Insurance and Credit: Micro Financial Underpinnings for Entire Economies by Robert Townsend
A Discussion

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   - Tests of perfect risk sharing
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Introduction

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- Interestingly this contrasts with the approach taken in some of the early papers by Townsend.
- Both approaches have advantages and disadvantages.
  - robustness v ability to use results for policy.
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Risk sharing in village economies: Townsend 1994

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... however we need a number of other assumptions/data requirements.
The Townsend perfect insurance test

- The logic is very simple and intuitive.
  "...it was never easy....on Gaze Island, but they had the cows and a bit of hay, and the berries, the fish and the potato patches, and they’d get their flour and bacon in the fall from the merchant over at Killick-Claw, and if it was hard times, they shared, they helped their neighbor. No they didn’t have any money, the sea was dangerous and men were lost, but it was a satisfying life in a way people today do not understand. There was a joinery of lives all worked together, smooth in places, or lumpy, but joined.” (A. Proulx, Shipping News pp. 168-9).
The Wilson/Townsend characterisation of perfect insurance

- First order conditions from a planner problem:

\[ \lambda^i U'(c_t^i(s^t))\beta^t = \mu_t(s^t), \quad \forall i, s^t \]
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\[ \Delta \text{Var}_g[\log(U'(c^i_t(s^t)))] = \alpha \Delta \text{Var}_g[\log(y^i_t(s^t))] \quad \forall g, s^t \]

\( \alpha \) should be zero.
What is needed

- Risk sharing group.
  - The village?
  - Extended families within villages?
  - Caste? (Rosenzweig and Munshi)
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- What shock to consider (and what arguments to preferences)
  - Vera-Hernandez et al. (2012)
  - Health shocks, consumption and nutritional status
Findings on insurance

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- How to characterise constrained efficient allocations?
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- This motivates Townsend’s data efforts.
- Households as firms
- Households detailed accounts.
The research agenda: GE and full characterisation

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- This is very ambitious, especially when one deviates from first best allocations and complete markets.
- The data requirements are tremendous:
  - This motivates Townsend’s data efforts.
  - Households as firms
  - Households detailed accounts.
- Whether a full characterisation is feasible is still unclear.
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Examples:
- Asymmetric information (Attanasio and Pavoni, 2011)
- Imperfect enforceability (Attanasio, 2012)
Risk sharing with moral hazard and hidden assets

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- Use (among others) the equation:

\[
\Delta \text{Var}_g[\log(U'(c_t^i(s_t)))] = \alpha \Delta \text{Var}_g \log(y^i_t)
\]

\(\alpha\) can be related to the severity of the moral hazard problem.
Imperfect enforceability of contracts

Imperfect enforceability of contracts

- Attanasio (2012) relates the amount of risk sharing observed in different villages properties of the income process in those villages.
  - Income processes estimated through subjective probabilities.
  - Amount of risk sharing measured by evolution of the cross sectional distribution of consumption.
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- Slow adoption of HYV
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- Other markets imperfections (Udry, 2012)
  - Land markets
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- What about implications of the impacts of specific interventions?
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Other imperfections

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- Outcomes will then depend:
  - Information and knowledge
  - Beliefs
  - Attitudes

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- Beliefs
- Attitudes
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Examples:
- Subjective expectations on returns to education (Mexico)
- Subjective expectations on returns to investment (Anantapur, India)
- Asymmetric information in micro finance groups (Mongolia, Anantapur, India)
- Information on knowledge (Colombia)
Conclusions

- Ambitious agenda
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- GE approach
- Linked to measurement and data.
Conclusions

- Ambitious agenda
- GE approach
- Linked to measurement and data.
- Might be complemented by 'partial equilibrium' studies
- Identification of components of the model.
Future agenda

- Modeling explicitly imperfections
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- Networks and network formations
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