

# How Economic Research Informs Policy

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Research and Policy: A Golden Minnesota Partnership

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# How Economic Research Informs Policy: Four Themes

- ❖ Risk Sharing: Theory and Data with implications for Policy
- ❖ Corollary, the Value of Surveys: Research with Central Banks and Governments, Impact
- ❖ Cross-Country Policy Guidance: An Example
- ❖ Featuring Parallel Work in the U.S.

# Arrow–Debreu Theory and the Optimal Allocation of Risk

- ❖ Pure theory conceptualization: idiosyncratic shocks (specific to household or small enterprise) fully shared and dissipated, aggregate shocks borne by someone -- had not been tested
- ❖ *Risk and Insurance in Village India* (Townsend 1994)
  - Shocker: How could such poor communities do so well in the allocation of risk?
  - Smooth consumption against idiosyncratic risk/shocks, close to benchmark
- ❖ Contrast: Outside presumption of policymakers, we have to go in and intervene, to help
  - Work created a bit of a firestorm
- ❖ Were India villages exceptional?
  - Thailand, field research, northern Thai villages
  - ❖ NICHD funding to do large scale Thai surveys
    - Findings in the Thai data, next....

# informal networks: help the formal sector and help with policy interventions

1. Day to day: Very lively village networks akin to sophisticated US money markets: bridge loans from informal to pay formal, credit chains, active not only in passing along default but in early pre-pay
  - Again, nearly full risk-sharing
2. With policy: Village Fund Program, million baht per village injected (regardless of population)
  - Kinship networks kick in, informal is helping formal, complements, but also informal/kin network is enhanced
    - Switch from a lending/borrowing financial-information regime to costly state verification, especially for low wealth households
      - Financing of investment and risk-sharing with costly audits for claims of low income
    - Costs of verification lower for kin relative to non-kin after VFP, lower for small villages with higher treatment per capita rather than larger ones
3. Not perfect: Who is bearing cost and risk of health shocks
  - Parallel to US Medicaid, Finkelstein
  - In Thailand: large financial expenditures not covered by formal insurance-informal gift-giving network kicks in
    - If not in informal network, uncovered, damage washes downstream -  
how to fix, working on it...

# Designing elements of a new financial system

4. *Policy Remedy: Risk and Return in Production, in Thai Village Economies*
  - In quantities, idiosyncratic risk much higher than village aggregate risk
  - In terms of risk premium, that is, returns to compensate entrepreneurs for exposure to risk, it is the other way around
  - Good if not perfect insurance for idiosyncratic shocks, via gifts and loans, not for village aggregate
  - But aggregate shocks at village level are idiosyncratic in the region, could be smoothed in principle, and this part is missing
  - Policy needed: To build cross-village infrastructure
  - Designing new platforms with fintechs and in collaboration with Bank of Thailand, with distributed ledgers and blockchain
  
5. *Caveat: Heterogeneity and Risk-Sharing within a Village*
  - Be careful how you intervene
  - Completely covering village aggregate shocks hurts the more risk-tolerant, who had been receiving implicit insurance premia for doing this job

# Corollary, the Value of Surveys: Research with Central Banks and Government, Impact

- ❖ With Central bank and government: Townsend Thai project
  - Last 3 years, funded by Bank of Thailand, Thai Research Fund (government)
    - Up to 20 years of annual and monthly data, urban and rural, multiple instruments
  - Impact on BoT : overturning stereotypes
    - Do not get rid of informal as a goal (debunk evil money lender syndrome)
    - Going against the grain of debt relief, some actually need more credit
- ❖ Extended: As prototype for data gathering in other countries
  - Mexico, Chile
- ❖ Implications: Part of a larger shift in macro towards micro, not just concern with micro situations, communities and regions but also as underpinnings integrated into macro models and used for policy guidance...

# Policy Guidance in Multiple Countries: An Example

- ❖ The Apple Pie Syndrome: *GDP, TFP and less Inequality*— we want it all
- ❖ Project with an IMF/MIT team
- ❖ Model: Calibrate models with multiple potential binding obstacles (not just one)
  - Fixed cost of financial access- policies to lower, nearby branches
  - Better information -lowering margins between borrowing/lending rates
  - Legal change, more objects can qualify as collateral requirement for borrowing
- ❖ Practicality: it is tough to do multiple reforms at the same time.
- ❖ Lesson: in the model, impacts wage earners and SMEs differently, and different in short vs. long run
  - Role of theory/model: Surprises, not evident in reduced form data alone, even from widely used ratios
  - Why? Interactions: Complements vs. substitutes, on extensive and intensive margins
  - Adopted: in Nigeria, India, Honduras, and other LICs, as official IMF program
  - Policymakers were ready to hear the message, they suspected apple pie was not realistic, plus the commitment warning was useful, things may get worse from the policy impact itself before they get better

# Featuring Parallel Work in the US

- ❖ Quote: "Meaningful program review can be achieved only through measurement and critical analysis. Systematic research of community economic development programs has been limited. Accordingly, your challenge is to vastly expand the information base."  
[Alan Greenspan 2003](#)
- ❖ Partnerships: Data gathering, community-level surveys in the US with Federal Reserve Banks
  - With Chicago Fed (Mexican, Korean, African-American)-
  - Minneapolis Fed: Hmong – team is here
- ❖ Current Status: US financial accounts- ongoing work but large gaps remain
  - Distributional wealth accounts – Federal Reserve Board
  - Personal income vs. GDP – Bureau of Economic Analysis
  - Missing: concept of integrated accounts
    - Thailand Project meets FRB Boston
    - Synching up income statement and balance sheet, cash flow
- ❖ Need: regional integrated accounts – even if synthetic and not new surveys
  - Even more interest now in community impact of policy: inequality, voting patterns
  - Working with Board, SCF, BEA to initiate collaboration
- ❖ Discern Obstacles: what is there now, as in informal or not, and binding underlying obstacles, with model-based potential remedies
- ❖ Examples: it Matters for US Macro - discerning obstacles and assessing policy
  - Impact of China shock, tariffs, not only uneven but flows to other states, trade and financial
  - Closing the loop of monetary policy implementation, feedback from micro back to macro policy