Imperfect Financial Markets and Poverty Traps: Discussion

Comments on
Carter, Ikegami, and Barrett; and Kaboski, Buera, and Shin

NBER Conference on
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Poverty Traps – Framing

- Broadly, self-reinforcing mechanism causes poverty to persist
- Or future poverty predicted from present – may be local conditions
- A low-level attractor can result from many processes
- Not all are financial market related but many others interact
- Some likely interact (complements); - multidimensional traps?
- E.g. health traps; in some cases and conditions likely cannot "purchase escape" or overcome with assets alone; Psychological
- So any single model unlikely to span all plausible poverty traps
- Empirically we shouldn't expect all studies of poverty traps to be <u>very</u> broadly replicable, as varying local conditions may prevail
- Traps inherently long-run; requires observation over long time
- Difficult research questions… but real progress in these 2 papers

Comments on Paper 1: Joseph P. Kaboski, Francisco J. Buera, and Yongseok Shin:

Taking Stock of the Evidence on Micro-Financial Interventions

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Much to Praise in Kaboski, Buera, and Shin…

- Impressive in innovations; in what already accomplished
- Innovative focus on heterogeneity
- Intriguing connection between micro programs and macro outcomes
- Good lit review set in context of a formal model
- Model has impressive properties, generality, flexibility; although highly stylized usefully guides intuition
- Unsurprisingly that the model has some limitations –
- Very difficult for one model to span canon of trap analysis perhaps even WRT microenterprise and microfinance

On Kaboski et al Model

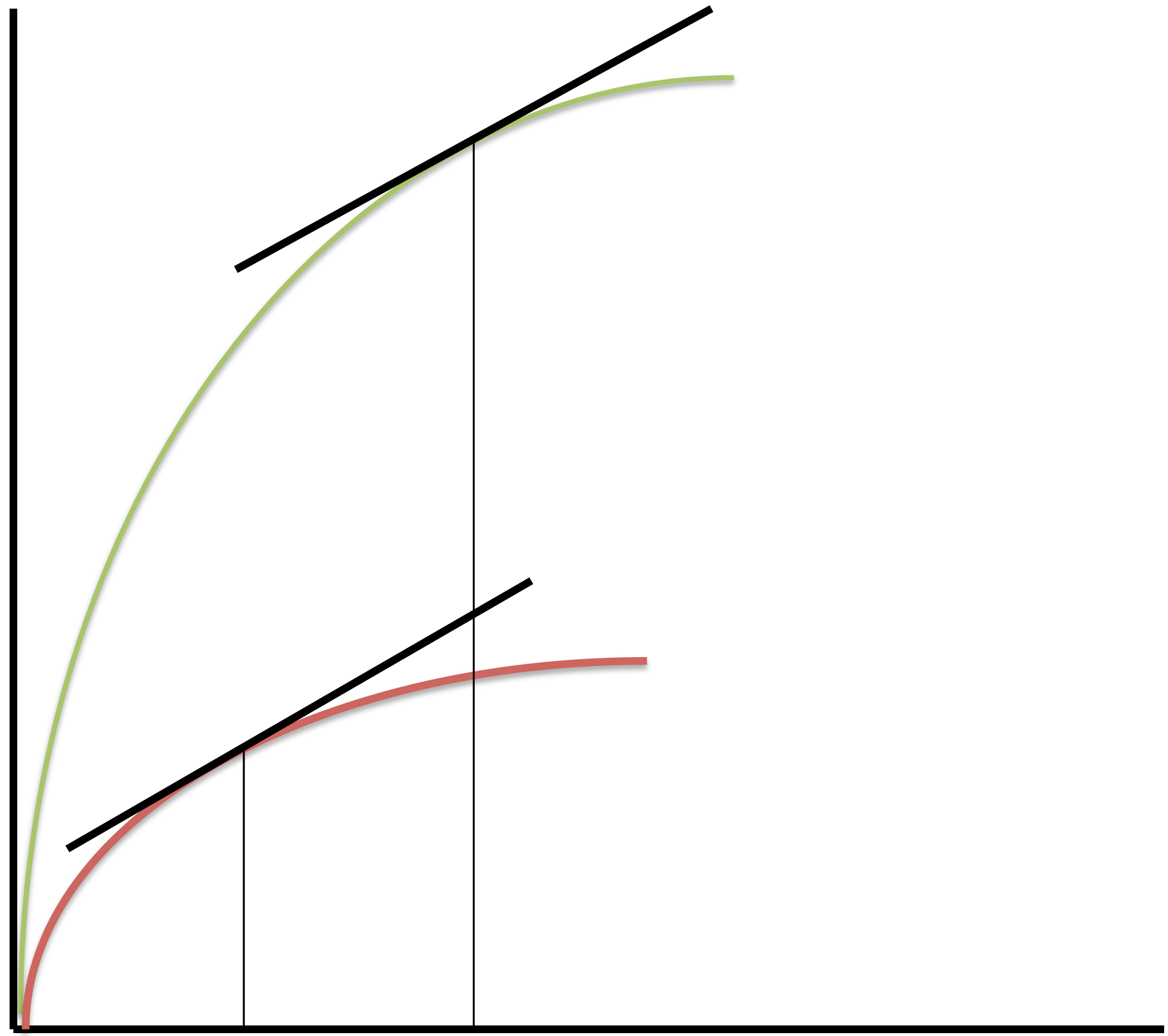
- Clever, compact, flexible model to address recent empirics and theory; guides intuition at various stages of the arguments;
- Allows for relevant market failures with suitable model interpretation
- Interesting set-up, and role of, productivity shocks in model
- Tractability great… though (naturally) limits in what can be represented

Some Questions

- Could you reorganize lit review sequence to parallel model reach – aspects of what the model covers – and its possible limits?
  - (Or other approach so less a sequence of abstracts)
- Spell out standards of evidence of what is to be included in review?
  - Literature is very large now – so of course you need to be selective
  - Currently most papers in the review are RCTs, though not all
  - Criteria for when RCTs are included (plausible external validity, study length…)?
  - Criteria for when non-RCTs are included (lack of availability of RCTs on important topic; well identified by non RCT means; corresponds to related RCT findings…)?
- Can you clarify how widely model spans relevant poverty trap concepts?
  - Even setting aside behavioral literature…;
- Are all traps that are covered escapable with cash or assets alone?
- Fully modeled with diminishing returns? Some MFI literature emphasizes
  - Input complementarities; and:
  - Ranges of increasing returns even in a single, standard capital input,
  - Matters are illustrated in very simple way in the following two diagrams

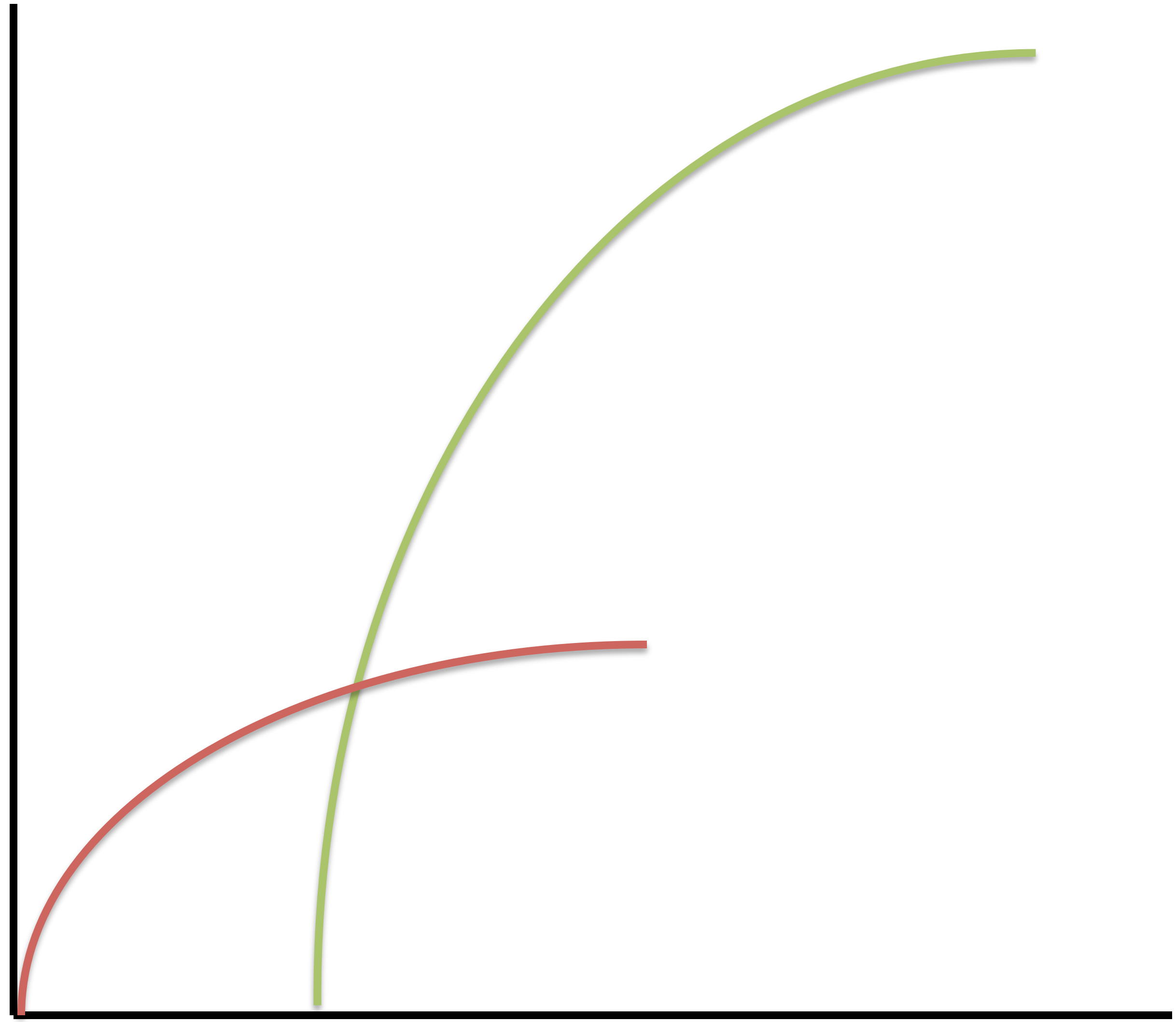
(Overly) simple representations may help clarify as follows

Case A: Differing capabilities/complementary inputs; but only a basic DR technique available*



*MR for rich could be same, or higher; x-axis input – think of as asset index; y-axis outcomes, e.g. measured as permanent or expected income. Note: Even if the low-capability group can move along the curve sustainably in a stochastic environment e.g. with insurance, movement to better relation between input and outcomes may be infeasible with transfers of type considered in these papers – and this research shows that uninsured risk can make matters qualitatively more challenging;

Case B: Non-strictly diminishing returns in some activities of poor
Two techniques - one more productive, but requiring a fixed cost or some complementary set of capabilities; transition between them raises difficult problems



*Notes: Utilizing x-axis to represent differing combined asset indices. Alternatively this could be a two-humped function. Better-off may have complementary inputs. Marginal return plausibly higher for better-off. Multiple equilibria possible given assumptions]

Questions on whether there special significance of how the transfers are financed?

- At least part of analysis assumes transfer from tax on upper deciles:
  - a one-time 100% tax on wealth above a threshold $\bar{a}$
- Could alternative revenue source have different effects in model?
  - Eg - In practice, asset transfer programs financed through aid
- At scale this should have macro level effects – could they differ by method of tax/financing?
  - E.g. could it lead to smaller "dissipation" found in empirics than model?
- Lastly – re lack of "dramatic" escapes: quite possible; but MFIs/ *Microenterprises may represent "transitional institutions"*
  - Step to conventional jobs/ facilitate later structural transformation
- Still, MFI/ME needed where modern jobs start at very low base

Comments on Paper 2
Michael Carter, Munenobu Ikegami, and Christopher Barrett:
Poverty Traps and the Social Protection Paradox

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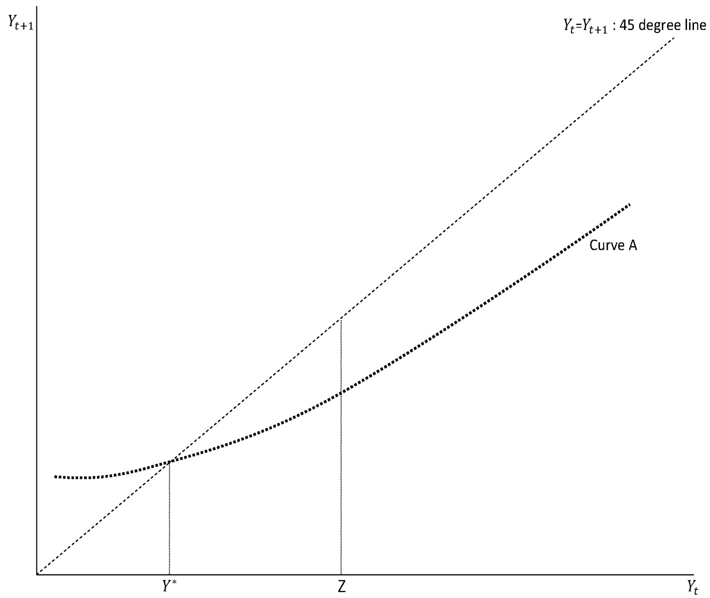
Contributions of Carter et al paper include…

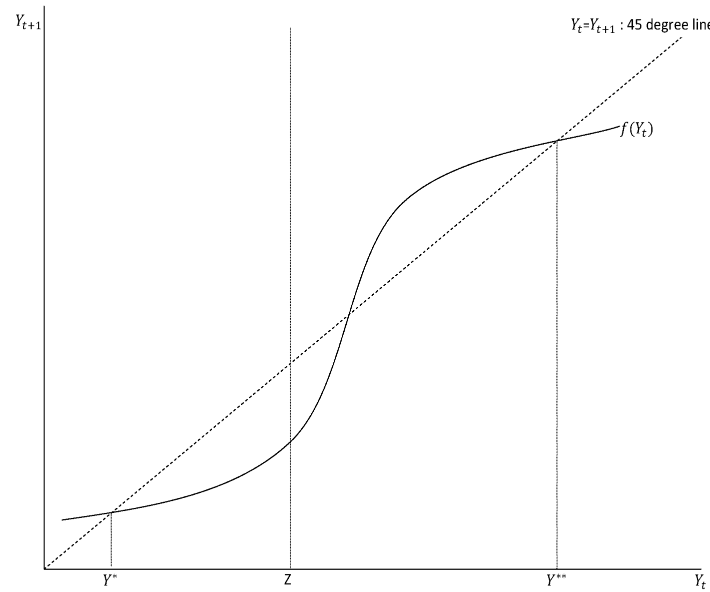
- Models high and low production activity with more than 1 trap type
- Treats risk-driven and other poverty traps in broad framework
- Good framing of heterogeneity which generates their Paradox
  - some types of ability as immutable;
  - others improvable with intervention -
- Measurement: Proposes an interesting indicator of “unnecessary deprivation”
  - Could use further examination of properties, what aggregation means, welfare interpretations
- Raises possible benefit of triage across types of “vulnerable” vs “poor”, thus:
- *Reframes asset-oriented poverty trap literature as counterpoint to now-predominant approach of cash transfers*, thereby
- Issues a challenge to cash transfers as a “silver bullet” because such transfers:
  - May fail to lift beneficiaries out of poverty sustainably (recent empirics); Relatedly,
  - May reduce incentives of poor to accumulate assets (theory);
  - Do not prevent “vulnerable” falling below asset threshold into chronic poverty
  - May result in too-low benefits, or an “aid trap” as total number of poor could grow:

Now that is One Bad Attractor…

- Perhaps only thing worse than being in a multiple-equilibria poverty trap is…
- No multiple-equilibria poverty trap – when alternative is a unique single-equilibrium low-level attractor…
- Some households may face multiple equilibria, others a single equilibrium (plausibly depends on region); Note -
- So creation of a second equilibrium has (at least) an option value (drawn from Kwak and Smith 2013):

Poverty traps (here, in household assets)



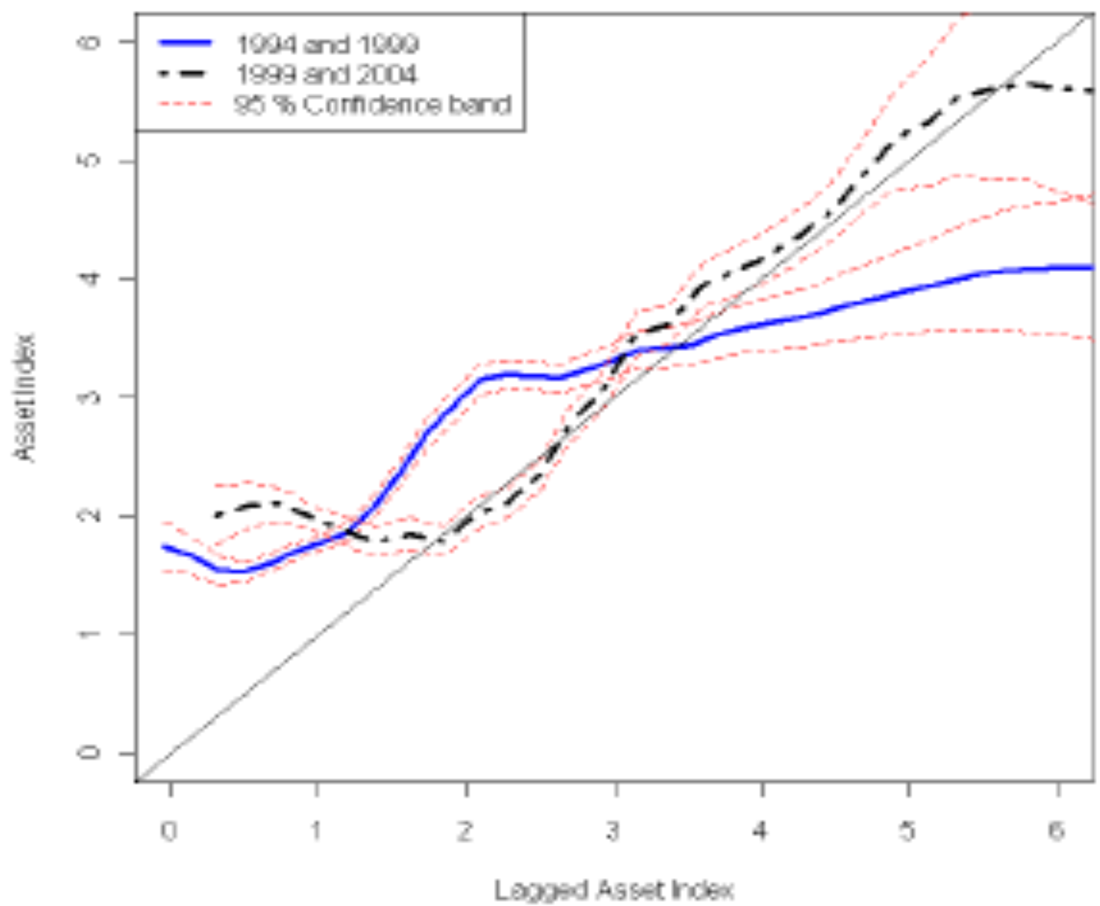


- Two Stable Equilibria; a sufficient neg shock can lead to chronic poverty*

- Low-level Single Stable Equilibrium

- *No reason lowest equilibrium must always be below a given poverty line Z. But a shock reducing current income below the unstable equilibrium leads to an inferior outcome: at least potentially implying severe, chronic poverty

Shifts of Implied Long-Run Equilibria: Ethiopia



Local linear regression (Assets)

- Shift toward multiple equilibria comparing 1994 to 1999 dynamics with 1999 to 2004 dynamics, which is consistent with the emergence of a bimodal density
- Robust to different nonparametrics
- An S-shape curve emerged in later period - after an overall improvement of asset distributions
- Source: Kwak and Smith JDS 2013

Addressing jointly single- and multiple-equilibria traps, with heterogeneous ability, and risk…

- Importance of issues recognized; addressed in sophisticated ways
  - *"Model admits two… sorts of poverty traps: one in which individuals with low innate ability face a unique, low-level dynamic equilibrium and another in which higher ability individuals face multiple equilibria based on their capital holdings due to borrowing constraints and non-convexities in production [fixed costs of investment and innovation]"*
- Vulnerable face stochastic environment in which they may fall – even losing the better equilibrium in their set of possible futures at all
- Shows paradoxical – perhaps tragic – outcome, suggesting less resources for intrinsic chronic poor (could say ultra-poor), viz:
- Even placing greater welfare weight on poorer people, may create more benefits to focus limited resources on observationally better-off people…
- Contribution to identify then rigorously analyze this protection tradeoff

- [*Even so, of course possible another package could achieve the outcome in better/ more cost-effective way; Also, rather strong calling shocks "rather more severe" for the vulnerable, as low-ability may have chronic much lower equilibrium incomes – though "more dramatic" is surely accurate…]

Highlighting policymaking challenges of coexistence of types of chronic poverty and trap mechanisms

- Note: tradeoff represented in the paradox could be playing overlooked practical role even now, in implicit choices made in domestic policy, NGO programs…
- Shows attractive to offer partly subsidized insurance for vulnerable
- Can this discussion be supplemented with analogous examples
- Note - Apparently low innate productive ability could be lack of – confounded with – lack of complements in behavioral-psychological-aspirational dimensions
  - Though some traps will take more than one generation to solve many may not with better understanding of traps and design of new programs
  - If this is possible could this give scope to cost out additional 1-time transfer for poor whose innate ability isn't too low to enable them to stay above threshold
- Solutions to remedying these conundrums would have high social benefits and, potentially, modest costs in global perspective
- Last question: would variations of poverty trap conditions affect salience of the paradox?

Thank you!

- Thanks to both sets of authors for their innovative and stimulating contributions