Researchers’ Role In Continuously Improving International Food Assistance

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International Conference of Agricultural Economists conference
Milan, Italy
August 10, 2015
International food assistance (food aid) offers a great example of how empirical research can usefully inform policy ... for good and for ill!
Example 1: 2008 Local and Regional Procurement Pilot Program
Research partnership with implementing NGOs (LRP Learning Alliance) established strong evidence that LRP on average:

- Reduces delivery delays by 14 weeks
- Reduces costs of basic grains by 50% (but not processed foods)
- Has no effect on price levels or volatility in procurement markets
- Is preferred by recipient consumers over foods imported from US
- At least comparable quality/safety to US products
- Can benefit smallholder farmer suppliers

Conclusively answered questions that lingered during the 2008 Farm Bill debates ... White House invoked the findings for 2014 Farm Bill clinching the policy debates (but lost the political ones!).

(See Lentz et al. Sep. 2013 World Development special issue)
Improving Food Aid Quality

Example 2: Improving Food Aid Quality
Historically, US food aid has heavily emphasized supplemental rations with basic grains and simple fortified products.

Important Food Aid Quality Review by Tufts University highlighted the nutritional deficiencies of prevailing US food aid, including FBF products.

Careful simulation/dynamic optimization analysis highlights importance of therapeutic feeding and targeting of children suffering chronic as well as acute malnutrition.

(See Webb et al. 2011; Yang, Van den Broeck and Wein, PNAS 2013)
Cargo Preference in US Food Aid

Example 3: Tying Ocean Freight to Food Aid Deliveries
The political economy of US food aid turns on shippers and obscure cargo preference provisions.

Careful empirical research demonstrated that cargo preference:
- Costs taxpayers the equivalent of non-emergency food aid to Africa
- Goes primarily to vessels that are not militarily useful
- Goes largely to vessels whose ultimate owners are non-US
- Costs equivalent of ~$100K/mariner job

Overwhelming evidence helped finally push policy change to reduce cargo preference from 75% to 50%.

(See various GAO studies and Bageant, Barrett & Lentz, AEPP 2010)
Example 4: Food Aid and Conflict
Nunn and Qian (AER 2014) claim US wheat food aid shipments cause longer, more deadly conflict in recipient countries. … Widely reported and hugely important, if true.

Problem: They mischaracterize US food aid policy. But a model with proper timing and subsamples yields the same result … why?

Deeper (and underappreciated) econometric problem: IV with a nonlinear parallel trend due to an omitted variable.

Finding: Once one controls properly for the nonlinear parallel trends, the causal effect disappears. Indeed, the NQ results are perfectly consistent with a model in which food aid reduces conflict.

Implication: No basis to reduce food aid.

(P. Christian & C.Barrett, Cornell working paper, 2015)
Monte Carlo simulation demonstrates positive IV bias

We can reproduce NQ’s results in a model where food aid causes reduced conflict but wheat production and conflict are both correlated with nonlinear climate trends. NQ result is an artefact of estimation bias.
Empirical research can – and has – significantly influence food aid policy. Good research matters!

There remain ample issues in need of careful attention, e.g.:
- Where and when to deliver food vs. vouchers/cash vs. LRP?
- Tradeoffs between non-emergency and emergency food aid?
- How do optimal rations vary by target population and conditions?
- Is LRP cost-effective as a strategy to assist smallholder producers vs. deliver food to consumers faster and cheaper?

Need good empirical agricultural and development economic research!
Thank you for your time, interest and comments!