Can Employment Programs Reduce Poverty and Social Instability?

Experimental evidence from a Ugandan aid program (Mid-term results)

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Average age: 25

Average education: 8th grade

Average cash earnings: $0.48/day PPP

Average employment: 10 hours/week

Female: 33%

The "Youth Opportunities Program" in Uganda

- NUSAF: Uganda's second largest development program

  1. **Raise incomes and employment**

  2. **Increase community cohesion and reduce conflict**

- YOP: groups of 15 to 30 young adults (ages 16 to 40) apply to government for cash transfers of $7-$10k ($377 per person on average)

- If your group is selected:

  – Central bank transfers lump sum to bank account in names of group leaders

  – Groups pay training fees for group members and distribute cash or in-kind assets

- Conditions:

  – Must propose to use for vocational training fees, tools, and start-up costs

  – After transfer, no further government monitoring, support, or accountability

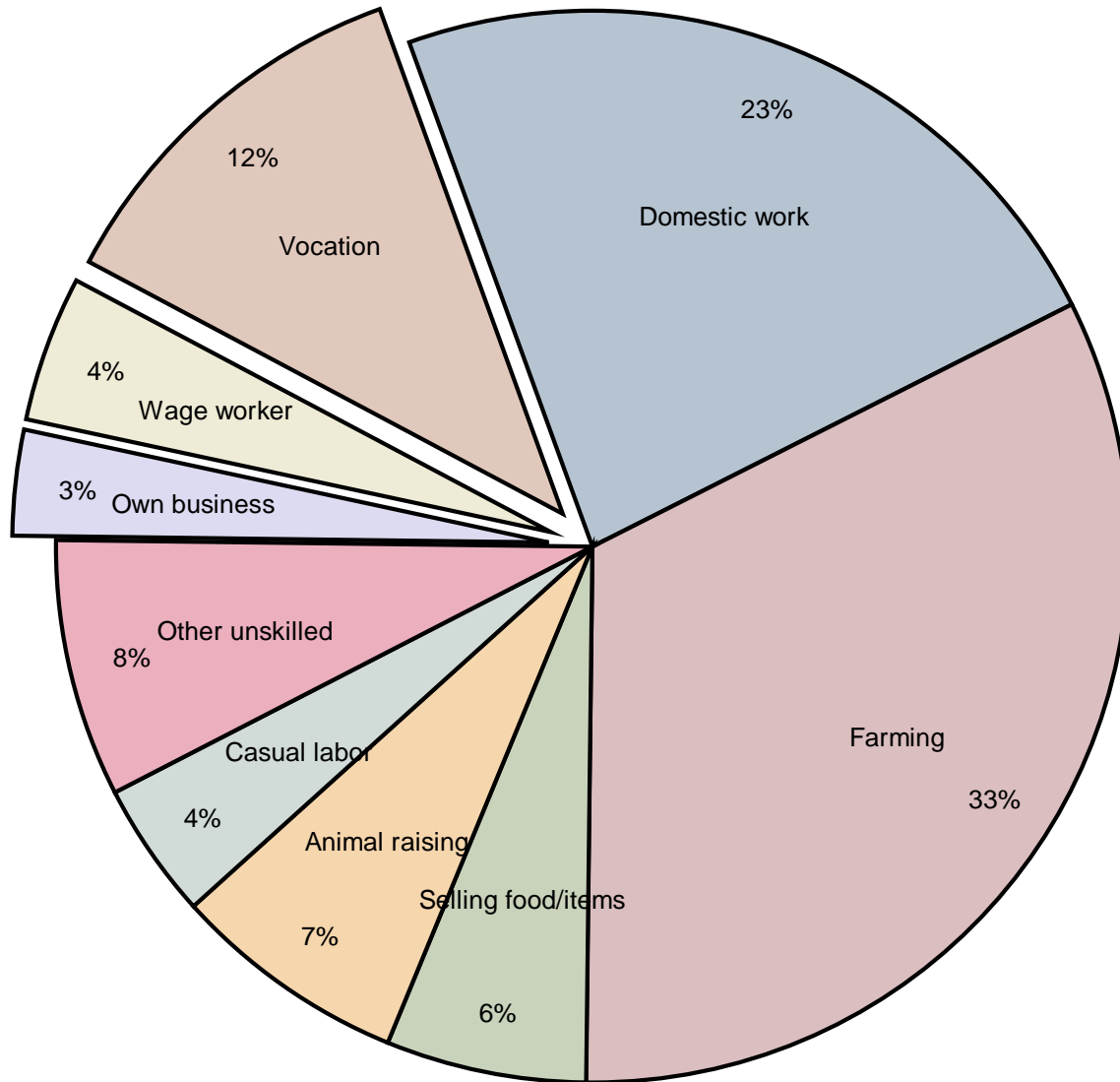# Aid strategy rooted in at least four assumptions

1. Money will not be "wasted"
   - Poor people have agency and can make informed economic decisions
   - i.e. will save/invest rather than eat right away

2. Poor have high potential returns to capital

3. Poor are constrained from reaching high returns
   - e.g. Missing markets (credit, insurance) and production non-convexities

4. Poverty reduction will have positive socio-political impacts
   - More empowered and engaged citizens (especially if participatory)
   - Less alienated
   - Less violent

Questions

1. Is (relatively) unconditional cash transfer invested on training and equipment?

2. Do the poor have high returns to capital?

3. Do employment programs promote social stability?
   - i.e. externalities

Work opportunities outside intervention
Distribution of hours worked in control group (at endline)

23% Domestic work

12% Vocation

4% Wage worker

3% Own business

8% Other unskilled

4% Casual labor

7% Animal raising

6% Selling food/items

33% Farming

Distribution of per capita grant size across groups
Heterogeneity driven mainly by differences in group size
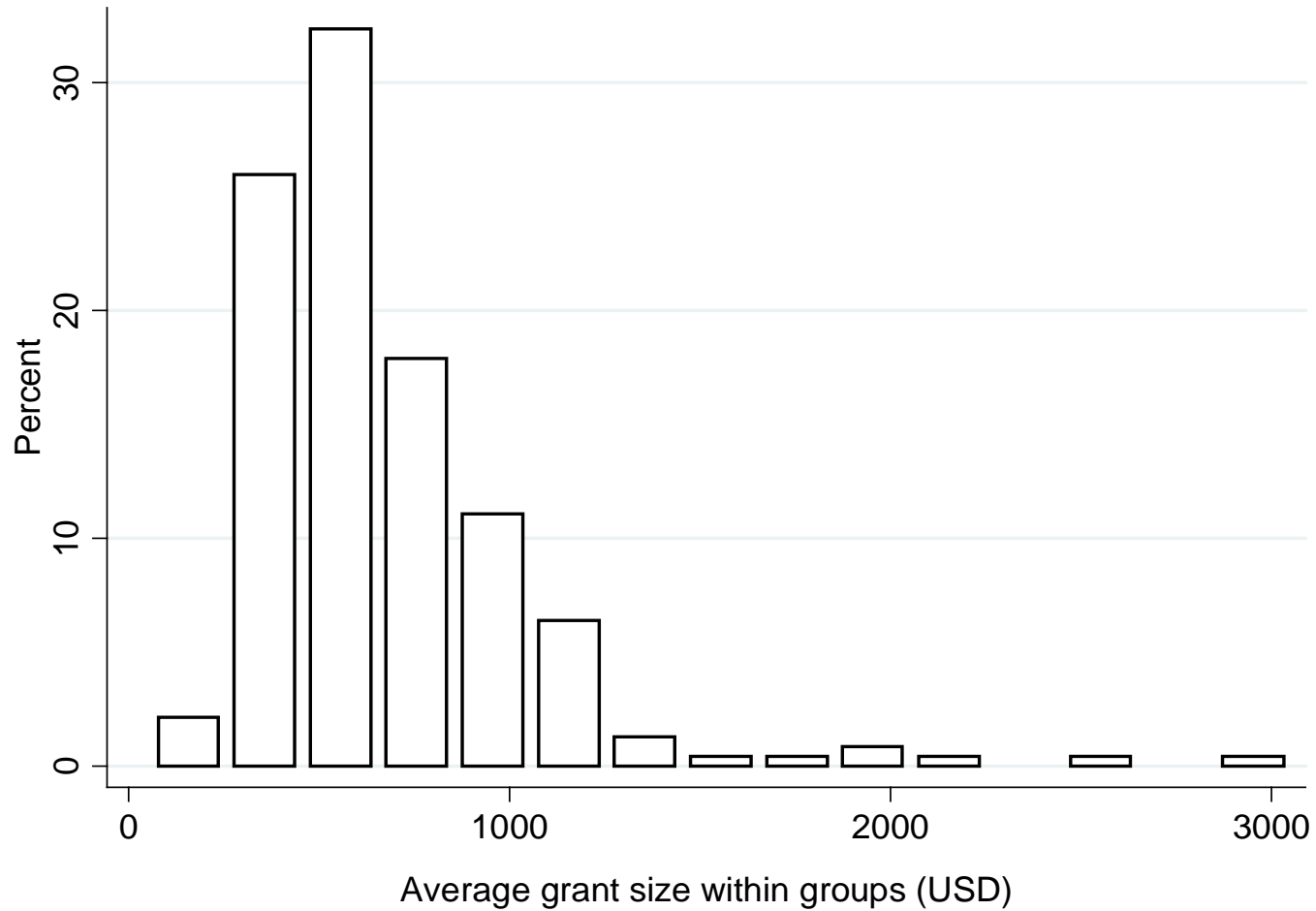
Timeline of events

2006   Tens of thousands apply, hundreds of groups funded

2007   Funds remain for 265 groups in 10 districts

               Government selects, screens and approves 535 groups

2/2008   Baseline survey with 5 people per group

               Randomization at group level

7-9/2008   Government transfers funds to treatment groups

10/2010   Mid-term survey commences roughly 2 years after transfer

               Effective attrition rate of 8%

5/2012   Next survey in the field

Data and attrition

- Baseline survey
  - Successfully tracked 524 of 535 groups
    - 6 discovered to be "ghosts" and discarded
  - Interviewed 5 random members per group
  - Balanced along most characteristics

- Mid-term follow-up survey
  - Sought all 5 members of each group, tracking migrants (4 attempts per person)
  - Attrition of 13%
    - 9% of control group not found
    - 15% of treatment group not found
  - Attrition relatively unsystematic

Investments in vocational skills and capital

# ATEs on investments in vocational skills and capital

	Vocational training		Tools and machines acquired since baseline		Existing stock of raw materials, tools, and machines	
	Enrolled	Hours	Level ('000s of UGX)	Log(UGX)	Level ('000s of UGX)	Log(UGX)
Treated	0.607	400.264	791.904	2.765	658.554	1.837
	[0.030]***	[25.162]***	[130.305]***	[0.258]***	[141.476]***	[0.244]***
Treated × Female	0.033	13.996	-409.800	-0.539	-408.071	-0.204
	[0.046]	[46.693]	[171.343]**	[0.450]	[191.037]**	[0.423]
Female	-0.014	27.474	-49.611	-0.172	-145.331	-0.179
	[0.031]	[25.389]	[85.262]	[0.257]	[103.627]	[0.265]
Control means						
Males	0.169	41.80	159.8	7.296	414.2	9.537
Females	0.157	63.34	96.71	7.013	234.9	9.078
Female Treatment Effect	0.640	414.3	382.1	2.226	250.5	1.633
p-value	0.000	0.000	0.001	0.000	0.046	0.000
ATE as % of control mean						
Males	359%	958%	496%		159%	
Females	407%	655%	395%		107%	

Robust standard errors in brackets, clustered by group and stratified by district.
Omitted regressors include an age quartic, district indicators, and baseline measures of employment and human and working capital.
*** p<0.01, ** p<0.05, * p<0.1

Types of training received
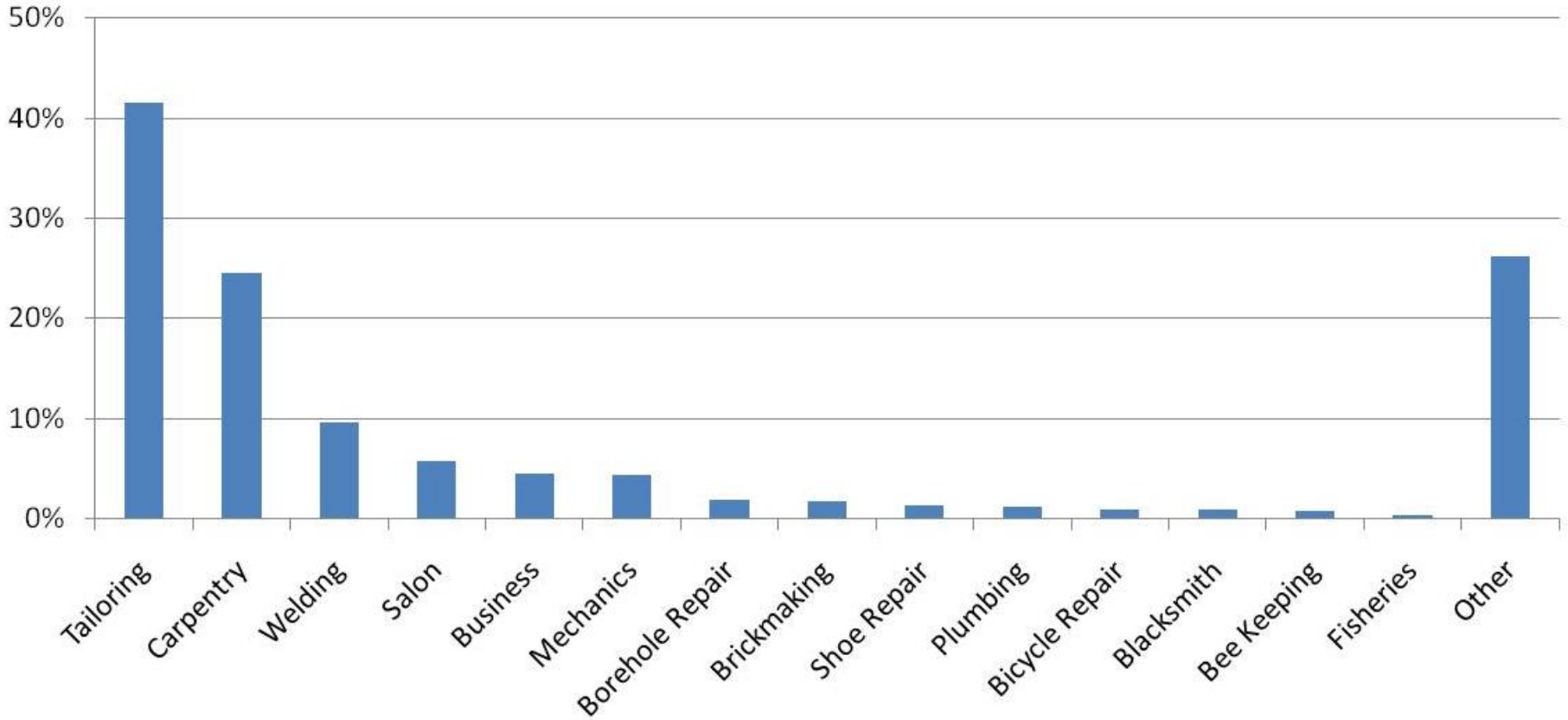
Implications

- Appears that two thirds of grant was invested in either training fees or tool/capital purchases

- Remaining third could have been consumed, or could have been invested in inventory, materials, etc. (No data on this)

Impacts on income, consumption and employment

ATEs on income, consumption and employment

	Profits in last 4 weeks		Poverty	Employment levels in past 4 weeks		
	Level (000s of UGX)	ln(Profits)	Index of wealth (z-score)	Hours on market activities	Hours on all econ activities	Engaged in skilled work
Treated	26.225 [7.326]***	0.813 [0.179]***	0.182 [0.067]***	20.473 [7.118]***	17.596 [7.287]**	0.314 [0.035]***
Treated × Female	-20.234 [11.317]*	0.164 [0.327]	-0.156 [0.106]	5.328 [11.293]	6.362 [12.330]	0.078 [0.057]
Female	-9.547 [7.379]	-0.571 [0.232]**	-0.006 [0.066]	-27.102 [7.736]***	-28.686 [8.207]***	-0.124 [0.036]***
Control means						
Males	50.01	8.653	-0.00328	80.69	132.9	0.404
Females	32.27	8.010	-0.0476	52.76	99.60	0.241
Female Treatment Effect	5.992	0.977	0.0261	25.80	23.96	0.392
p-value	0.447	0.000482	0.762	0.00435	0.0187	0
ATE as % of control mean						
Males	0.524			0.254	0.132	0.778
Females	0.186			0.489	0.241	1.628

Robust standard errors in brackets, clustered by group and stratified by district.

Omitted regressors include an age quartic, district indicators, and baseline measures of employment and human and wor

*** p<0.01, ** p<0.05, * p<0.1

Are these high rates of return?

	Real rate of return
Treatment effects	
Income ATE	35%
Income QTE	22%
Available rates	
Prime rate	5%
Commercial low	15%
Commercial high	25%
ROSCAs	200%
Moneylenders	200%

- ATE and QTE higher than real commercial lending rates

- ATE implies a "Payback" time of 3 years

- But returns lower than 40 to 60% rates seen among microenterprises in Sri Lanka, Mexico or Ghana
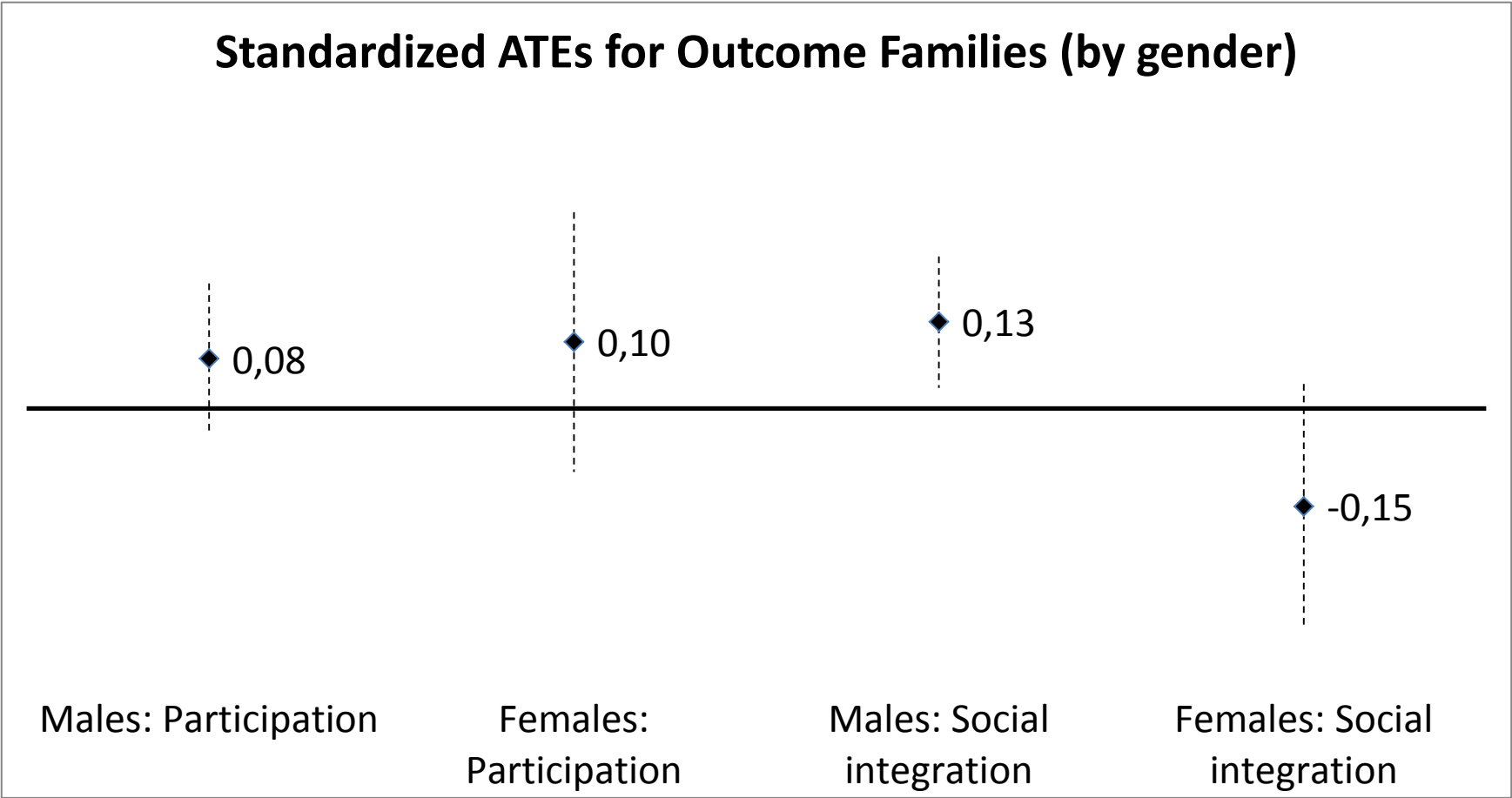
Impacts on aggression and alienation

Survey measurement

- Social alienation/integration
  - **Participation**: Community group participation/leadership, community leadership, attending and speaking out in community meetings
  - **Interpersonal**: social support, family relationship, neighbor relations, elder/leader relations
  - **Emotional depression and distress:** 9 self-reported symptoms

- Interpersonal aggression
  - Frequency & intensity of disputes
  - Self-reported hostile behaviors
  - Peer behavior

- Political behavior – prevented from asking in mid-round
  - Preferences
  - Participation
  - Violence

Impacts on social cohesion and alienation

Standardized ATEs for Outcome Families (by gender)

0,08

0,10

0,13

-0,15

Males: Participation
Females: Participation
Males: Social integration
Females: Social integration

Evidence consistent with idea that economic performance changes social role and esteem

- Treated give 25%-50% more transfers within and outside the household

- Robust positive correlation between social integration and participation and:
   - Economic performance (real and perceived rankings)
    - Transfers

Impacts on mental health and aggression

Standardized ATEs on Outcome families (by gender)

- Males: Distress symptoms: -0,16
- Females: Distress symptoms: 0,12
- Males: Aggression and hostile behavior: -0,20
- Females: Aggression and hostile behavior: 0,25

In absolute terms the changes in aggression are small
Distribution of index of aggressive behaviors
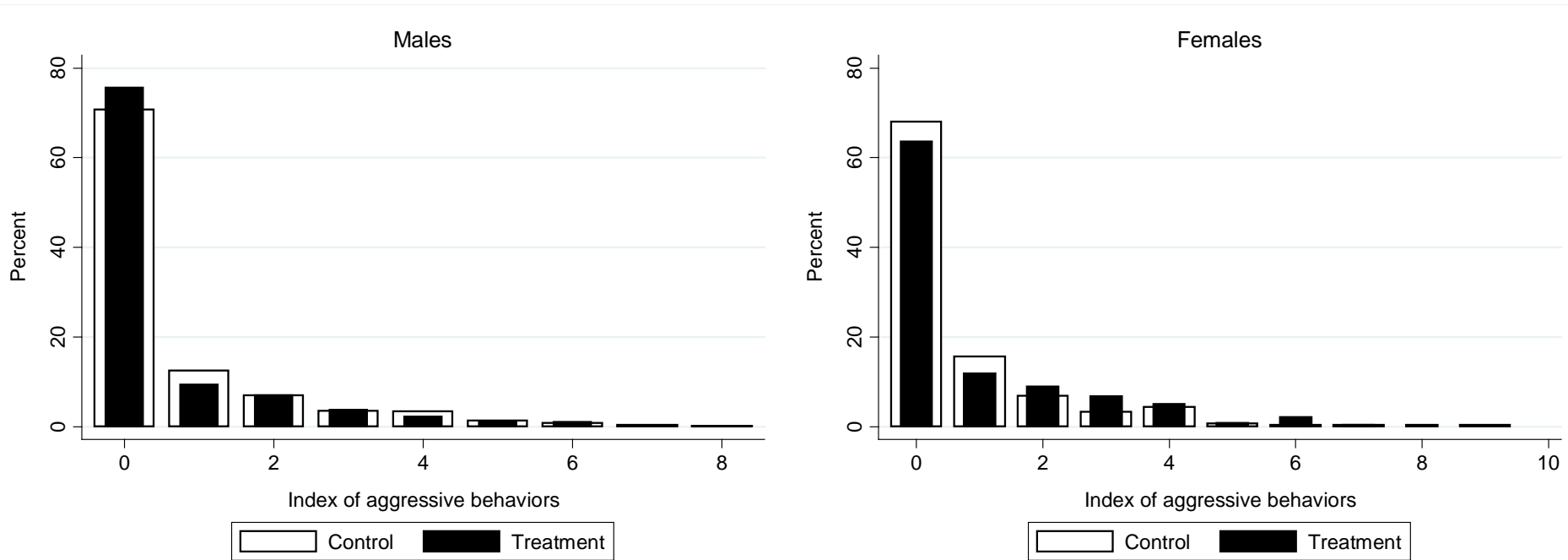
- But aggression levels changing at all points in the distribution
    - Especially those who at baseline report the highest number of disputes

- Proportionally the impact is huge

Next steps

- New round of data collection in 2012
    - Better data on de facto group size
    - Longitudinal performance data
    - More extensive social, political and violent participation outcomes
    - More extensive data on time preference and cognitive/non-cognitive skills