Role of Cash Transfer Programmes in Building Resilience: Cross-country Evidence from Sub-Saharan Africa

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Outline

1. Background of CT in SSA
2. Why do we expect productive impact?
3. What does the evidence say?
   - Direct impacts
   - Indirect impacts (spill-over)
4. Final remark
Expansion of cash transfer programs in Sub-Saharan Africa

- Approximately half of the countries of SSA have some kind of government-run CT program
  - And others have multilateral/NGO-run CT programs
- Some programs are national
  - Others scaling up
  - Some pilots beginning this year
- Beneficiaries predominately rural, most engaged in agriculture
What’s particular about cash transfers in SSA--context

- HIV/AIDS
- Economic and social vulnerability
- Widespread poverty
- Continued reliance on subsistence agriculture and informal economy
  - Exit path from poverty is not necessarily through the labor market
  - Less developed markets and risk, risk, risk
- With exception of Southern Africa, less fiscal space---donors play a strong role
- Still missing consensus among national policy makers
- Weak institutional capacity to implement programs
- Weak supply of services (health and education)
Wide range of designs

- Universal programs
  - Old age pensions, child grants

- Targeted programs
  - Focus on ultra poor, labor constrained; OVC and other specific vulnerabilities

- Cash for work for able bodied

- Prominent role of community in targeting

- Unconditional (for the most part)
  - “Soft” conditions and strong messages
A few cash transfer programs are explicitly linked to productive activities

- Public works focused on agricultural rehabilitation (Somalia), or with complementary agricultural packages (Ethiopia PSNP) or small business loans (Rwanda VUP)
- CCT, with complementary vocational training or small business grants (Atención a Crisis)
- With exception of these programs, perception that cash transfer programs do not have economic impacts
Yet unconditional cash transfer programs targeted to poorest of the poor can have productive impacts.

5 (+1) ways in which cash transfer programs have productive/economic impacts and lead to improved resilience.
1. Improve human capital

- Nutritional status
- Health status
- Educational attainment

Underlying rationale for CCTs in LAC
2. Facilitate change in productive activities

By relaxing credit, savings and/or liquidity constraints—and/or constructing community assets

► Investment in productive activities
  – Allocation of labor, inputs
► Accumulation of productive assets
  – Farm implements, land, livestock, vehicle, inventory
► Change in productive strategies
  – New crops, techniques
  – New line of products or services
  – New activities (off farm wage labor, migration?)
3. Better ability to deal with risk and shocks

By providing insurance via regular and predictable CTs

- Avoid detrimental risk coping strategies
  - Distress sales of productive assets, children school drop-out, risky income-generation activities

- Avoid risk averse production strategies
  - “Safety first” or “eat first”

- Increase risk taking into more profitable crops and/or activities
  - Specialization or diversification
    - Higher value crops or ..... migration
4. Relieve pressure on informal insurance mechanisms

By regular and predictable CTs to the poorest and most vulnerable

- Reduce burden on social networks
  - Local networks of reciprocal relationships
    - In SSA, often weakened and over burdened in context of HIV/AIDS

- Rejuvenate social networks

- Allow beneficiaries to participate in social networks

- Allow non beneficiaries to redirect their resources
5. Strengthen the local economy

- Significant injection of cash into local economy
- Multiplier effects on local goods and labor markets via economic linkages
5+1. Facilitate climate change adaptation

All five pathways related to increasing resilience and reducing vulnerability at the level of the household, community and local economy

1. Human capital formation
2. Change/adaptation in productive activities
3. Better ability to deal with risk
4. Reduced pressure on informal insurance networks
5. Strengthened resilience of the local economy

climate change adaptation
### Evaluation of SCT in SSA - Design

<table>
<thead>
<tr>
<th>Country</th>
<th>Design</th>
<th>Level of Randomization or Matching</th>
<th>N</th>
<th>Ineligibles sampled?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>Social experiment with PSM and IPW</td>
<td>Location</td>
<td>2234</td>
<td>No</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Social experiment</td>
<td>Electoral District</td>
<td>2150</td>
<td>Yes</td>
</tr>
<tr>
<td>Malawi</td>
<td>Social experiment</td>
<td>Village Cluster</td>
<td>3200</td>
<td>Yes</td>
</tr>
<tr>
<td>Zambia</td>
<td>Social experiment</td>
<td>Community Welfare Assistance Committee</td>
<td>2519</td>
<td>No</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Non-experimental (PSM and IPW)</td>
<td>Household level within a village</td>
<td>3351</td>
<td>Yes</td>
</tr>
<tr>
<td>Ghana</td>
<td>Propensity Score Matching (IPW)</td>
<td>Household and Region</td>
<td>1504</td>
<td>No</td>
</tr>
</tbody>
</table>

All studies are longitudinal with a baseline and at least one post-intervention follow-up.
The UNICEF-FAO-UCD Mixed Method Approach

• Real-world evaluation of government-run cash transfer programs in seven countries (not rarified experiments)
  • Malawi, Ghana, Ethiopia, Lesotho, Zambia, Zimbabwe and Kenya

• Evidence-based policy support
  – Quantitative (emphasis on experimental & econometric methods, randomized “treatments”)
  – Qualitative (perceptions on household economy and decision making, social networks, local community dynamics & operations)
  – Local Economy-wide Impact Evaluation (LEWIE)
    • Integrates general-equilibrium and econometric methods

• Data:
  – Baseline surveys
    • Comparison of treatment & control groups
    • Simulations of SCT impacts
  – Qualitative methods
  – Follow-on surveys
    • Estimation of actual SCT impacts
    • Validation, updating of simulation models
What are the key findings?
Livelihoods matter for social cash transfers beneficiaries

- Most beneficiaries in Sub Saharan Africa are rural, engaged in agriculture and **work for themselves**
  - >80% produce crops; >50% have livestock
- Most grow local staples, traditional technology and low levels of modern inputs
  - Most production consumed on farm
- Most have low levels of productive assets
  - few hectares of land, a few animals, basic tools, few years of education
- Engaged on farm, non farm business, casual wage labour (ganyu)
- Often labour-constrained
  - Elderly, single headed household
- Large share of children work on the family farm
  - 50% in Zambia, 30% in Lesotho, 42% in Kenya
Households invest in livelihood activities—though impact varies by country

<table>
<thead>
<tr>
<th></th>
<th>Zambia</th>
<th>Malawi</th>
<th>Kenya</th>
<th>Lesotho</th>
<th>Ghana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural inputs</td>
<td>+++</td>
<td>-</td>
<td>++</td>
<td>+++ (1)</td>
<td>NS</td>
</tr>
<tr>
<td>Agricultural tools</td>
<td>+++</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Agricultural production</td>
<td>+++(2)</td>
<td>NS</td>
<td>++(3)</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Sales</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>-</td>
</tr>
<tr>
<td>Home consumption of agricultural production</td>
<td>NS</td>
<td>+++</td>
<td>+++ (4)</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Livestock ownership</td>
<td>All types</td>
<td>All types</td>
<td>Small</td>
<td>Plgs</td>
<td>NS</td>
</tr>
<tr>
<td>Non farm enterprise</td>
<td>+++</td>
<td>NS</td>
<td>+FHH</td>
<td>-</td>
<td>NS</td>
</tr>
</tbody>
</table>

1) Reduction hired labor
2) Overall value of production; reduction in cassava
3) Maize, sorghum and garden plot vegetables
4) Animal products

Many stories told in the qualitative fieldwork

Stronger impact
Mixed impact
Less impact
### Shift from casual wage labor to on farm and family productive activities

<table>
<thead>
<tr>
<th>adults</th>
<th>Zambia</th>
<th>Kenya</th>
<th>Malawi</th>
<th>Lesotho</th>
<th>Ghana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural/casual wage labor</td>
<td>- - -</td>
<td>- - - (1,2)</td>
<td>- - -</td>
<td>- - (2)</td>
<td>NS</td>
</tr>
<tr>
<td>Family farm</td>
<td>+ (2)</td>
<td>++ (1)</td>
<td>+++</td>
<td>++ (2)</td>
<td>+++</td>
</tr>
<tr>
<td>Non farm business</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
<td>+</td>
<td>NS</td>
</tr>
<tr>
<td>Non agricultural wage labor</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>children</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage labor</td>
<td>NS</td>
<td>NS</td>
<td>- - -</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Family farm</td>
<td>NS</td>
<td>- - - (3)</td>
<td>+++ (4)</td>
<td>- -</td>
<td>NS</td>
</tr>
</tbody>
</table>

1) Positive farther away
2) Varies by age, gender
3) Particularly older boys
4) Increase chores, reduction leisure

No clear picture on child labor (but positive impacts on schooling)

Shift from casual wage labour to family business—consistently reported in qualitative fieldwork
Zambia—continuous treatment effect model: how impact changes with level of cash transfer

As transfer level increases, greater reduction in wage labor and greater increase in own farm labor.

As transfer level increases, greater increase in hired labor.
### Improved ability to manage risk

<table>
<thead>
<tr>
<th></th>
<th>Zambia</th>
<th>Kenya</th>
<th>Malawi</th>
<th>Ghana</th>
<th>Lesotho</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Negative risk coping</strong></td>
<td></td>
<td>+++</td>
<td>- - -</td>
<td></td>
<td>- - -</td>
</tr>
<tr>
<td><strong>Pay off debt</strong></td>
<td>+++</td>
<td></td>
<td>+++</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td><strong>Borrowing</strong></td>
<td>- - -</td>
<td>NS</td>
<td>- - -</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Purchase on credit</strong></td>
<td>NS</td>
<td></td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Savings</strong></td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td><strong>Give informal transfers</strong></td>
<td>NS</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td><strong>Receive informal transfers</strong></td>
<td></td>
<td>NS</td>
<td>+++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td><strong>Remittances</strong></td>
<td>- - -</td>
<td>NS</td>
<td>- - -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td><strong>Trust (towards leaders)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) Mixes remittances and informal transfers

- Reduction in negative risk coping strategies
- Increase in savings, paying off debt and credit worthiness—risk aversion
- Some instances of crowding out

**Strengthened social networks**
- In all countries, re-engagement with social networks of reciprocity—informal safety net
- Allow households to participate, to “mingle” again
**Beneficiaries are happier....and people with hope are more likely to invest in the future**

<table>
<thead>
<tr>
<th>Question</th>
<th>Zambia</th>
<th>Kenya</th>
<th>Malawi</th>
<th>Ghana</th>
<th>Lesotho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you happy with your life?</td>
<td></td>
<td></td>
<td>+++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you very satisfied with your life?</td>
<td></td>
<td></td>
<td>+++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life score</td>
<td></td>
<td>+++ (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you better off than 12 months ago?</td>
<td>+++ (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you feel you life will be better off two years from now?</td>
<td>+++ (2,3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) Zambia CGP  
2) Zambia Monze  
3) Cross section

Feelings of renewed hope, dignity consistently reported in qualitative fieldwork
### Improved dietary diversity

<table>
<thead>
<tr>
<th></th>
<th>Zambia</th>
<th>Kenya (1)</th>
<th>Malawi</th>
<th>Ghana</th>
<th>Lesotho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>- -</td>
<td>NS</td>
</tr>
<tr>
<td>Dairy</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Cereals</td>
<td>+++</td>
<td>NS</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Fruits/vegetables</td>
<td>NS</td>
<td>NS</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Sugars</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Fats, oil, other</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>NS</td>
</tr>
<tr>
<td>Dietary diversity</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

1) 2007-2009

- **Big impact, partially through increased agricultural production**
- **Little impact**
**Zambia - can SCTP mitigate against negative effect of climate risk?**

<table>
<thead>
<tr>
<th></th>
<th>Total Expenditure</th>
<th>Exp. Food Items</th>
<th>Non Food Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH received SCTP</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Ln Total Average Rainfall (1983 t)</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>(+) Deviation of Rain (mm)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>(-) Deviation of Rain (mm)</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>(-)Dev * SCTP</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
</tbody>
</table>

Cash transfer mitigate the negative effect of climate shock.
Broad range of impacts (though variation across countries)

• Improvement in different aspects of child welfare
  – Increased school enrolment
  – Reduction in morbidity (diarrhea/illness)
  – Increased access to shoes, clothing, birth registration, vaccination

• Safe-transition of adolescents into adulthood
  – Reduction in transactional sex, sexual debut, pregnancy
### Why?

What explains differences in household-level impact across countries?

<table>
<thead>
<tr>
<th>Country</th>
<th>Crop</th>
<th>Livestock</th>
<th>NFE</th>
<th>Productive labor</th>
<th>Social Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Malawi</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>small</td>
</tr>
<tr>
<td>Kenya</td>
<td>no</td>
<td>small</td>
<td>yes</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Lesotho</td>
<td>yes</td>
<td>small</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Ghana</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>small</td>
<td>yes</td>
</tr>
</tbody>
</table>
Predictability of payment

Regular and predictable transfers facilitate planning, consumption smoothing and investment.
Bigger transfer means more impact

Widespread impact
Selective impact

% or per capita income of poor

Ghana LEAP (old)
Kenya CT-OVC (big)
Burkina CSG
Kenya CT-OVC (base)
RSA CGP
Lesotho (base)
Ghana LEAP (current)
Kenya CT-OVC (small)
Zim (HSCT)
Zambia CGP
Zambia MCP
Malawi SCT
Demographic profile of beneficiaries

**Ghana LEAP**
- Over 90
- 85 to 89
- 80 to 84
- 75 to 79
- 70 to 74
- 65 to 69
- 60 to 64
- 55 to 59
- 50 to 54
- 45 to 49
- 40 to 44
- 35 to 39
- 30 to 34
- 25 to 29
- 20 to 24
- 15 to 19
- 10 to 14
- 5 to 9
- Under 5

**Zambia CGP**
- Over 90
- 85 to 89
- 80 to 84
- 75 to 79
- 70 to 74
- 65 to 69
- 60 to 64
- 55 to 59
- 50 to 54
- 45 to 49
- 40 to 44
- 35 to 39
- 30 to 34
- 25 to 29
- 20 to 24
- 15 to 19
- 10 to 14
- 5 to 9
- Under 5

**Population**
- Males
- Females

**More labour-constrained**

**More able-bodied**
Effectiveness of local committees

- Play important role in suggesting options for beneficiaries, facilitating programme operations

Programme messaging matters

- Messaging in unconditional programmes, and conditions in CCTs, affects how households spend the transfer
- Lesotho: CGP transfer combined with Food Emergency Grant
  - Instructed to spend on children (shoes and uniforms)
  - Instructed to spend on agricultural inputs
  - And they did!!
Are there impacts beyond the beneficiary households? Are there spill-overs?
Impacts beyond the beneficiary household: local economy income multipliers

- Transfer raises purchasing power of beneficiary households
- As cash spent, impacts spread to others inside and outside treated villages, setting in motion income multipliers
- Purchases outside village shift income effects to non-treated villages, potentially unleashing income multipliers there.
- As program scaled up, transfers has direct and indirect (general equilibrium) effects throughout region.
- Three possible extremes:
  - Local supply expands to meet all this demand
    - Big local multiplier
  - Everything comes from outside the local economy
    - No local multiplier at all: 1:1
  - Local supply unable to expand to meet demand, and no imports
    - Inflation
- Have to follow the money
  - Surveys and LEWIE model designed to do this
Treatment

Control
Transfer

Rest of Lesotho

Rest of World

Treatment

Control

Food and Agriculture Organization of the United Nations
Transfer

Treatment

Rest of Lesotho

Rest of World

Control

Food and Agriculture Organization of the United Nations
Ghana: LEAP households spend about 80% of income inside the local economy.
These production activities buy inputs from each other, pay wages, and make profits. Payments to factors start a new round of income increases.

Data from Ghana
Simulated income multiplier of the Ghana LEAP programme

<table>
<thead>
<tr>
<th>Income multiplier</th>
<th>Base model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal (CI)</td>
<td>2.50</td>
</tr>
<tr>
<td>(2.38 – 2.65)</td>
<td></td>
</tr>
<tr>
<td>Real (CI)</td>
<td>1.50</td>
</tr>
<tr>
<td>(1.40 – 1.59)</td>
<td></td>
</tr>
</tbody>
</table>

**MAX**

Every 1 Cedi transferred can generate 2.50 Cedi of income

**MIN**

Production constraints can limit local supply response, which may lead to higher prices and a lower multiplier

When constraints are binding, every 1 Cedi transferred can generate 1.50 Cedi of income
Nearly all the spillover goes to non-beneficiary households

**Nominal**

- Total household: Spillover (2.5) Transfer (0)
- Beneficiary households: Spillover (1) Transfer (1)
- Non-beneficiary households: Spillover (1.5) Transfer (1)

**Real**

- Total household: Spillover (1.5) Transfer (1)
- Beneficiary households: Spillover (0.5) Transfer (1)
- Non-beneficiary households: Spillover (0) Transfer (1)
Cash transfers lead to income multipliers across the region

Every 1 Birr transferred can generate 2.52 Birr of income

Income multiplier is greater than 1 in every country

If constraints are binding, may be as low as 1.84

Kenya (Nyanza)  Ethiopia (Abi-Adi)  Zimbabwe  Zambia  Kenya (Garissa)  Lesotho  Ghana  Ethiopia (Hintalo)

Nominal multiplier  Real multiplier
Beneficiaries are hard working and are responsible for their own income generation and food security.

How can cash transfers be better linked to livelihoods? Implications support to small holders?

1. Ensure regular and predictable payments
2. Link cash transfers to livelihood interventions
3. Consider messaging—it’s ok to spend on economic activities
4. Consider expanding targeting to include households with higher potential to sustainably achieve self-reliance
   - including able-bodied labour

But keeping in mind potential conflicts and synergies with social objectives
Agriculture, livelihood interventions play important part in social protection systems

• Reaching social objectives and reducing vulnerability require sustainable livelihoods
• Almost three quarters of economically active rural population are smallholders, most producing own food
• Small holder agriculture as key for rural poverty reduction and food security in Sub Saharan Africa
  – Relies on increased productivity, profitability and sustainability of small holder farming
• Social protection and agriculture need to be articulated as part of strategy of rural development
  – Link to graduation strategies
Reference


Our websites

From Protection to Production Project
http://www.fao.org/economic/PtoP/en/

The Transfer Project
http://www.cpc.unc.edu/projects/transfer
Size of income multiplier varies by country and context—Why?

- Which sectors get stimulated
  - Where do households and activities spend their income?*

- Openness of economy
  - How much demand is for goods produced inside the economy?
  - What goods are tradable, where are prices determined?
    - Retail: biggest sector, and most open

- Supply response
  - Intensity of local production in different inputs (labor, etc.)*
  - Elasticities of these inputs’ supplies

- Other constraints
  - Cash constraints on inputs
  - SCT loosens these for beneficiaries, but not for non-beneficiaries