



Migration and Food and Nutrition Security

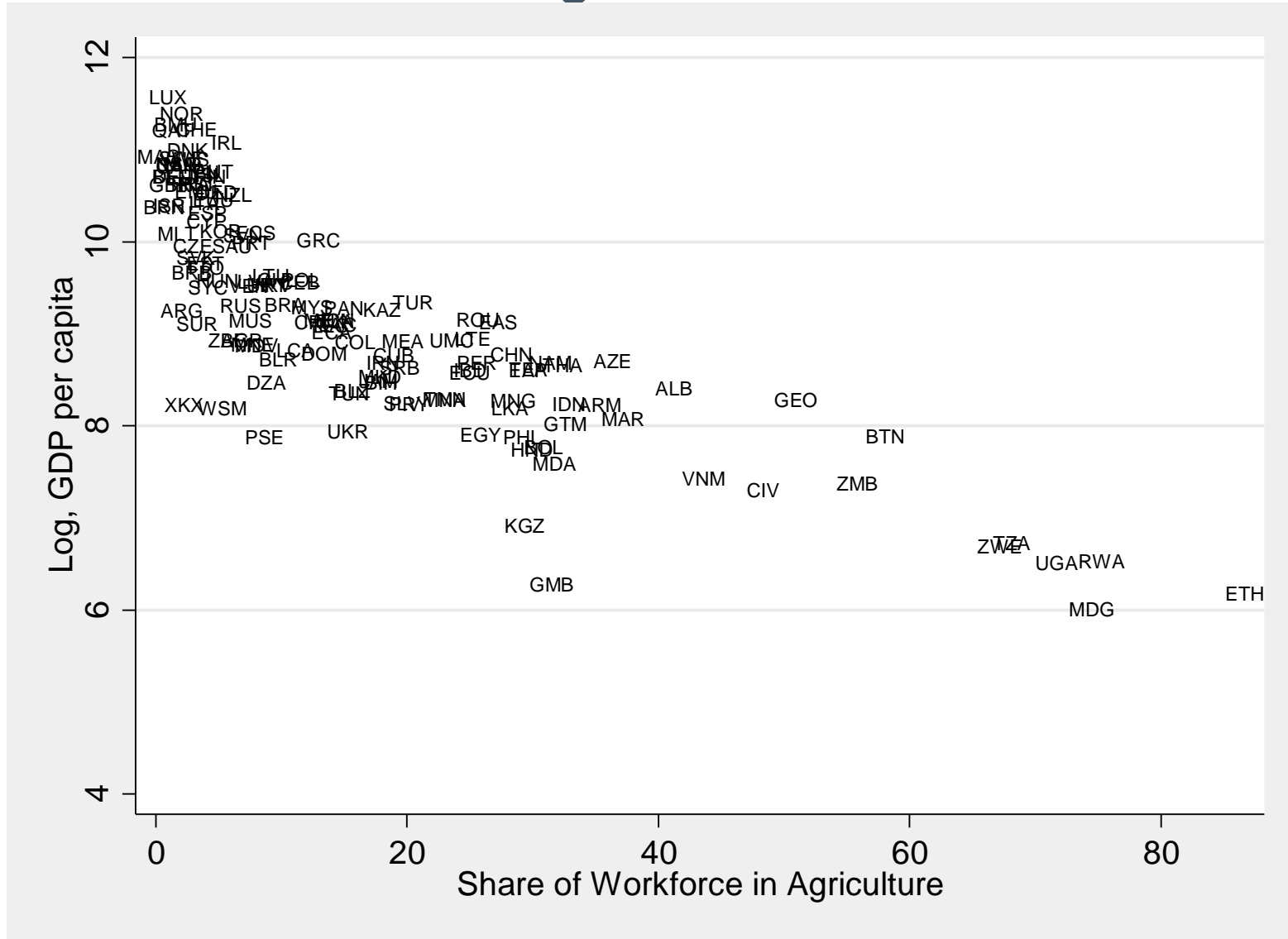
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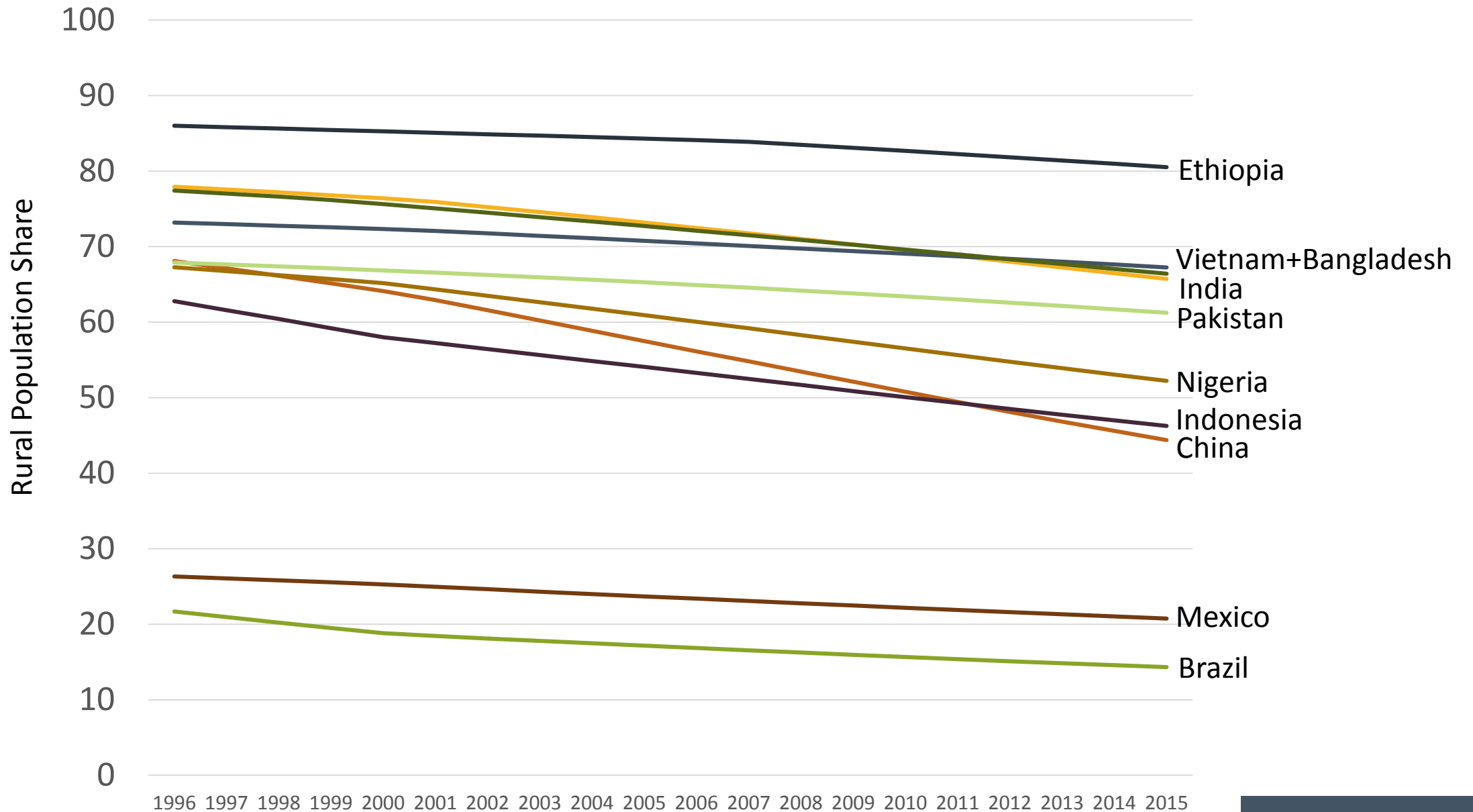
Migration: Part and Parcel of the Economic Development Process

GDP and Share of Labor in Agriculture





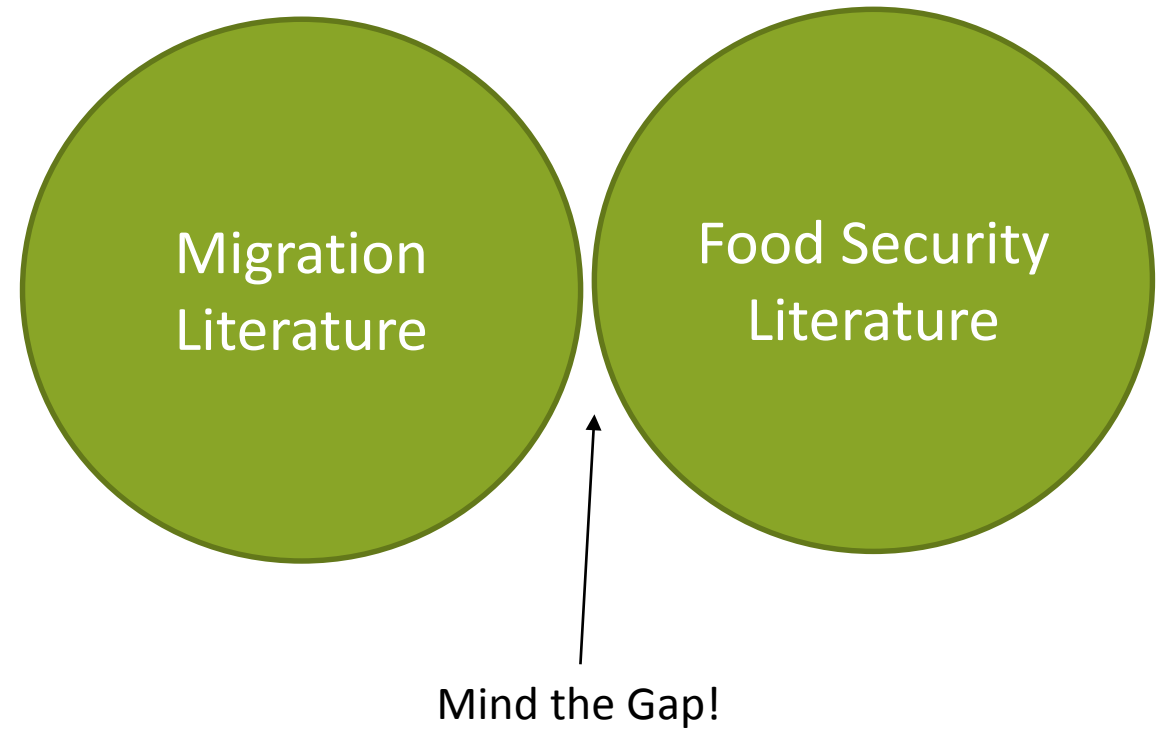
Rural Population Share, 1996-2015





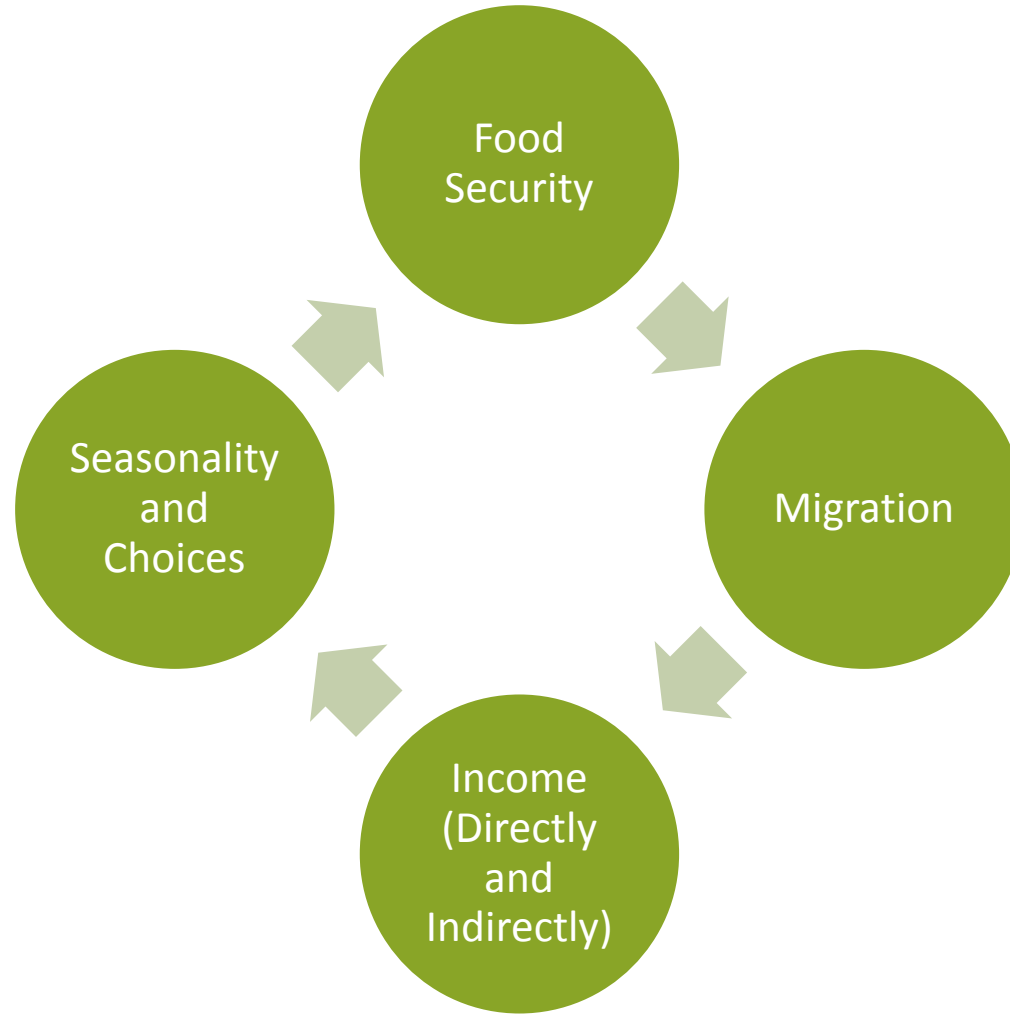
Observation: Migration and Food Security Literatures Barely Overlap

- Migration Literature -> Difficult to Establish Causality, and Food Security far down the causal chain
- Food Security Literature -> Mostly Ignores Migration





Migration Perspective- challenge





A Note on Involuntary Migration

- People may decide to leave (rural areas, home country) for higher wages, marriage etc.
 - *Voluntary Migration*
- But other reasons- may fear for their life (conflict), area becoming uninhabitable (climate? Major weather shocks)
 - Continuum to *Involuntary Migration*
 - Major international policy role in the latter- refugee camps etc.
 - Clear food security implications both before and after migration occurs



Migration and Rural Income

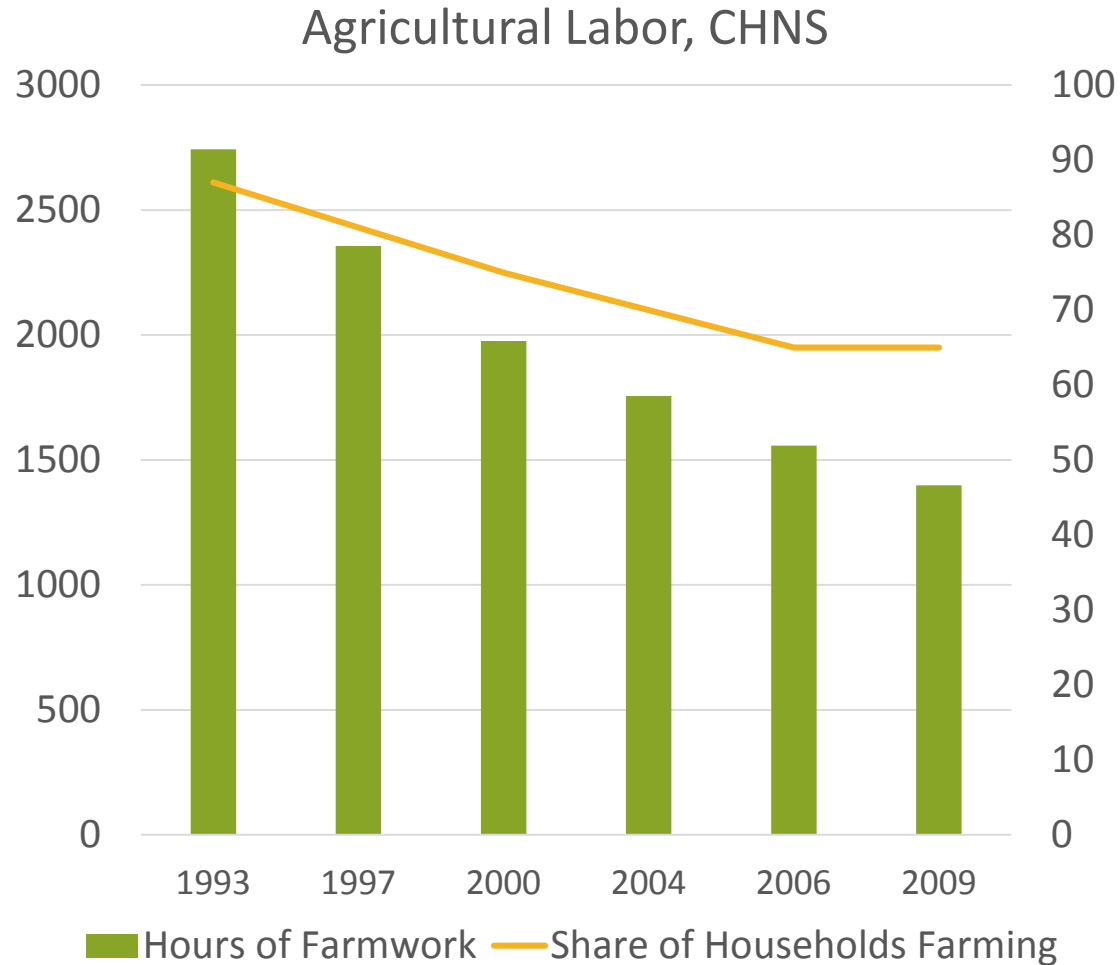
1. If choose to send out a migrant (or migrants), could be a lost labor effect on ag production
 - But several adjustments that can be made to reduce impact of lost labor (change composition of family labor force, hired labor, capital)
2. Migration could lead to investments recouping the lost labor effect
 - Could be productive (e.g. farm, non-farm investment)
 - Could be short term (e.g. fertilizer)
3. Could affect the way households deal with risk



Evidence: Agricultural Productivity

- Any evidence of lost labor effects in agriculture?
 - In general, challenging problem due to endogeneity of migration so little convincing evidence in the literature
- But lots of papers from China...
- Outside China:
 - De Brauw (2010) shows suggestive evidence of a shift from labor-intensive to land-intensive crops in northern Vietnam
 - Quisumbing and McNiven (2010) find a null result in the Philippines in a small panel

Evidence from China: Agriculture



- Meanwhile, plot level productivity in grains from China National Rural Survey, 2000 and 2008 (includes HH level fixed effects)

	All counties	Poor counties only
Time Dummy (2008=1)	0.253*** (0.058)	0.304*** (0.076)
Number of Obs	4821	3298

Adapted from de Brauw et al. (2012)

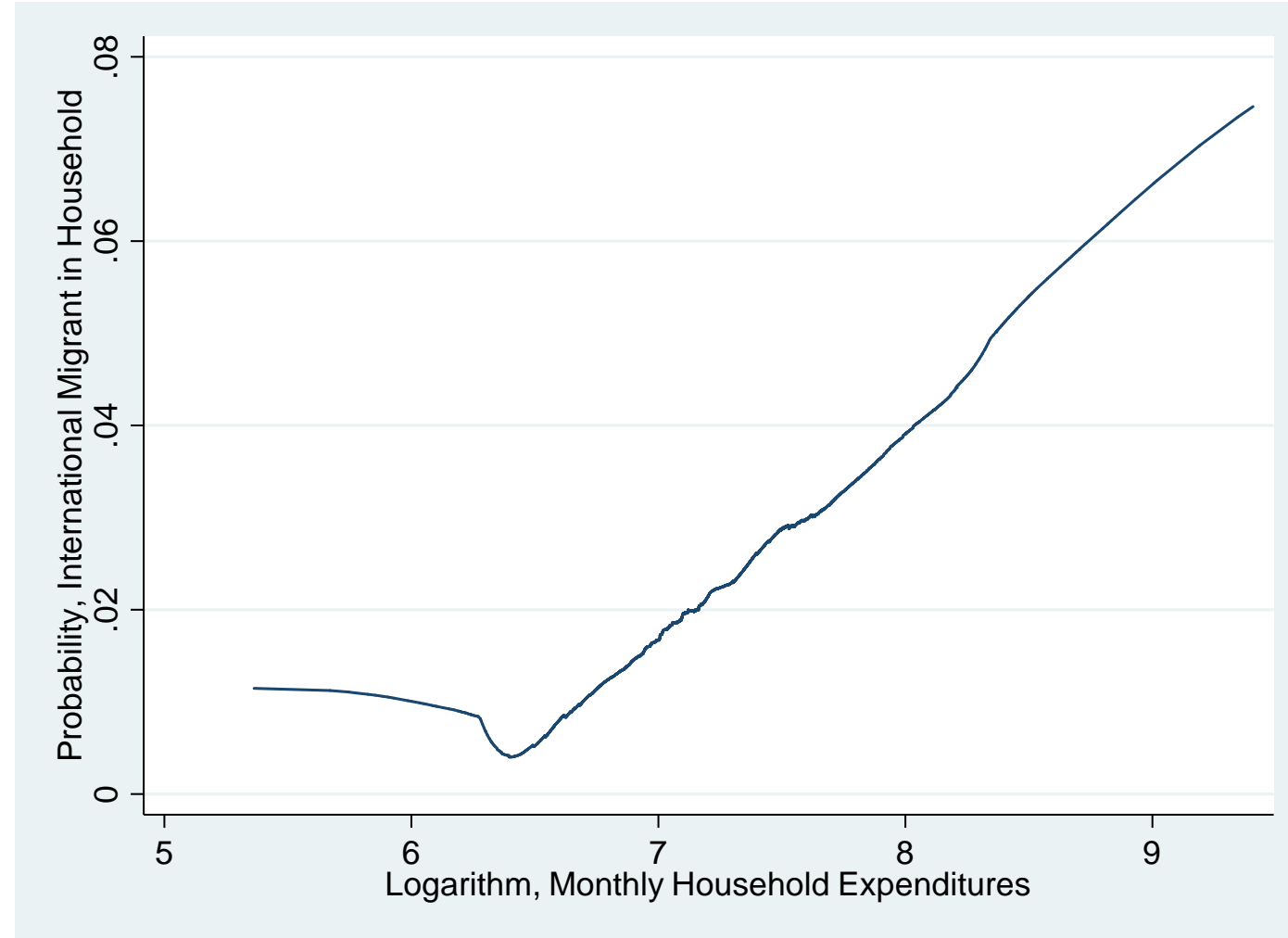


Evidence: Migration and Risk

- “Old” idea: Migration advantageous to rural households because covariance of incomes lower than for local off-farm labor (e.g. Rosenzweig and Stark, 1989)
- Poor potential migrants may not leave due to risk at destination (e.g. Bryan, Chowdhury and Mobarak, 2014)
- Yet can be a more complicated relationship
 - Morten (2017) studies how seasonal migration affects risk-sharing in source community in India
 - With more migration, due to covariate risk households might have less need for traditional insurance mechanisms

What about international migration?

- Credit constraints more important for international migration
 - Lots of costs
- So food insecure are less likely to voluntarily migrate





A Further Investment: Migration and Young Child Nutrition

- Nutritional status among young children has been linked to positive outcomes (including wages) later in life (Hoddinott et al., 2008; Gertler et al., 2014)
- Could be improved outcomes from migration through:
 - increased income
 - more decision making power among women, but
 - Decreased time to care for children (negative)
- Mu and de Brauw (2015) show positive impacts on child weights in rural China
- Carletto, Covarrubias, and Maluccio (2011) also find positive impacts on height in Guatemala (US migration)
- Gibson, McKenzie and Stillman (2011b) find opposite in Tonga



Food and Nutrition Security leading to Migration?



- Actual share in population is about stable
- We don't know what the standard errors are on these estimates
 - My guess is that they are pretty large
- Since food insecurity not changing, hard to see how migration affects it in the aggregate



Nutrition Security

- More questions than answers
- How do migrant diets change when migrants leave?
 - Migrant diet- de Brauw, Mueller, and Woldehanna (2017)
 - But may be different in international migration/richer countries
- How do diets change in the source household?
 - One less mouth to feed
 - Very little evidence on this point but likely related to income (again)



One final point: Food and nutrition security among people or places?



With substantial international migration, changes in food security among people may be different than for country as a whole



Conclusion- More avenues for research

- Valuable to place more thought about how voluntary migration affects food security and vice versa
- Would be great to understand whether the food insecure are constrained against migrating
 - Certainly true in NW Bangladesh, for example (Bryan, Chowdhury, and Mobarak, 2014)
- What are implications of migration for food systems?