Economic and Productive Impacts of Unconditional Cash Transfers in Africa

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APPAM International Conference
Brussels, 14 July 2017
Objective and outline of presentation
## Program description

<table>
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<th>Country</th>
<th>Program</th>
<th>Targeting</th>
<th>Transfer</th>
<th>Evaluation design</th>
<th>Survey years</th>
<th>Sample size</th>
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</thead>
</table>
Profile of CT beneficiaries

• Most CT beneficiaries live in rural areas, work for themselves and depend on agriculture
  • 50% - 75% own livestock
  • 80% - 88% produce crops

• Most grow local staples, using traditional technology and few modern inputs
  • Most production consumed on farm

• Most have low levels of productive assets
  • .5 - 2 hectares of agricultural land, few animals, basic agricultural tools, few years of education

• Engaged on farm, non-farm business, casual wage labor

• Large share of children work on the family farm
  • 50% in Zambia, 30% in Lesotho
Household productive decisions

• **Smallholder farmers face barriers in multiple markets**
  • Market failures in credit, insurance, etc. constrain economic decisions on investment, production, labor allocation, risk taking
    • Short time horizon—imperative of meeting immediate needs
    • Lack of liquidity, difficult to manage risk

• **Decisions about production and consumption are linked**
  • Labor needs (adults and children), including domestic chores
  • Investment in schooling and health
  • Food consumption, dietary diversity and nutrition
  • Intra household decision making
    • Dynamic between men and women, old and young

• **Obtaining liquidity and managing risk take precedence over maximizing returns of investments**
Pathways to productive impacts

- **Household needs, preferences, risk aversion**
  - Poverty, food insecurity
  - Meeting subsistence needs, consumption smoothening
  - Hedging against risk

- **Household composition**
  - Able-bodied adults, number of dependents

- **Targeting criteria**
  - Households with young children, OVCs, extremely vulnerable members

- **Transfer size**
  - % of average p.c. household income/consumption

- **Frequency of transfers**
  - Regular and predictable, lumpy payments

**Beneficiary household variables**

**Program design variables**
Evaluation design

Use of mixed-methods approach:

- **Micro-econometric analysis**: ex-post evaluation of programs, comparing a sample of beneficiary households (treatment group) to a sample of similar households eligible to but not receiving the program (comparison group).

- **Qualitative analysis**: key informant interviews, focus groups, in-depth case studies to explore impacts on household economic decision-making and the local economy.

- **General equilibrium models**: Simulation of spillovers and income multipliers of the CTs on the local economies.

![Diagram showing treated and control villages with eligible and ineligible statuses, indicating direct and indirect impacts of the program.](image-url)
RESULTS
Crop production

• Increase in crop production and sales
  • Lesotho: significant increase in maize, sorghum and vegetable production, mostly for own consumption due to high levels of food insecurity
  • Zambia: rise in agricultural output/value, crop sales and home consumption of more nutritious staples

• Move away from traditional to more nutritious, higher-value crops
  • Zimbabwe: Switch from finger millet to groundnuts and pearl millet
  • Ethiopia: Barley fell but overall value of production rose, driven by higher sorghum yields
  • Malawi: Increase in groundnut production, share of hh’s cultivating pigeon pea fell

• Heterogeneity of impacts
Agricultural inputs and assets

- Significant impacts on expenditures on and use of agricultural inputs (seeds, fertilizers and pesticides)
  - Increased spending in crop inputs (seeds) and large increase in operated land (one third of baseline mean) in Zambia
  - Similar increases in the share of households purchasing seeds and chemical fertilizers in Lesotho
  - Increase in seed expenditures (Ghana) and use of organic fertilizers (Malawi and Ethiopia)

- Increased investment in assets, though limited to ownership or use of small agricultural tools
  - Dramatic increase in Zambia, both in share of households owning agricultural assets and number of assets owned
  - More selective impacts in other countries (Ethiopia, Malawi and Zimbabwe)
Livestock

• **Positive impact on livestock accumulation**
  
  • Large effects on share of households investing in animal species and on the number of livestock in Malawi and Zambia (esp. chicken)
  
  • More limited effects in Lesotho (pigs) and Kenya and Zimbabwe (small ruminants)
  
  • No impact on livestock ownership in Ghana and Ethiopia

• **Livestock ownership often seen as risk-coping strategy, second-best for precautionary savings**
  
  • An increase in livestock rearing could be a means to overcome barriers to insurance and credit markets, rather than an increase in productive investments
Labor use

Reallocation of labor within and outside the household

- Reduction in casual agricultural wage labor...,
  - In Malawi, 17 fewer days of *ganyu* by adult males in last 12 months
- ... often offset by an increase in on-farm work
  - In Zambia, decline in ag wage labor participation was compensated by increase of work on and off-farm (20 days and 1.6 days weekly, resp.)
  - Ghana: almost 8 more days of work by adult males in own farms
- Reduced participation of children in family farming
- No signs of disincentives to work, reductions in total labor supply or dependency
  - More choice when to seek ag wage work during the lean season
Reduction in agricultural wage labor

<table>
<thead>
<tr>
<th></th>
<th>Zambia CGP</th>
<th>Malawi SCTP</th>
<th>Zimbabwe HSCT</th>
<th>Lesotho CGP</th>
<th>Kenya CT-OVC</th>
<th>Ethiopia SCTPP</th>
<th>Ghana LEAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural / casual wage labor</td>
<td>--</td>
<td>--</td>
<td>NS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>NS</td>
</tr>
<tr>
<td>Family farm</td>
<td>++</td>
<td>NS (1)</td>
<td>--</td>
<td>NS (1)</td>
<td>NS</td>
<td>NS</td>
<td>+</td>
</tr>
<tr>
<td>Non-farm business</td>
<td>++</td>
<td>NS (2)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Non agricultural wage labor</td>
<td>++</td>
<td>+/NS (3)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

(1) varies by age and gender
(2) varies by type of business
(3) NS at midline, positive at endline

- Shift from casual wage labor to family business, consistently reported in qualitative fieldwork
- No general work disincentive or reduction of work effort
**Reduction of children’s work**

<table>
<thead>
<tr>
<th></th>
<th>Wage / casual labor</th>
<th>Family farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia SCTPP</td>
<td>NS (1)</td>
<td>-- (3)</td>
</tr>
<tr>
<td>Ghana LEAP</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Kenya CT-OVC</td>
<td>NS</td>
<td>--</td>
</tr>
<tr>
<td>Lesotho CGP</td>
<td>NS</td>
<td>--</td>
</tr>
<tr>
<td>Malawi SCTP</td>
<td>- (2)</td>
<td>NS</td>
</tr>
<tr>
<td>Zambia CGP</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Zimbabwe HSCT</td>
<td>NS</td>
<td>NS/- (4)</td>
</tr>
</tbody>
</table>

(1) significant reduction for boys  
(2) stronger for older boys in ganyu  
(2) decrease for younger children  
(3) stronger for girls
## Impacts on productive activities

<table>
<thead>
<tr>
<th></th>
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<th>Ghana LEAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural inputs</td>
<td>++</td>
<td>+</td>
<td>NS</td>
<td>+</td>
<td>-</td>
<td>-/+</td>
<td>+</td>
</tr>
<tr>
<td>Agricultural tools</td>
<td>++</td>
<td>++</td>
<td>+ (5)</td>
<td>NS</td>
<td>NS</td>
<td>+</td>
<td>NS</td>
</tr>
<tr>
<td>Agricultural production</td>
<td>++ (1)</td>
<td>++ (2)</td>
<td>++ (6)</td>
<td>+</td>
<td>NS</td>
<td>++</td>
<td>NS</td>
</tr>
<tr>
<td>Agricultural sales</td>
<td>++</td>
<td>+</td>
<td>NS</td>
<td>NS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Home consumption of agricultural production</td>
<td>NS</td>
<td>++ (3)</td>
<td>NS</td>
<td>+</td>
<td></td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Livestock ownership</td>
<td>All types</td>
<td>All types</td>
<td>Most types</td>
<td>Pigs</td>
<td>Small ruminants</td>
<td>-</td>
<td>NS</td>
</tr>
<tr>
<td>Non-farm enterprise</td>
<td>++</td>
<td>NS (4)</td>
<td>++</td>
<td>NS</td>
<td>+ FHH/ - MHH</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

(1) value of ag production  
(2) NS at midline, strong at endline  
(3) animal products  
(4) varies by type of business  
(5) smaller households  
(6) switching crops

**Stronger impact**  
**Mixed impact**  
**Less impact**
Risk management

• Households diversified income sources, increasing their engagement in non-farm businesses...
  • Significant increase in share of households operating non-farm enterprises in Zambia and Zimbabwe

• ... Or switching to less physically demanding non-farm activities
  • Reduction in charcoal/firewood businesses and rise in petty trading in Malawi

• CTs contributed to debt repayments, savings and a reduction of loans and distress sales of assets in times of hardship
  • Positive impacts in Ghana (savings, borrowing and debt repayment), Malawi (distress sales of assets) and Zambia (borrowing and debt repayment)

• CT beneficiaries were less likely to change eating patterns or take their children out of school and send them to work or live elsewhere

• Impacts often stronger among more vulnerable households
Engagement in reciprocity networks

• In general, CTs reinforced social networks by increasing informal transfers within communities and increasing participation of the poorest households in these networks
  • Statistically significant impacts on receipt/provision of informal transfers found in Ghana, Lesotho and Zimbabwe, especially giving gifts and food-sharing arrangements

• No evidence of CTs crowding out private remittances

• Qualitative work confirmed that CTs increased self-esteem, trust and social capital, and allowed beneficiaries to re-join existing networks or strengthen informal insurance and risk-sharing arrangements.
## Risk management and social networks

### Reduction in negative risk coping strategies
- In all countries, re-engagement with social networks of reciprocity—informal safety net
- Allow households to participate, to “mingle” again

### Increase in savings, paying off debt and credit worthiness—risk aversion

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Negative risk coping</td>
<td>--</td>
<td>--</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay off debt</td>
<td>++</td>
<td>++</td>
<td>NS</td>
<td>NS</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowing</td>
<td>--</td>
<td>-</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>+/-</td>
<td>--</td>
</tr>
<tr>
<td>Purchase on credit</td>
<td>NS</td>
<td>--</td>
<td>+</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Savings</td>
<td>++</td>
<td>--</td>
<td>NS</td>
<td>++</td>
<td>NS</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Give informal transfers</td>
<td>NS</td>
<td>NS</td>
<td>++</td>
<td>NS</td>
<td>++</td>
<td>NS</td>
<td>++</td>
</tr>
<tr>
<td>Receive informal transfers</td>
<td>NS</td>
<td>NS</td>
<td>++</td>
<td>NS</td>
<td>++</td>
<td>NS</td>
<td>++</td>
</tr>
<tr>
<td>Remittances</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>NS</td>
</tr>
</tbody>
</table>

### Strengthened social networks
- In all countries, re-engagement with social networks of reciprocity—informal safety net
- Allow households to participate, to “mingle” again
DRIVERS OF IMPACTS
Age distribution of program beneficiaries

Kenya
Age distribution

Malawi
Age distribution

Zimbabwe
Age distribution

Zambia
Age distribution

Kernel: epanechnikov
Bandwidth:
- Kenya: 1.8142
- Malawi: 2.9809
- Zimbabwe: 3.1377
- Zambia: 1.9700

Age groups:
- Kenya: Older children and adolescents, Elderly
- Malawi: Older children and adolescents, Elderly
- Zimbabwe: Pre-schoolers, Prime-age adults
- Zambia: Pre-schoolers, Prime-age adults
Size of transfer

- Selective impact
- Widespread impact
Predictability of payment

Regular and predictable transfers facilitate planning, consumption smoothing and investment.
Take-home messages

- SCTs targeted to poorest can have productive impacts
  - Relaxing some of constraints brought on by market failure (lack of access to credit, insurance)
  - Helping households manage risk
  - Increasing purchasing power and providing liquidity

- SCTs can reduce burden on social networks and informal insurance mechanisms

- Long term effects of improved human capital
  - Nutritional and health status; educational attainment
  - Labor productivity and employability

- Infusion of cash can lead to multiplier effects in local village economy
Take-home messages

• **Program design and implementation matters!**
  • Targeting criteria: labor constrained ultra poor vs households with labor capacity
  • Transfer size (between 20-30% of mean hh consumption)
  • Regularity and predictability of payments
  • Messaging

• **Spillover and income multipliers higher when supply responds to rise in demand triggered by cash injection**
  • Importance of complementary interventions on agriculture side

• **No evidence of work disincentives or dependency**
Thank you!