

Scaling-up Microfinance Products for Weather Risk Management: Three Proposals to Improve the Public-Private Partnership

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Public-Private Partnerships

- Minimalist view of Public-Private Partnership is that:
 - Public sector provides a stable, enabling environment
 - Private sector uses its comparative advantage to design, market & administer insurance
 - Public sector (perhaps) subsidizes premium as set by private insurance & reinsurance sectors
- But will this minimalist partnership underwrite sustainable agricultural index insurance in low income economies?
- Three perhaps immodest proposals for optimizing the public-private partnership:
 - ① Public certification & perhaps regulation of index insurance quality
 - ② Public subsidy through full provisioning of insurance for the 'catastrophic risk layer'
 - ③ Public reinsurance of at least the catastrophic risk layer

1. Certification (& Regulation) of Index Insurance Quality

- Index Insurance as a “Credence Good”
 - Consumer cannot easily ascertain index insurance quality (e.g., basis risk)
 - Consumer cannot even easily learn over time about index insurance quality
 - Consumer therefore has to “believe” the insurance is good before purchasing
- As a consequence, it may be more profitable for the insurance company to forego investing in a high quality design and instead offer low quality insurance in the knowledge that it can probabilistically escape detection for some time (take the money & run strategy)
- Suggests a role in certifying index quality; At work now on metrics & standards
- However, even if public sector licenses only high quality contracts, demand may be minimal if credence/trust low
- Public subsidy may thus be necessary to get the scale of market needed to sustain a market large enough for high quality contracts

2. Public Provision of Insurance for Catastrophic Layer

- So how do we best subsidize?
- Can divide yield risk into layers; For example:
 - ① *Risk Retention Layer*: Yields between 80% & 100% of long-term average
Farm household can manage this risk with other mechanisms (savings)
 - ② *Commercial Risk Layer*: Yields between 50% & 80% of long-term average
Farm household's commercial viability threatened (capital loss, credit default)
 - ③ *Catastrophic Risk Layer*: Yields between 0% & 50% of long-term average
Yields this low threaten fundamental household consumption standards as well as business viability

2. Public Provision of Insurance for Catastrophic Layer

- Standard approach is to provide an across board subsidy for full contract (across all risk layers)
 - If contract costs \$40 per-hectare, then a 40% across the board subsidy would remit \$16 to the insurance company if the farmer purchased and paid \$24.
- Alternatively, if the premium associated with the catastrophic layer cost \$16, then the public could pay the full cost of this risk layer, providing minimal protection to all farmers.
 - Farmers could then pay the additional \$24 if they wanted to increase to full coverage. This optional level of available protection might help incentivize risk taking & investment by the farmer.
 - If not, there would still be a substantial market size with the hope that trust in the contract might grow.

3. (Partial) Public Reinsurance

- Finally, public sector could likely lower cost of overall insurance (especially cost of the catastrophic risk layer) by reinsuring this risk with a financially self-sustaining public reinsurance fund
- Logic relies on the observation that insurance and reinsurance companies appear allergic to the imprecisely estimated parameters that result when data to price risk are 'sparse'
- In other words, the private sector for a variety of reasons seems to overprice risk when data are sparse
- If correct, then a public sector agency less worried about uncertainty should be able to price risk more favorably and still cover costs on average
- Creation of such a public reinsurance mechanism (similar to the GIIF established by the IFC with European Community support) would be another very smart form of subsidy to the risk management for development for agenda

Risk Layers

