Strategies for Resilient Graduation from Poverty

Michael R. Carter

University of California, Davis, University of Cape Town, NBER &
BASIS Assets & Market Access Innovation Lab

Washington, D.C.
6 December 2018

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

USAID
FROM THE AMERICAN PEOPLE

NBER
National Bureau of Economic Research

FEED THE FUTURE INNOVATION LAB FOR ASSETS & MARKET ACCESS
BASIS
basis.ucdavis.edu

Poverty & Aid Traps

- Suspect that we would all agree that the goal of development assistance is to eliminate, or at least minimize, the need for it (put aid out of business)
- Poverty traps pose a particular challenge to this goal because they bespeak of those mired in an economically non-viable position from which autonomous economic advancement is not feasible
- While world seen tremendous reduction in severe poverty, also seen increasing concentration of remaining poverty in rural areas where evidence that poverty traps exist
- World Bank projects that 80% of severe poverty will soon be in sub-Saharan Africa

Poverty & Aid Traps

- While poverty traps not everywhere, arguably as important now as ever
- Addressing poverty in the face of poverty traps poses particular problems
- We risk an "Aid Trap" if we only address they symptoms (persistent deprivation) without considering the underlying causes that trap households
- In my talk, I would like to try to dig deeper and understand the causes of poverty traps and how to cost-effectively address chronic poverty

- Means-tested cash transfers have emerged as the instrument of choice, spreading from middle income early adopters (Mexico, South Africa) to lower income countries
- For example, Kenya established the HSNP cash transfer in 2009 in the risk-prone pastoralist regions in an effort to reliably address chronic deprivation
    - Means-tested bi-monthly transfer of about $15/family
    - Impact evaluation found that HSNP helped families tread water at best
    - Helpful but non-transformative impacts are similar to findings from some Latin American cash transfer programs (second generation beneficiary problem)

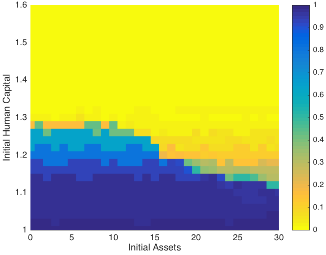
Poverty & Aid Traps

- Two weaknesses to HSNP and cash transfer programs as comprehensive poverty program, especially in the face of poverty traps:
  - Do little to enhance capacities & incentives for poor households to accumulate & graduate from cash transfer dependence; and,
  - Do not address the vulnerability of near poor who may fall victim to chronic poverty
- In high risk environment like the pastoralist regions of Kenya, these weaknesses might create a growing number of cash transfer eligible households over time, implying that:
  - Benefits to households will shrink, and depth of poverty will grow, if the social protection budget is fixed; or,
  - Social protection budget will need to expand to keep pace with a growing number of poor households
- Aid does not put itself of business in either case

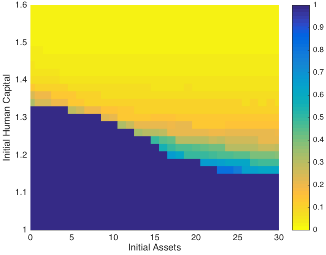
- So how can address this kind of poverty in a cost-effective manner?
- Intuitively, if we can understand the constraints that trap households, then relaxing those constraints should enable households to move ahead on their own (as in the example I gave in the introduction earlier)
- So what elements do we need?
- To answer this question, employ a stylized poverty trap model calibrated to the Northern Kenya environment:
  - Missing financial markets for credit & risk, meaning households must self-insure and self-finance all accumulation
  - Non-convex production technology Skill or technical efficiency heterogeneity (more and less able)
  - Households optimally manage their resources over time (best case scenario)
- Use this model to explore the impacts of different social protection schemes on poverty dynamics, and their cost

Mechanics of Poverty Traps

Chronic poverty maps



(a) Fixed human capital



(b) Endogenous human capital

Color scale indicates probability of collapse to chronic poverty

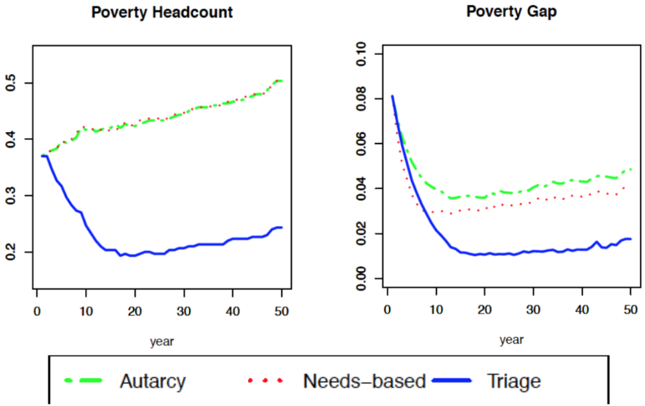
- Two sources of vulnerability embedded in diagram
  - Direct asset loss that pushes households below the tipping point
  - Deterioration of human capacities as vulnerable households struggle to preserve assets in the wake of shocks

Fixed Budget Theoretical Evaluation of Alternative Policies

- Fix assistance budget at a level that can cut the poverty gap in half for all initially poor people
- Consider a standard policy that over time targets this add in a progressive fashion to the poorest
- Alternatively let's invert the priorities and use the budget to address vulnerability first and then the deprivation of the poorest:
    - *Asset Building*
      The fixed budget first allocated as a contingent or compensatory asset transfers to households pushed into chronic poverty (economic non-viability) by a negative shock
    - *Insurance-like Contingent Transfers to the Vulnerable*
      As a second priority any remaining budget is allocated as asset transfers to lift individuals above the frontier into a position of viability
    - *Cash Transfers to the Poorest*
      Any budget remaining after these asset transfers is then allocated as assistance to the poorest

The Social Protection Paradox

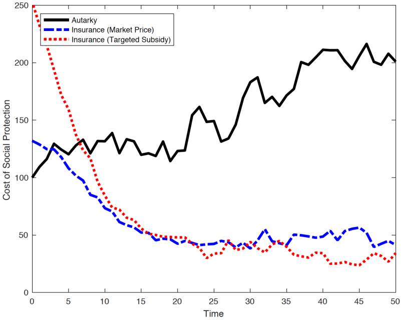
Poverty & Dynamics under Alternative Policies



- Paradoxically, given the fixed budget the poor are better off in the medium term when policy does not directly prioritize them
- But note tradeoffs over time in extent and depth of poverty

- These results underscore the difficult tradeoffs inherent in the design of social protection policy, both over time and across sub-populations of the poor:
  - Do we prioritize reducing the depth of poverty for the poor today or the poor tomorrow?
  - Do we focus on helping those who, with a bit of assistance, can then pull themselves out of poverty (unnecessarily deprived) , or on those who will suffer low living standards without permanent assistance ?
- Further analysis reveal that using partially subsidized insurance to deliver protection to the vulnerable can stretch budget and minimize intertemporal tradeoff

Escaping the Aid Trap by Addressing Vulnerability

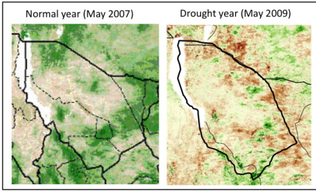


- Here look at total cost of a social compact policy that closes the poverty grap for all poor & pays a 50% insurance subsidy
- Insurance based policy costs more in the short-term, but less in the long term; Net present value of is 20% lower than a symptom-oriented conventional transfer policy

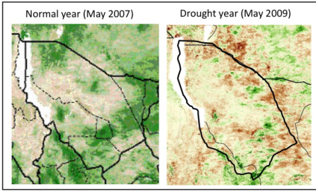
- Theory suggests synergistic interactions between 3 types of interventions:
    - Transfer of tangible assets, which may enhance & protect human capacities
    - Building of psychological capacities, which may boost investment
    - Asset protection, which enhances investment incentives & protects capacities
- So can these theoretically appealing policies that interact to cost effectively reduce chronic poverty work in practice?

- In the earlier introduction, discussed evidence for the effectiveness of BRAC-based graduation program
- BOMA graduation program
  - 24 month program that transfers hard and soft skills, as well as business assets
  - Impact analysis shows that the BOMA Program increased income by 30% income increase in the short term
  - But does not solve the problem of vulnerability (including for those who newly graduated from poverty)
- Need to address vulnerability if to alter dynamics over the longer term

The Resilient Graduation Pilot in Northern Kenya



- Drought insurance for livestock launched in January 2010
- "Index-based": uses satellite-based NDVI (normalized difference vegetation index) measures of available vegetative cover to predict livestock mortality
- Substantial training efforts & mobile payment technology to reduce costs
- Does it work?



- Impact evidence that it works to reduce the two sources of vulnerability discussed earlier:
    - Households above a critical threshold who are most likely to consumption smooth and insurance leads to a 71-96%-point drop in asset sales
    - Households below that threshold are most likely to asset smooth and insurance to a 31-49%-point reduction meal reduction as a coping strategy
    - Other work shows that insurance leads households to invest more in health & quality of their livestock, a finding which matches studies of the impact of insurance on farming households

Learning Agenda

- On-going randomized controlled trial with BOMA and International Livestock Research Institute to test this resilient graduation strategy
- Key questions include:
  - Does the strategy work & exhibit the expected synergies or complementarities?
  - How does it work, especially along the dimension of building psychological capacities?
  - Can social learning and role models lower cost of this latter component (as suggested by Karen's work)?
- Stay-tuned

Thank You!