

*FATE AND FEAR:
Risk, Vulnerability, and Poverty*

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Purpose?

- Report on lessons from research on risk and poverty in poor contexts
 - Focus on lessons for policy
- To introduce some key concepts
 - The link between poverty and risk
- Offer some new ideas
- To inspire a little...

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Outline

1. Understanding Risk in Poor Settings
2. Risk and its Consequences for Poverty
3. What can we do about it?

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1. Risk in Poor Settings

Shocks are central to life of many poor
e.g. Rural Ethiopia, five year period (1999-2004): any 'serious' shocks that gave hardship? 95% listed at least one.

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Table 1: The incidence of serious shocks 1999-2004

Type of shocks reported	%
Drought	47
Death of head, spouse or another person	43
Illness of head, spouse or another person	28
Inability to sell outputs or decreases in output prices	15
Pests or diseases that affected crops	14
Crime	13
Policy/political shocks (land redistribution, resettlement, arbitrary taxation)	7

Source: Data from Ethiopia Rural Household Survey

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Risk: some terminology

- Risky events cannot be affected by households
- But families don't passively undergo risk and shocks, but use risk strategies to shape their consequences
- Risk implies a possible 'fear' of bad outcomes
- Shocks are realizations of risk; nature and economy 'throw dice' determining 'fate'

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Household actively try to manage risk...

- Ex-ante strategies: before the risk occurs, trying to *prevent* risk affecting the household or to *mitigate* the impact of risk
- Ex-post strategies: after the risky event occurs, reducing its impact (*coping*) (while ex-ante preparing for this)

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	<h3>Risk strategies used by households</h3>
	<ul style="list-style-type: none"> ■ to cope ex-post: <ul style="list-style-type: none"> ■ Informal credit ■ Savings (grain storage, livestock) ■ Informal Insurance Arrangements (mutual support; insurance groups) ■ Family Labour adjustments (including child labour) ■ to mitigate and reduce risk ex-ante: <ul style="list-style-type: none"> ■ Diversification, Low risk activities ■ Marriage/migration patterns
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	<h3>Literature</h3>
	<ul style="list-style-type: none"> ■ Exciting literature... ■ But key finding: shocks still affect consumption and nutrition, despite clever strategies ('partial smoothing') ■ Implications not explored sufficiently
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	<h3>Overall Impact of Shocks?</h3>
	<p>e.g. in rural Ethiopia 1999-2004 data, impact on consumption in 2004?</p> <p>Drought? -13 to 16%</p> <p>Output price collapse? -19%</p> <p>Demand for non-agricultural prod? -20%</p> <p>Serious illness episode in family? -15%</p>
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	<h3>Impact on Poverty?</h3>
	<p>Overall contribution to poverty is high!</p> <ul style="list-style-type: none"> -Actual Poverty (=with shocks): 44% -Counterfactual poverty without shocks, or poverty-with-insurance: 29% -OR shock-related poverty as proportion of total poverty: share is 33% <p>Note: only 'short-term' effect. Consequences in the long-run even bigger!</p>
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Long-run impact of shocks

- Nutrition literature: temporary 'hunger' leading to stunting
- Further impact: lower school attainment and earnings
 - E.g. Zimbabwe (Hoddinott and associates)
 - Impact 82/83/84 drought/war on children
 - 16 years later 7 % loss of lifetime earnings
 - Impact 92/93 drought
 - Affecting education, up to 14 % lower earnings

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Tanzania: adult mortality/orphanhood in age of HIV/AIDS (Beagle/De Weerd/Dercon)

Long-term impact: panel 1991-2004

- Impact of maternal orphan hood:
 - Leading to 2 cm loss in height and loss of 1 year schooling shock AT ADULTHOOD
 - Returns to education and height in data: overall 8 percent permanent loss in earnings

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- Same Data: Persistent impact of living in household affected by adult death:
 - 7 % loss in consumption in first 5 years after (in period of strong growth for others
 - Note also: strong persistent effects of agricultural shocks
- In same data, Krutikov on child labour: Impact of shocks, leading to child labour and less education at adulthood in Tanzania
- Das et al. on Zambia: illness-related absenteeism of teachers
 - -> impact on educational attainment of children

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	<ul style="list-style-type: none"> ▪ in Ethiopia also observed in consumption <ul style="list-style-type: none"> ▪ persistent impact of drought in 84/85 ▪ those seriously affected then, experienced significantly lower growth (minus 10-15%) in 1990s ▪ Barrett et al: evidence of existence of livestock poverty traps <ul style="list-style-type: none"> ▪ loss of cattle below threshold leading to impossibility to recover (Kenya, pastoralists) ▪ recurring theme in many life histories across developing world
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	<h2 style="text-align: center;">Risk and shocks?</h2>
	<ul style="list-style-type: none"> ▪ Shocks resulting in lost human, physical or social capital, reducing access to profitable opportunities in the future. "persistent or permanent effect" ▪ Two ways in which risk causes poverty: <ul style="list-style-type: none"> - "FATE"= ex-post impact of risk (via shocks) - "FEAR" =ex-ante or behavioral impact of risk
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	<h3 style="text-align: center;">Risk as a cause of poverty: the impact of fear</h3>
	<p>Uninsured risk implies that it may be optimal to avoid profitable opportunities. So, lower risk at the expense of lower returns</p> <p>E.g. Diversification, low risk activities, low risk assets;</p> <p>-NOT due to 'risk averse preferences' but driven by lack of insurance (constraints)</p> <p>-even possibly 'choosing' to be poor by lack of options...</p>
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	<h3 style="text-align: center;">Examples: impact of risk and fear</h3>
	<ul style="list-style-type: none"> - Study in India and Tanzania: <ul style="list-style-type: none"> ▪ Comparing those with more protection against risk than others ▪ results in 25-50% higher return per \$ assets - Zimbabwe: (Gunning et al.) micro 'growth' effect, suggesting 40% lower capital stock, substantially due to 'ex-ante' effects. - Ethiopia: (Dercon/Christiaensen) lower fertilizer use related to downside risk given fear of inability to repay input credit
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Conclusion: Long-run impact of shocks and risk on Poverty

- Increasing evidence of long-run effects of shocks
- Destruction of human/physical capital, feeding into growth potential
- Closer to the core of the analysis of poverty
- Less attention to role of risk, but this is also *cause* of poverty and lower growth
- Role of "Fear" needs to be analyzed more: scope for research

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How to design better protection?

- Better and credible interventions
 - Risk reduction (public health, irrigation, ...)
 - (micro)finance activities
 - safety nets and social security nets
- Learning from insurance experience
- Starting from people's understanding of risk and of their risk strategies
 - Risk and insurance are really difficult
 - Start from what they know: mutual support via networks and groups

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How to deliver microfinance?

- Massive attention
- Probably works, but not as well as people claim...
- Evaluation study: highest impact via consumption credit (Karlan and Zinman)
- Focus much more on (micro)savings and microinsurance: offer protection

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Examples: drought insurance

- Crop insurance: highly costly (verification, moral hazard)
- "Rainfall insurance"
 - Farmers pay premium
 - Transfer if rainfall measure at 'official' station is below threshold (parameterised triggers)
 - Not suffering from moral hazard, adverse selection, verification, etc.
 - 'rainfall lottery'

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Rainfall insurance

Example: Gine et al. (2007),
(experiments in India and Malawi)
Low uptake

- Insurance mainly bought by wealthier, better educated farmers, more able to withstand shocks
- Problems with understanding/trust "insurance is always sold and never bought"

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Delivery of microinsurance?

- Problems with insurance provision
 - Information problems (adverse selection and moral hazard)
 - Administration costs
- Contract enforcement different from credit: credibility and trust
- Problems with risk: difficult!
 - Risk perception errors

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Problems of understanding

Underestimation of high probability events and overestimation of low probability events

- E.g. risk of dying a violent death or accident
 - Self-reported sample estimate: 53%
 - True probability: 8%
- We have no evidence on how perceptions of risks in Africa related to 'true' risks

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Challenge for delivery of insurance?

- Understanding, trust and credibility

Solutions?

- Historically: insurance for poor spread through cooperatives, trade unions, etc.
- Work with local community **GROUPS** to help bridge understanding and trust problems, especially those involved in mutual support already.

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Challenge for delivery of insurance?

- Cost and investment?

Solutions?

- Work with established insurers (e.g. NGOs with insurance companies, government with insurance companies).

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Conclusions

Risk has serious consequences for poverty in short-run and long-run;
Resolving risk problems will involve different actions and strategies;
Time to experiment in bringing lessons from insurance provision across the world for more effective responses.

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