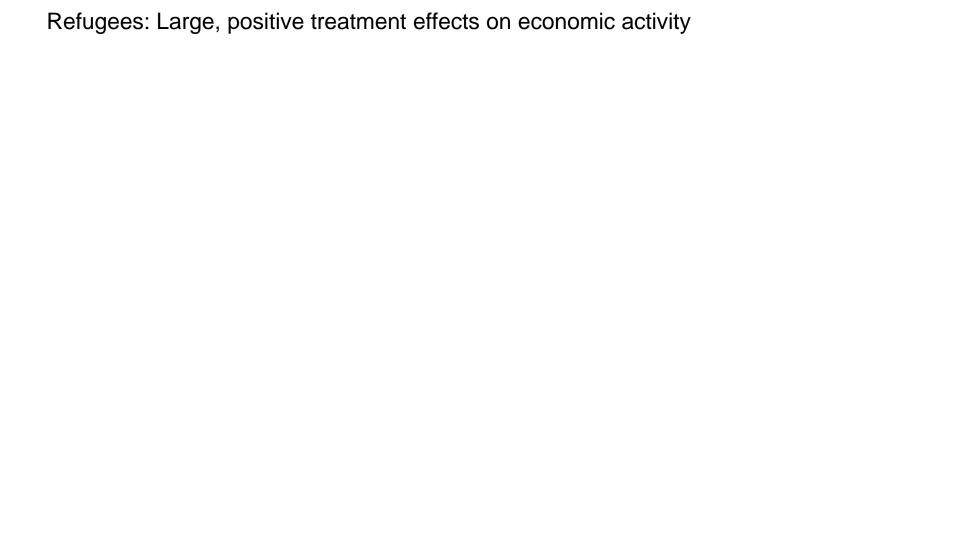
- ~10,500 households surveyed in in-person interviews covering a wide range of topics
- Response rate: 95% hosts, 94% refugees
- No differences in response rates by experimental conditions



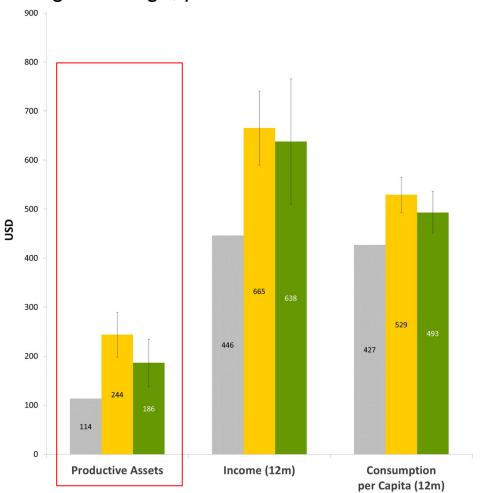








Refugees: Large, positive treatment effects on economic activity



ControlTreatment withCash Asset Transfer (T1,T2)

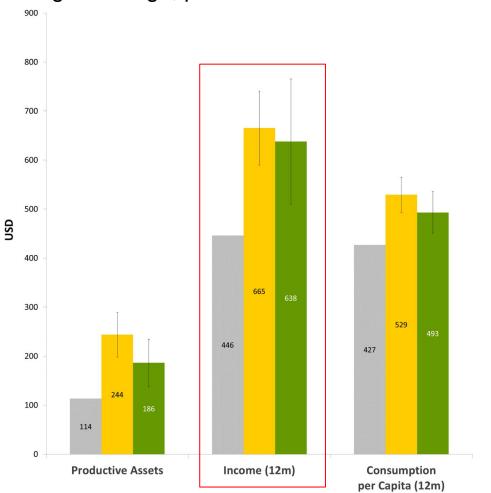
Treatment Without Cash Asset Transfer (T3)

Value of productive assets (excl. land):

Treatment with big asset transfer (T1/T2): USD 130 (+115%) relative to control

Treatment without big asset transfer (T3): USD 72 (+64%) relative to control

Refugees: Large, positive treatment effects on economic activity



Control

Treatment with Cash Asset Transfer (T1,T2)

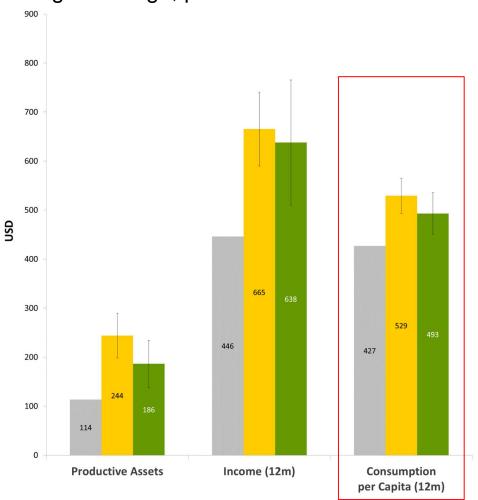
■ Treatment Without Cash Asset Transfer (T3)

Annual income:

Treatment with big asset transfer (T1/T2): USD 219 (+49%) relative to control

Treatment without big asset transfer (T3): USD 192 (+43%) relative to control

Refugees: Large, positive treatment effects on economic activity



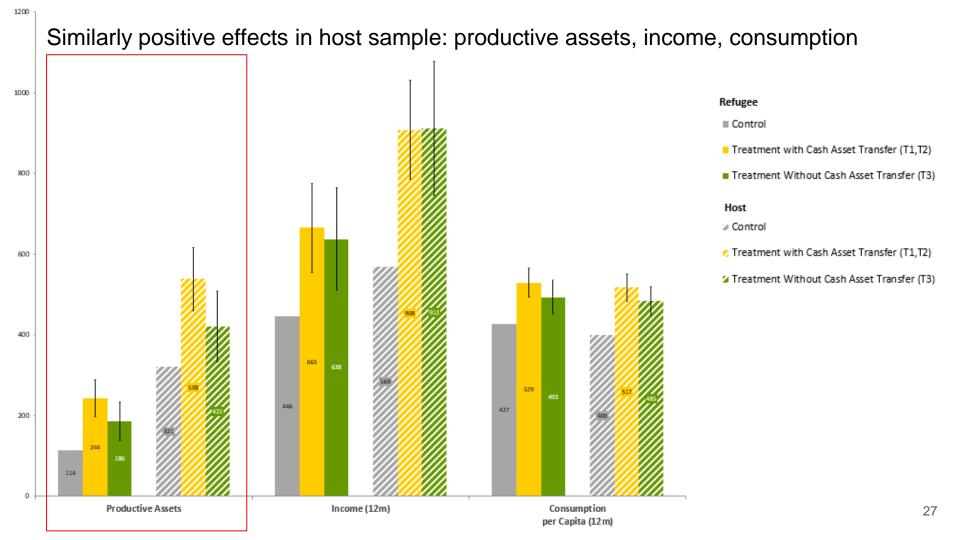
Control

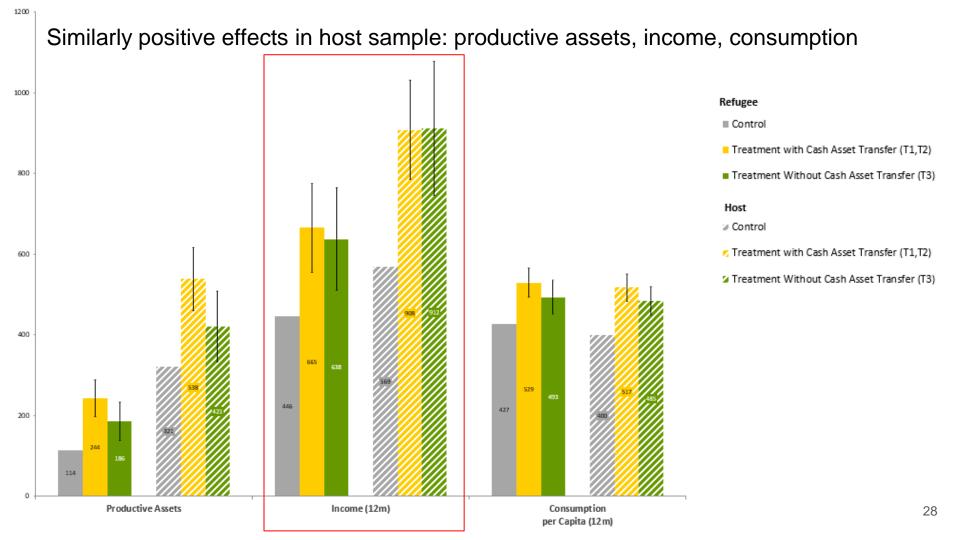
- Treatment with Cash Asset Transfer (T1,T2)
- Treatment Without Cash Asset Transfer (T3)

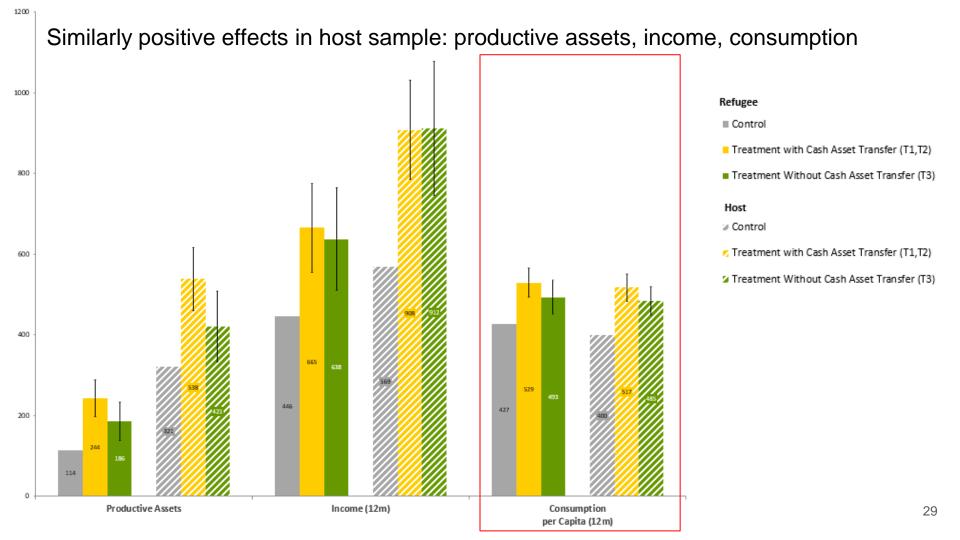
Annual consumption per capita:

Treatment with big asset transfer (T1/T2): USD 102 (+24%) relative to control

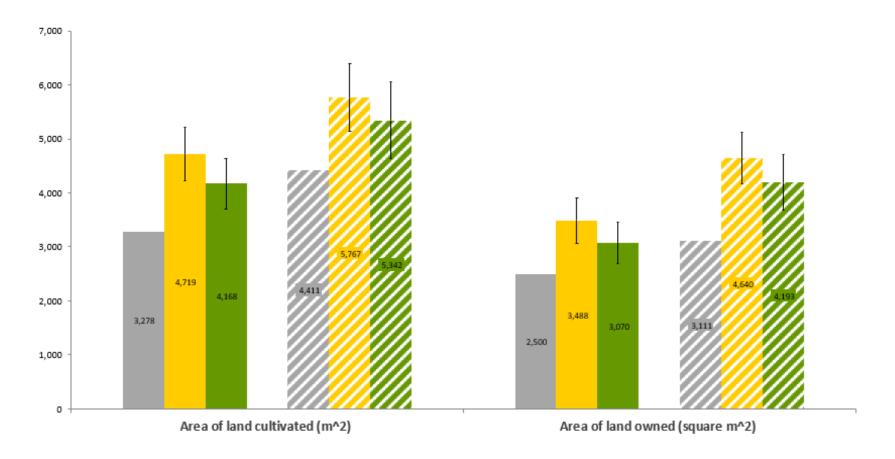
Treatment without big asset transfer (T3): USD 66 (+15%) relative to control





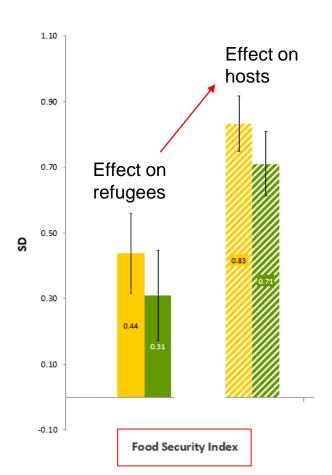


Increase in agricultural activity – and land ownership



Larger effects in host sample: food security (FCS, HFIAS, HAZ), subjective well-being (Kessler-6, Cantril ladder)

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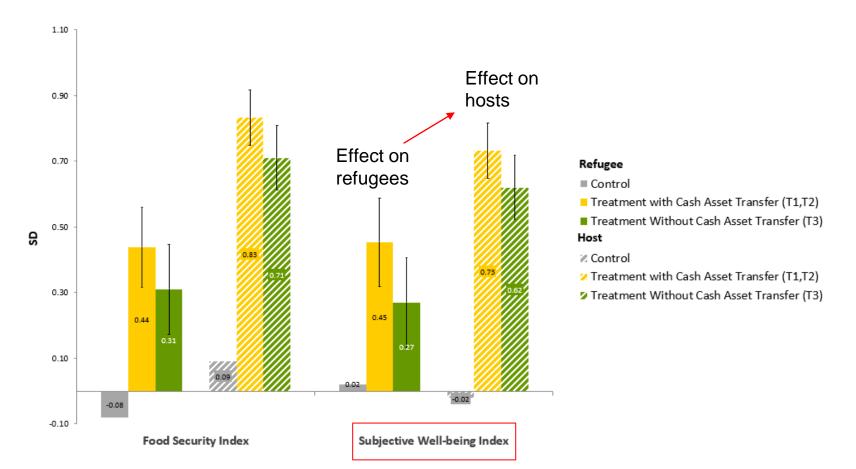
Refugee

- Control
- Treatment with Cash Asset Transfer (T1,T2)
- Treatment Without Cash Asset Transfer (T3)

Host

- Control
- Treatment with Cash Asset Transfer (T1,T2)
- Treatment Without Cash Asset Transfer (T3)

Large effects subjective well-being impacts, and larger for hosts



Spillover design

Treatment village clusters (21 refugee / 36 in host)



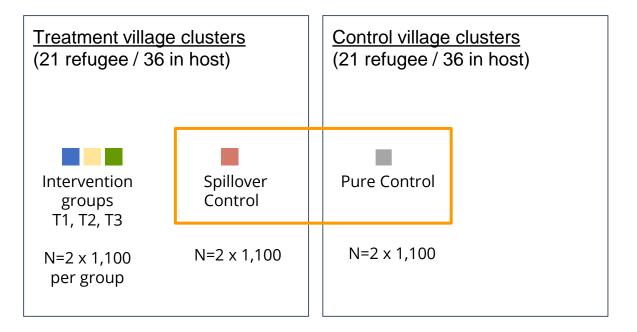
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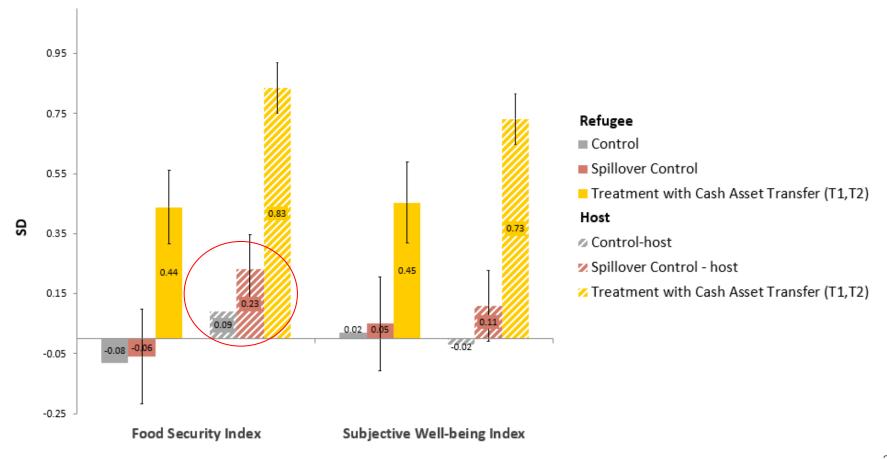
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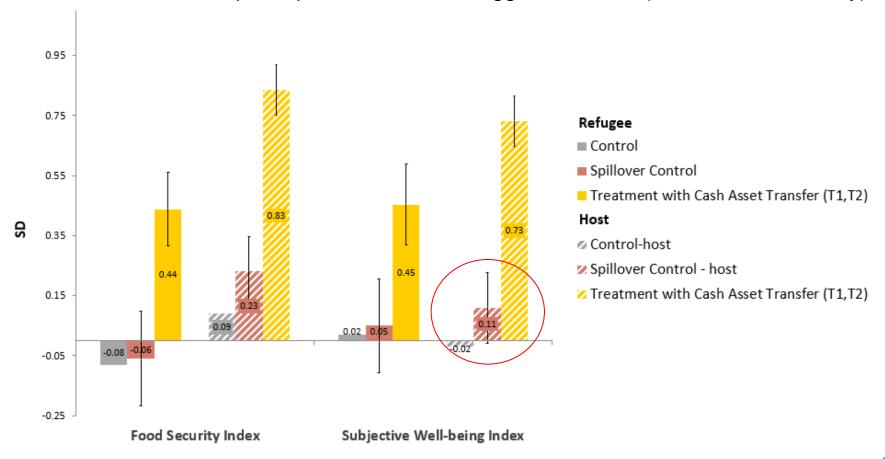
Spillover design



For hosts, evidence of pos. spillovers on some aggr. measures (less on econ. activity)



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Summary of endline results

- Increases in value of productive assets, income, consumption, food security, and subjective well-being, both in refugee and host communities
 - Effects on econ activity larger in absolute terms for hosts (but refugees start from a lower base)
- All program versions have positive impact
 - Group coaching same impact as individual coaching
 - With asset transfers performs better than without
- Additional positive effects on: savings, nutrition, health, psychometrics,...
- No impacts on anthropometric measures of young children (height, weight)
- Some evidence of positive spillovers (consumption, food security, business activity); larger for hosts, at most moderate for refugees

Cost-Benefit calculations

Costs per participant household (\$)

	T1	T2	Т3
	Asset, ind. coaching	Asset, group coaching	No asset, ind. coaching
<u>COSTS</u>			
(1) Direct cash transfers	609	609	307
(2) Consumption support	307	307	307
(3) Asset transfer	302	302	0
(4) Other direct costs during implementation	589	391	589
(5) Coaching and trainer salaries	395	198	395
(6) Sum of transfers (1) + other direct costs (5)	1,198	1,000	896
(7) Refinement year*	312	312	312
(8) All else: management, M&E etc.	1,309	1,129	1,319
(9) Total** [<i>(6)+(7)+(8)</i>]	2,819	2,441	2,527

Year-3 benefit per participant household (\$)

	T1	T2	Т3
	Asset, ind. coaching	Asset, group coaching	No asset, ind. coaching
BENEFITS			
Year 3 direct consumption benefit per year	426	457	303
Year 3 spillover attribution	78	84	56
Year 3 direct + spillover	504	541	359

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Total consumption benefit: add up impact over time

- Participants benefited most directly in year 1 (transfers)
- Benefits measured in year 3 during endline survey
- Due to increased asset base, savings and capabilities, benefits are expected to persist over time (how much?)
- Total consumption benefit: Net present value = sum of discounted consumption stream over time

Year 3 nominal impact 100 annual discounting 5%

	Scenario:	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>v</u>
	Year	5 years of 100% effects, 0% after	10 years of 100% effects, 0% after	100% persistence	90% persistence	80% persistence
Intervention	1	100	100	100	123	156
intervention	2	95	95	9 5	106	119
Endline	3	90	90	90	90	90
	4	86	86	86	77	69
	5	81	81	81	66	52
	6	0	77	77	56	40
	7	0	74	74	48	30
	8	0	70	70	41	23
	9	0	66	66	35	17
	10	0	63	63	30	13
	15	0	0	49	14	3
	20	0	0	38	6	1
	30	0	0	23	1	0
	50	0	0	8	0	0
	100	0	0	1	0	0

BENEFITS	T1		T2
Year 3 direct consumption benefit per year	T4326	457	303
Year 3 spillover attribution	78	84	56
Year 3 direct + spillover	504	541	359
Net Present Values (NPVs) for different impact			
time paths (5% yearly discounting)			
I 5 years of 100% impact, 0% after	2,281	2,447	1,625
II 10 years of 100% impact, 0% after	4,045	4,340	2,882
III 100% persistence	10,022	10,752	7,139
IV 90% persistence	4,292	4,605	3,057
V 80% persistence	3,282	3,521	2,338

<u>COST-BENEFIT</u>			
Return on Investment given NPVs above			
I 5 years of 100% impact, 0% after	-19	% 0%	-36%
II 10 years of 100% impact, 0% after	44	% 78%	14%
III 100% persistence	256	% 340%	183%
IV 90% persistence	52	% 89%	21%
V 80% persistence	16	% 44%	-7%

COST-BENEFIT UNDER DIFFERENT COST-OF-SCALE ASSUMPTIONS

Nor	-direct costs increase by 50% as program sc	ales up	—— T4		To	
	Return on Investment given NPVs above		T1		T2	
- 1	5 years of 100% impact, 0% after		T3 _{14%}	42%	-5%	
Ш	10 years of 100% impact, 0% after		101%	152%	68%	
III	100% persistence		399%	525%	317%	
IV	90% persistence		114%	168%	79%	
V	80% persistence		63%	105%	37%	
Non	a-direct costs increase by 25% as program sc	ales up				
	Return on Investment given NPVs above					
- 1	5 years of 100% impact, 0% after		42%	80%	25%	
II	10 years of 100% impact, 0% after		152%	219%	121%	
III	100% persistence		525%	691%	448%	
IV	90% persistence		168%	239%	135%	
V	80% persistence		105%	159%	79%	
Non-direct costs increase by 10% as program scales up						
	Return on Investment given NPVs above					
- 1	5 years of 100% impact, 0% after		68%	114%	53%	
II	10 years of 100% impact, 0% after		198%	279%	172%	
III	100% persistence		637%	840%	574%	
IV	90% persistence		216%	303%	189%	
V	80% persistence		141%	208%	121%	

Conclusion

- RCT in Uganda designed to test:
 - viability of a graduation approach in a refugee settlement setting
 - effectiveness a lower coaching-intensity approach, with coaching in groups
 - effectiveness of a less resource-intensive approach, without an asset transfer
- Strong results at the end of program, 18 months after end of transfers
 - No difference between group (T2) and individual coaching (T1) ⇒ group-coaching wins
 - No-asset group (T3) has smaller per-\$ effects => with-asset wins
- Cost-Benefit: ROI depends on longer-run path but positive over a range of assumed rates of dissipation of effects over time, under scale-up costs

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