

Rural Household Heterogeneity in Access to Assets, Inputs and Markets: A Cross Country Comparison

<http://www.fao.org/es/ESA/riga/>

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Outline

- Main features of RIGA database
- Descriptive analysis
- Examples of policy ‘questions’/shocks
 - Success in farming/commercialization
 - Impact of high food prices
- Can we use all this for modeling?

RIGA project - Approach

- Joint effort of FAO, World Bank & American University
- Household-level data
 - Income aggregates
 - Household characteristics
- Individual-level data
 - Wage employment
 - Individual characteristics

The RIGA Database (Nov. 2008)

AFRICA

- > Ghana 92 & 98
- > Malawi 04
- > Madagascar 94
- > Nigeria 04

ASIA

- > Vietnam 92 & 98
- > Nepal 96 & 04
- > Indonesia 93 & 00
- > Bangladesh 00
- > Pakistan 91 & 01

LAC

- > Ecuador 95 & 98
- > Panama 97 & 03
- > Guatemala 00
- > Nicaragua 98 & 01

E. EUROPE/C. ASIA

- > Albania 02 & 05
- > Bulgaria 95 & 01
- > Tajikistan 03

Descriptive analysis

- Characterise rural household heterogeneity
 - Income sources
 - Assets (labor, education, land, livestock)
 - Inputs (fertilisers, pesticides, mechanisation)
 - Services: TA, credit
 - Output markets
- BY: urban/rural; Gender; (land) rich/poor; across countries
- Limitations
 - Correlations, not causality
 - Demand and supply side effects

Income Aggregates: *Sources of Income*

Off-Farm

- Wages
- Self Employment
- Transfers
- Other

On-Farm

- Crop
- Livestock

Income Aggregates:

Wage Income and Transfers

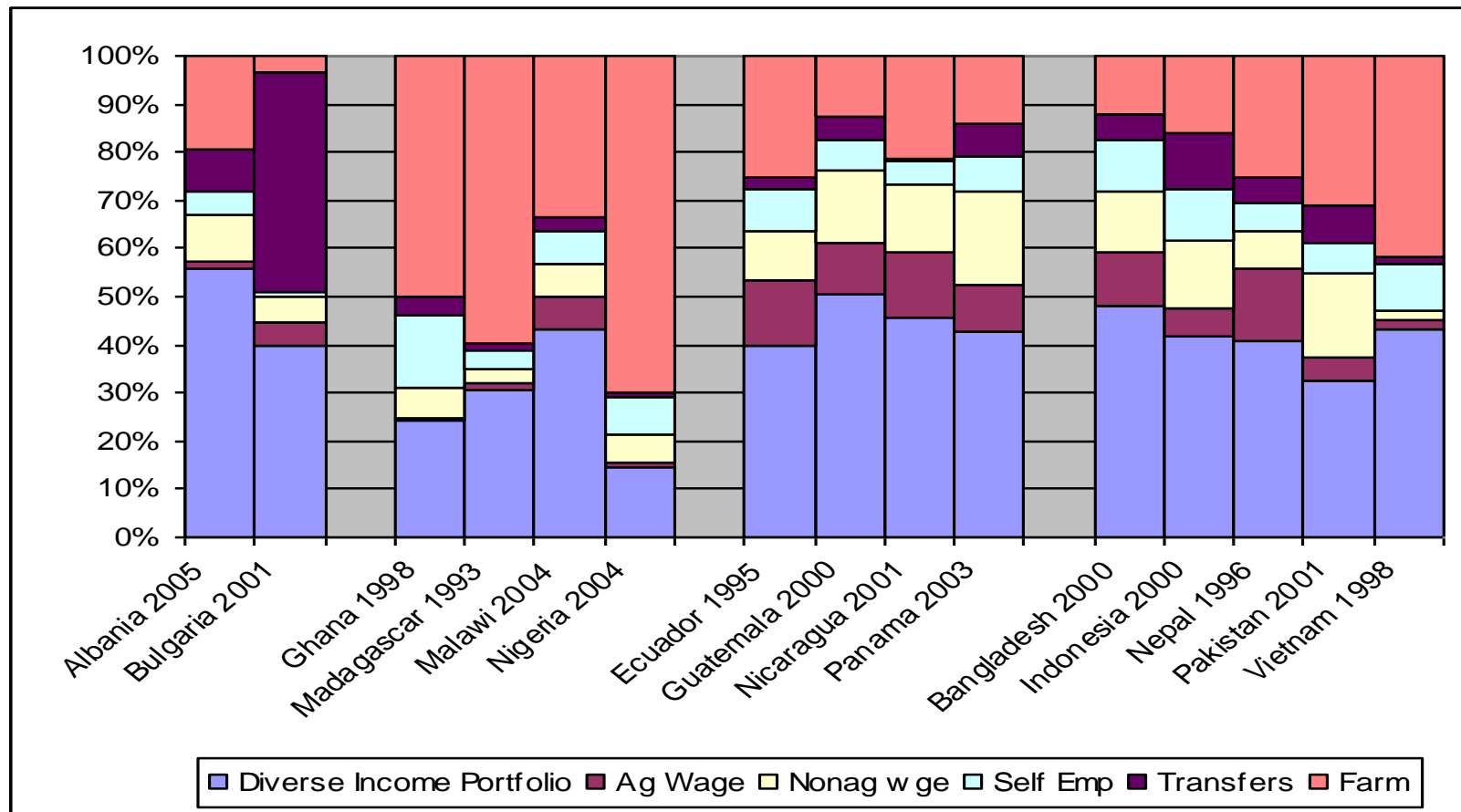
- Wages: Agricultural & Non-Agricultural
 - All Jobs Held, Previous 12 months
 - Industry: UN ISIC Classification & Skill Level: ILO ISCO
 - Agriculture, Forestry, Fishing
 - Mining
 - Manufacturing
 - Utilities
 - Construction
 - Commerce
 - Transportation, Communications & Storage
 - Finance and Real Estate
 - Services
 - Miscellaneous
- Transfers: Public and Private

Income sources

- Diversification is the norm
- High shares of farm specialization in our African countries
- Association with welfare levels: positive for non-ag wage and self-employment; negative for ag wage and mostly negative on-farm
- Non-farm inequality increasing

Income Aggregates: *Descriptive Results*

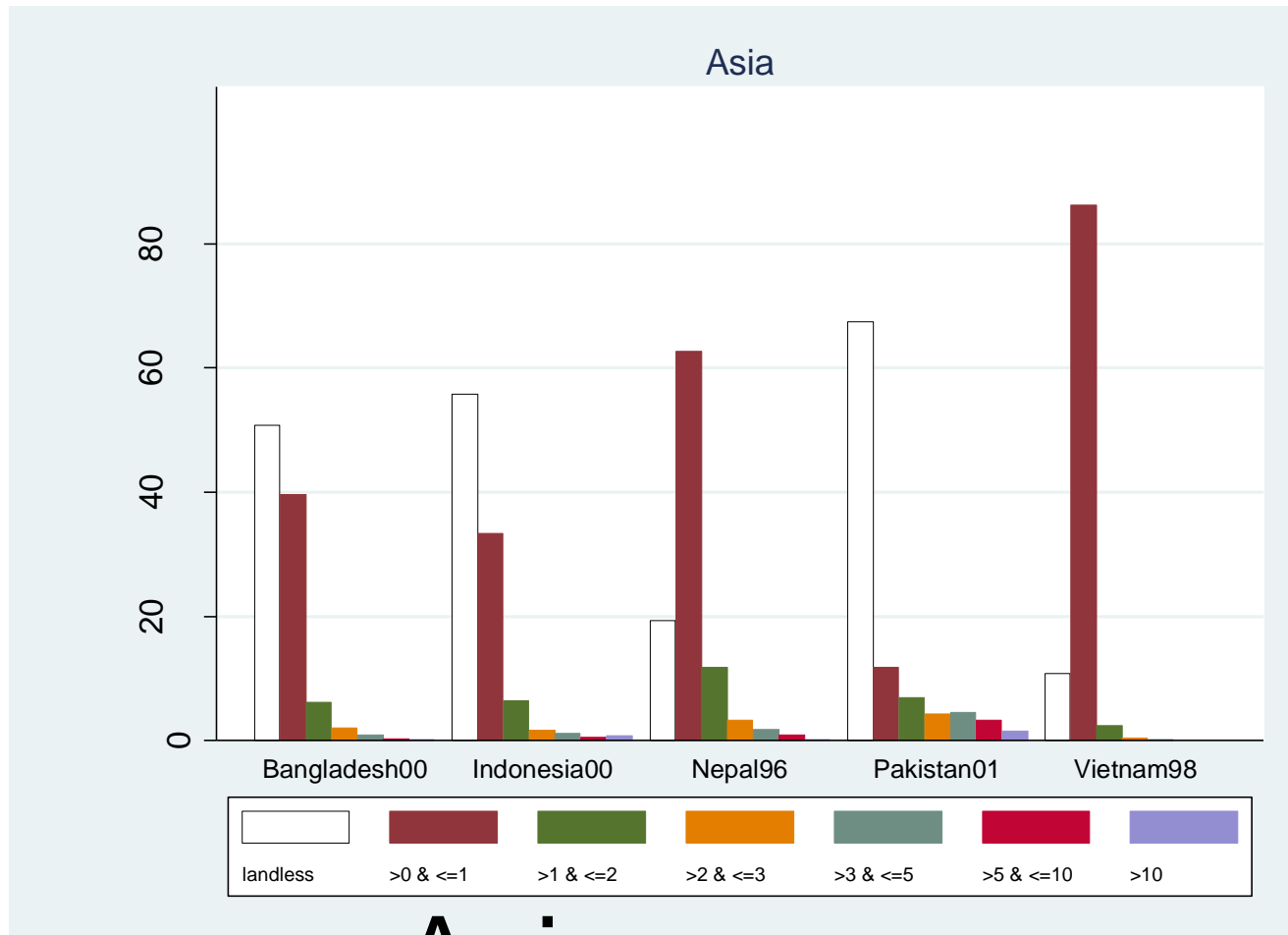
Diversification and Specialization



Land

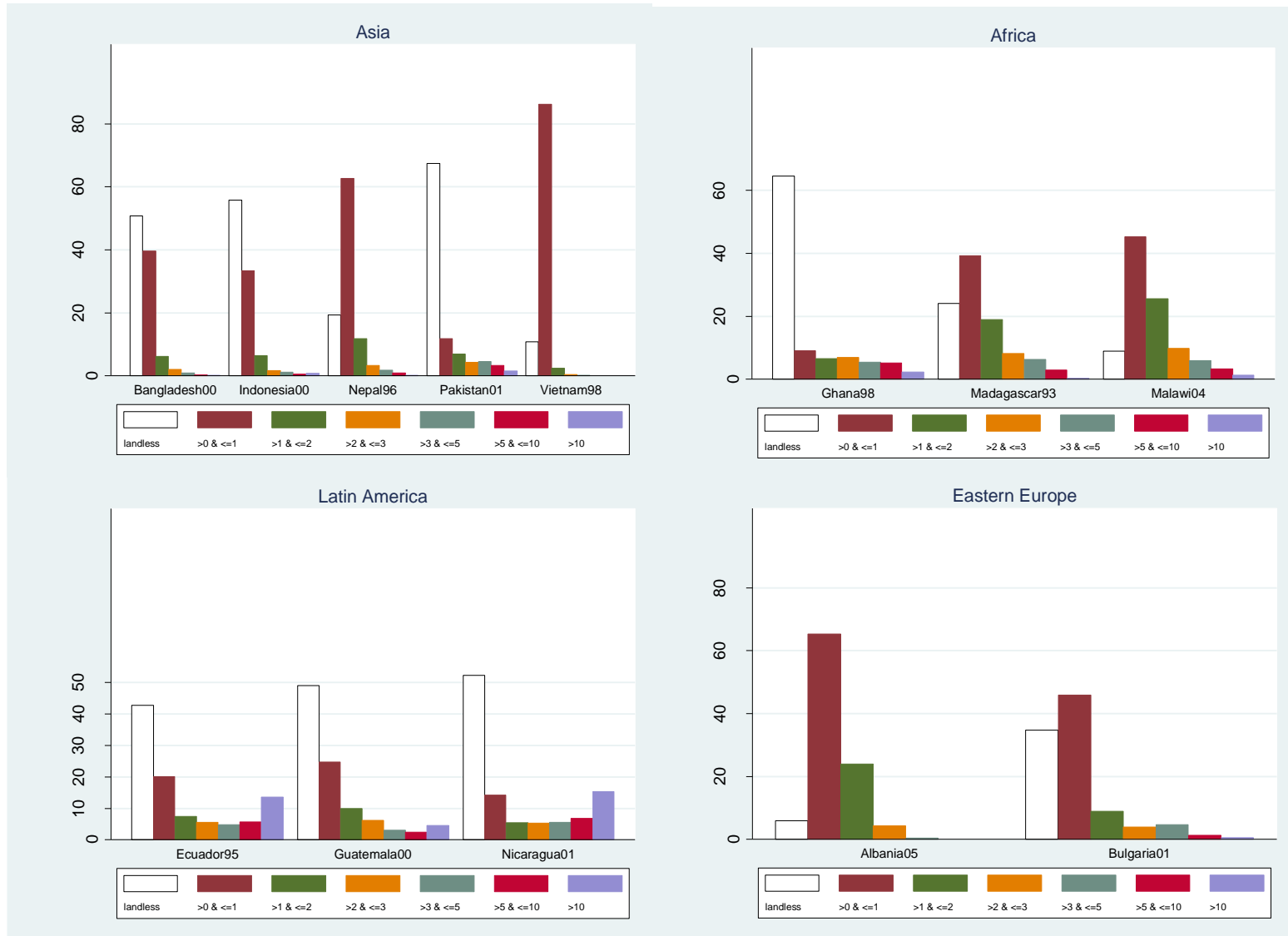
- A population of smallholders
- Land concentration is the rule
- Relationship with overall welfare mixed
 - Other assets are also important
 - Wealthier ag. hh's still own much land
- Forms of land access other than ownership are important

Land: A population of smallholders

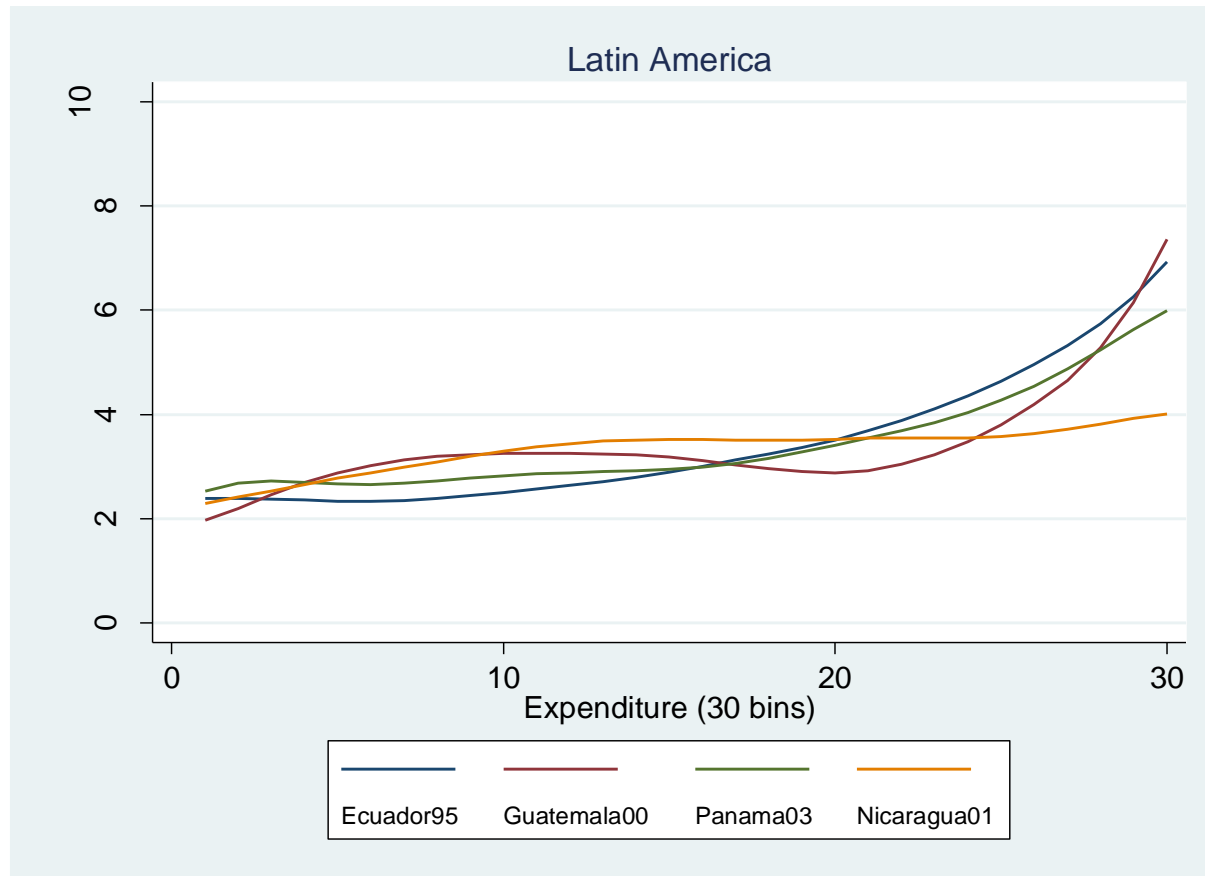


Asia

Land: A population of smallholders

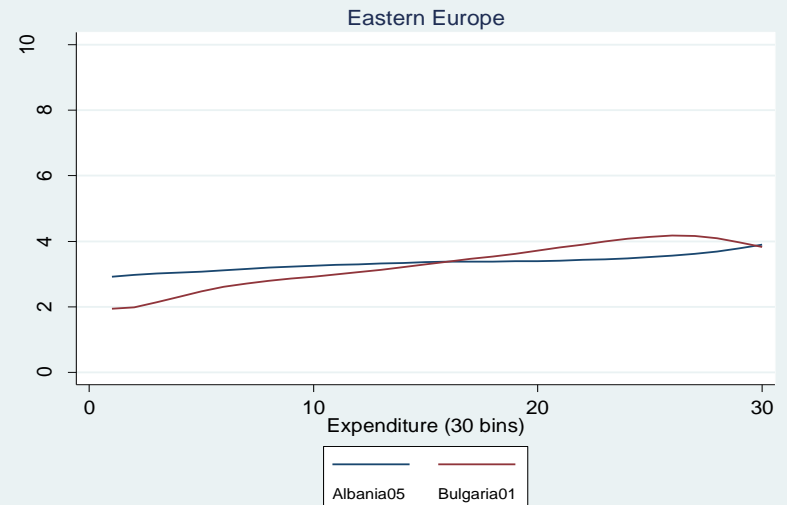
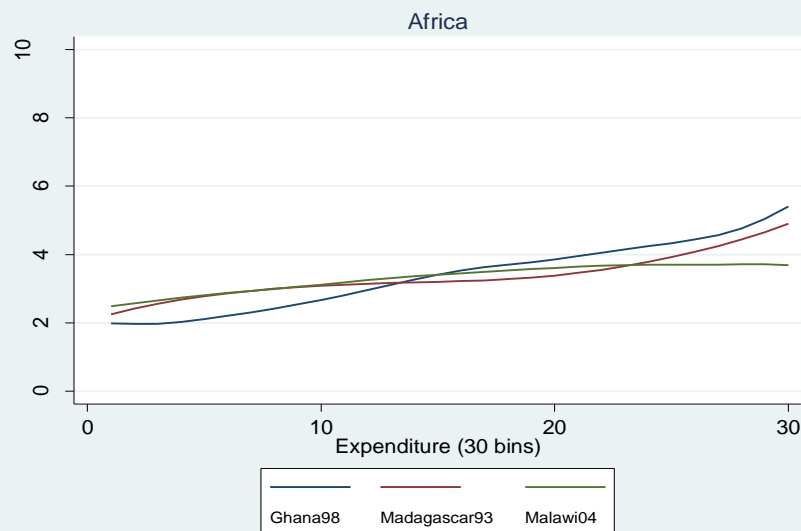
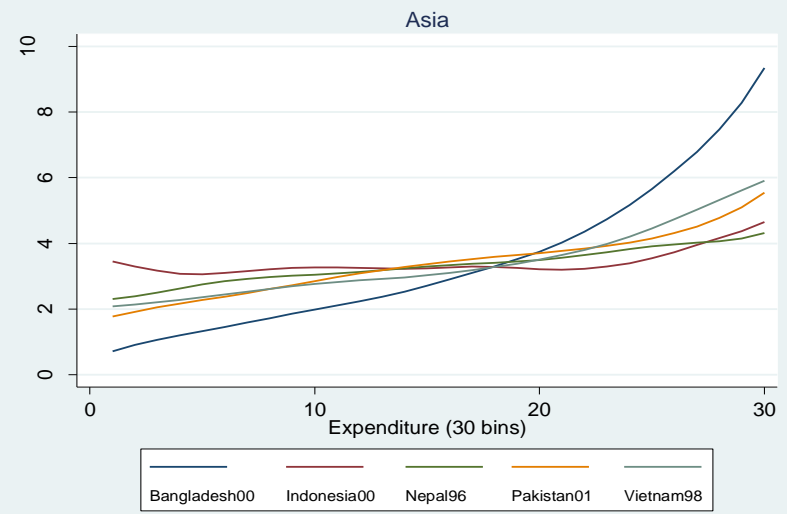
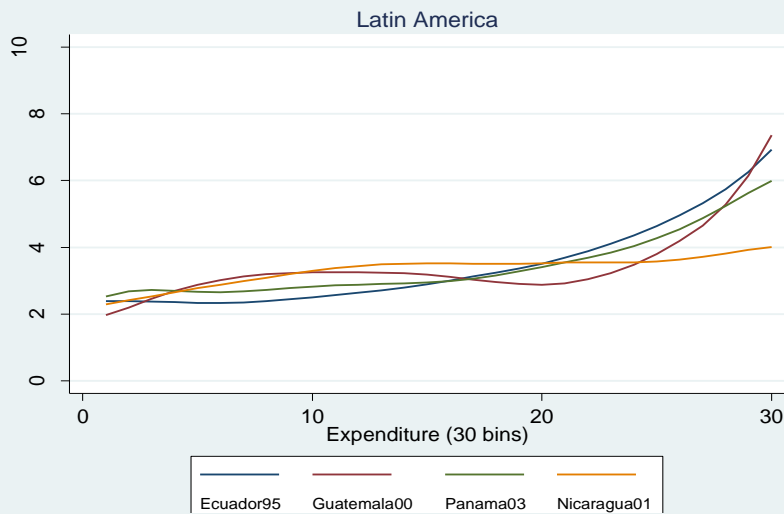


Land concentration and welfare



Latin America

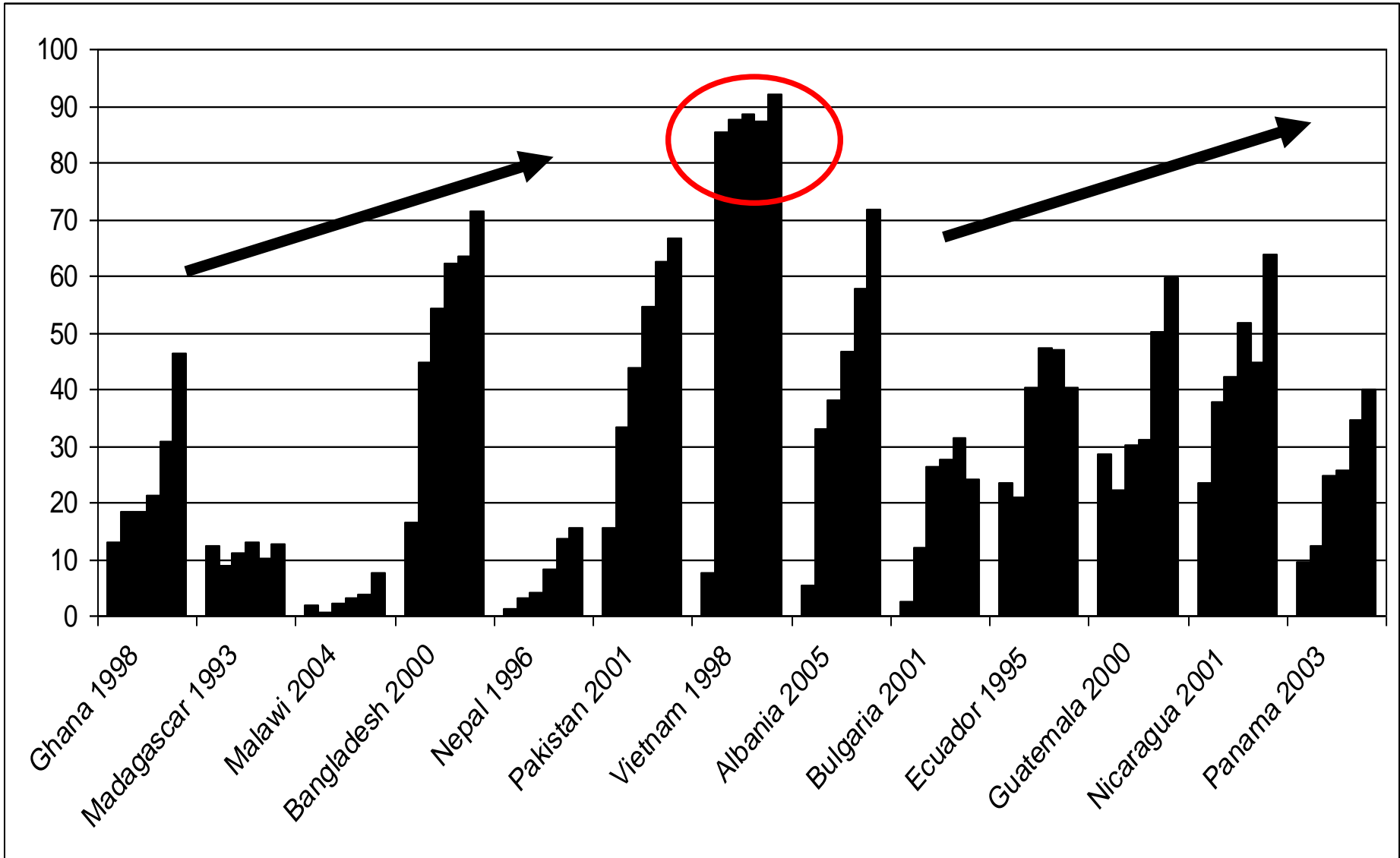
Land concentration and welfare



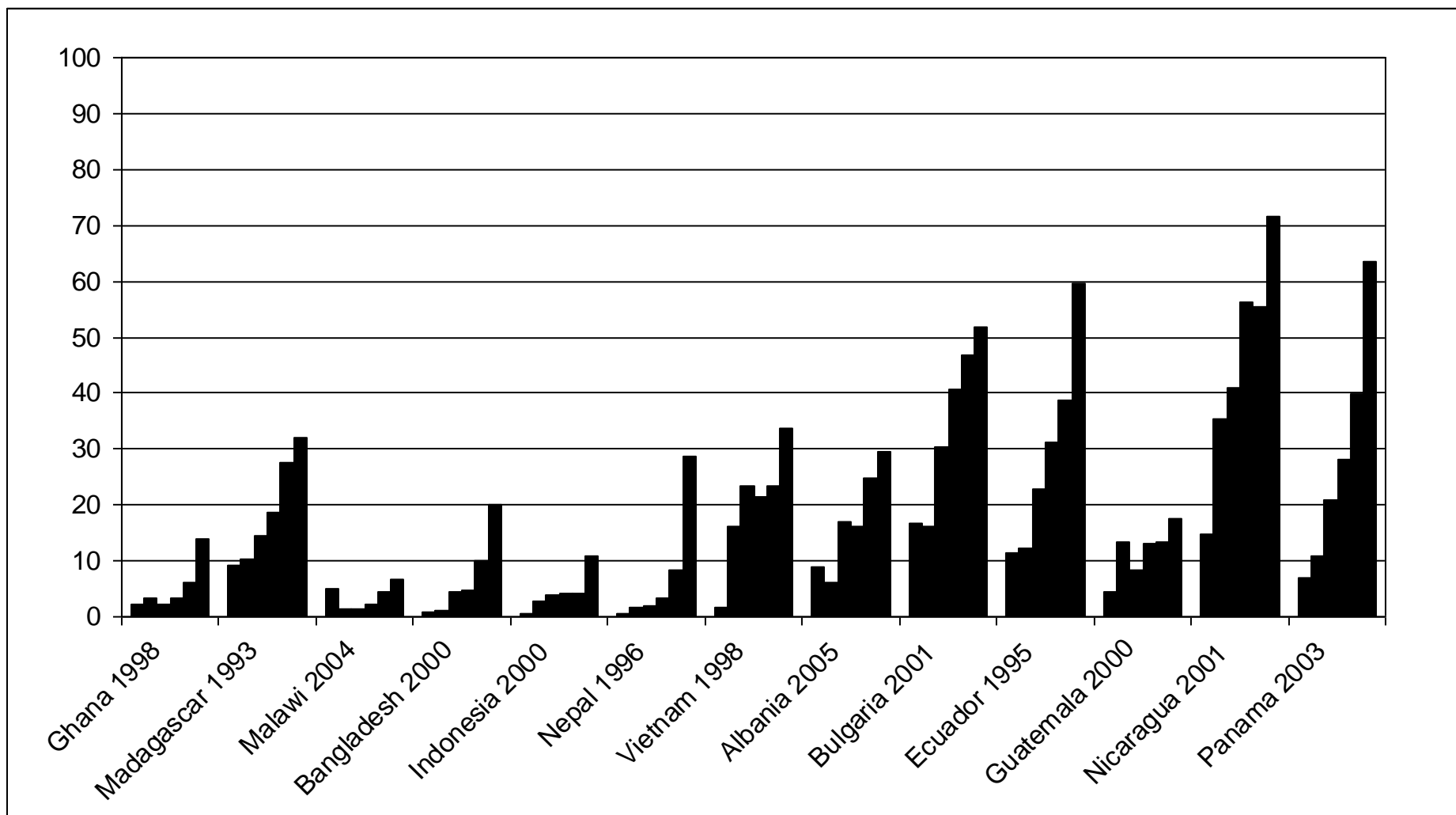
Access to agrarian 'institutions'

- Heterogeneity within ag and rural
- Low access to/utilization of basic assets, inputs, institutions
- Association between weak access to assets/inputs/services and weak market access
- Difficult for ag-based pro-poor strategies to work if imbalances not addressed

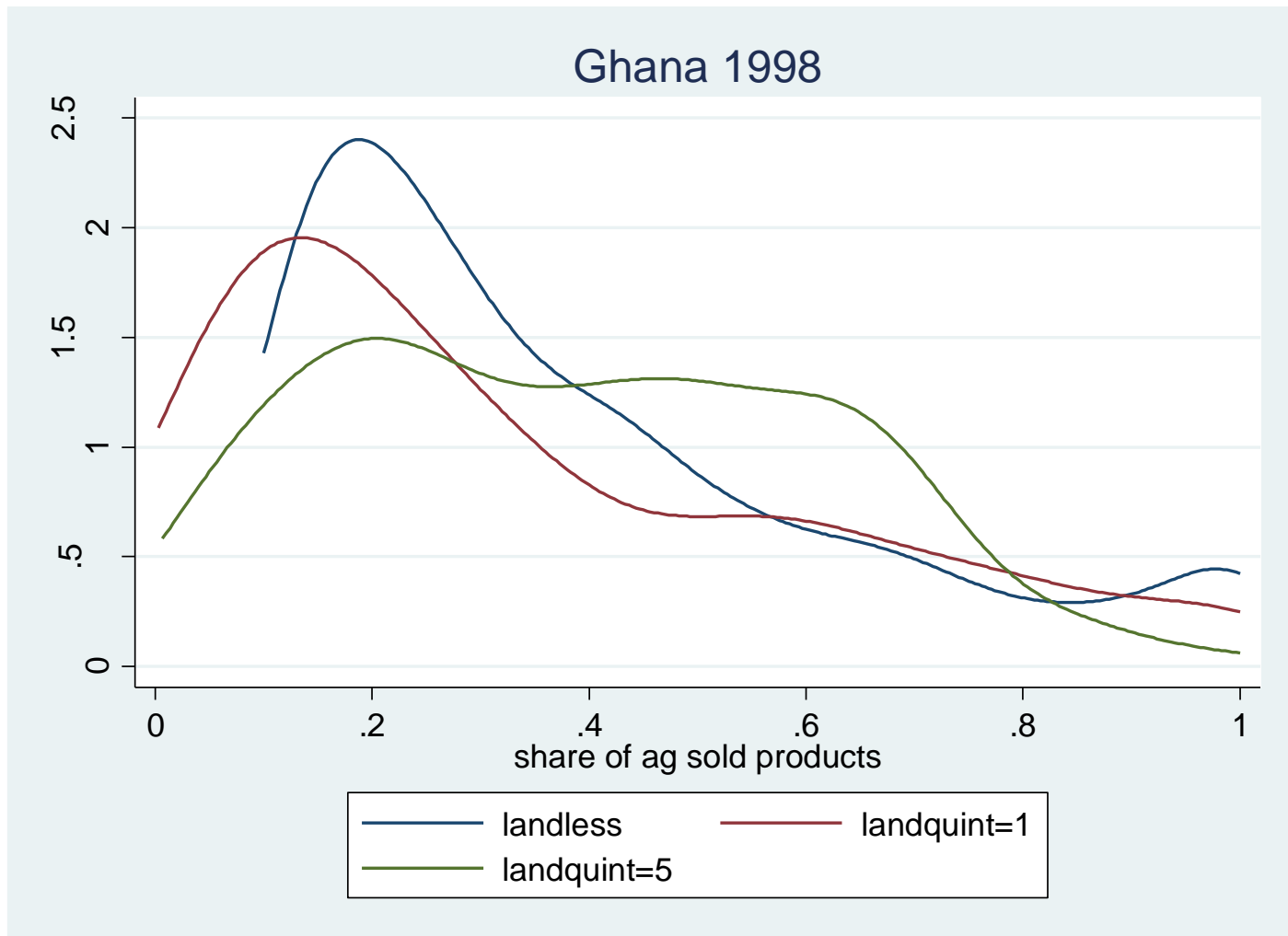
Use of pesticides by land quintile



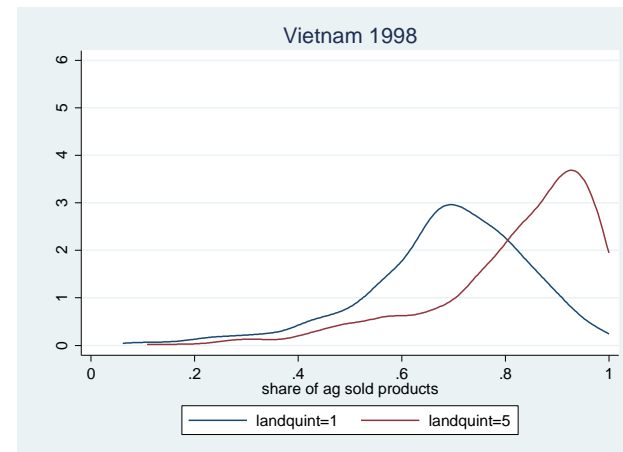
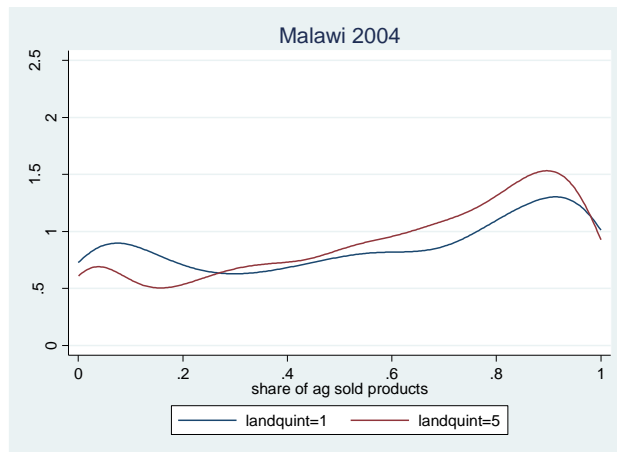
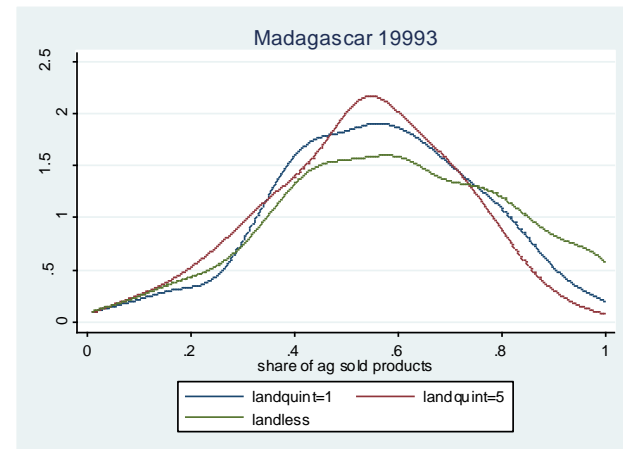
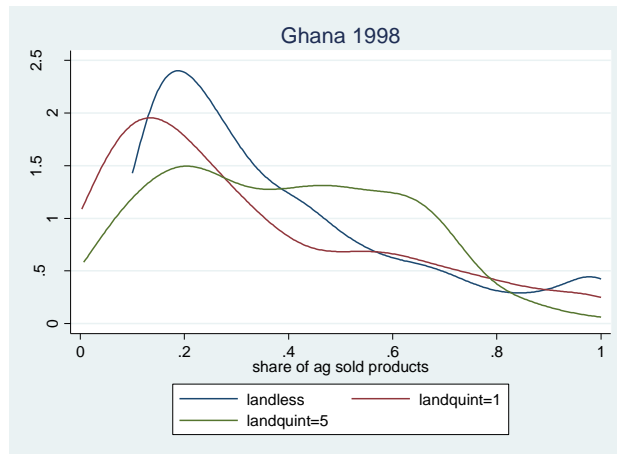
Use of mechanization by land quintile



Share of ag production sold



Share of ag production sold



Correlates of market orientation as measured by the Log Value of Crop Sold

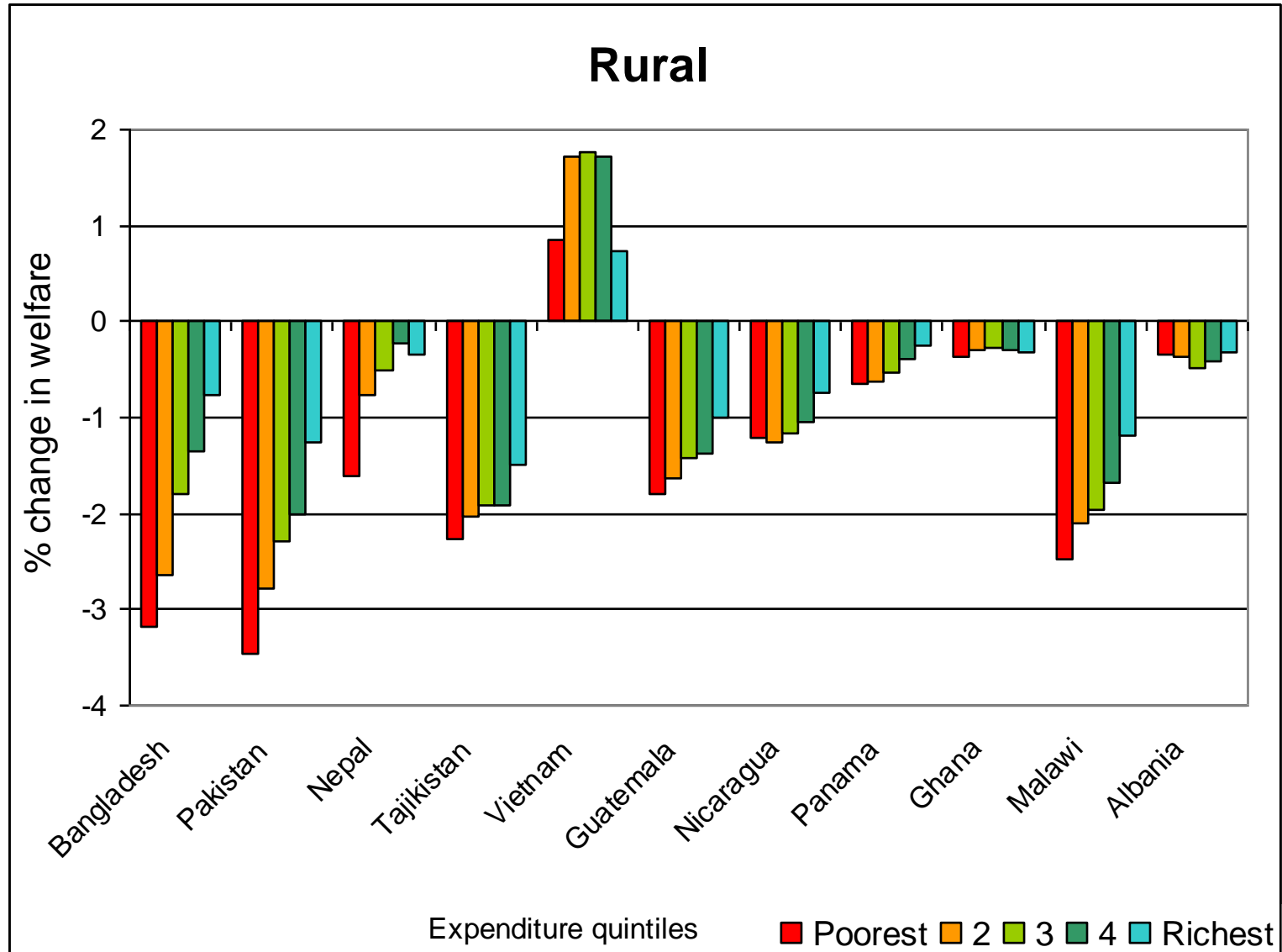
	Fertilizers	Pesticides	Mechaniz.
Selection	12/0 <i>(12)</i>	10/0 <i>(11)</i>	10/0 <i>(11)</i>
Log value	4/2 <i>(12)</i>	6/0 <i>(11)</i>	9/0 <i>(11)</i>

Note: Positive and significant/Negative and significant
(number of country regressions including the variable)

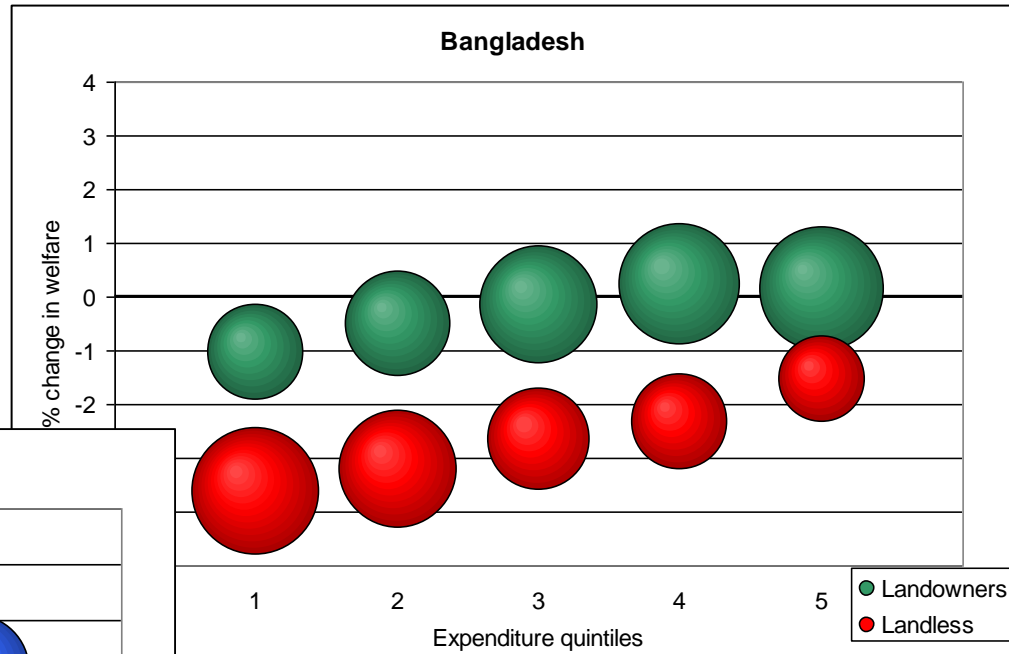
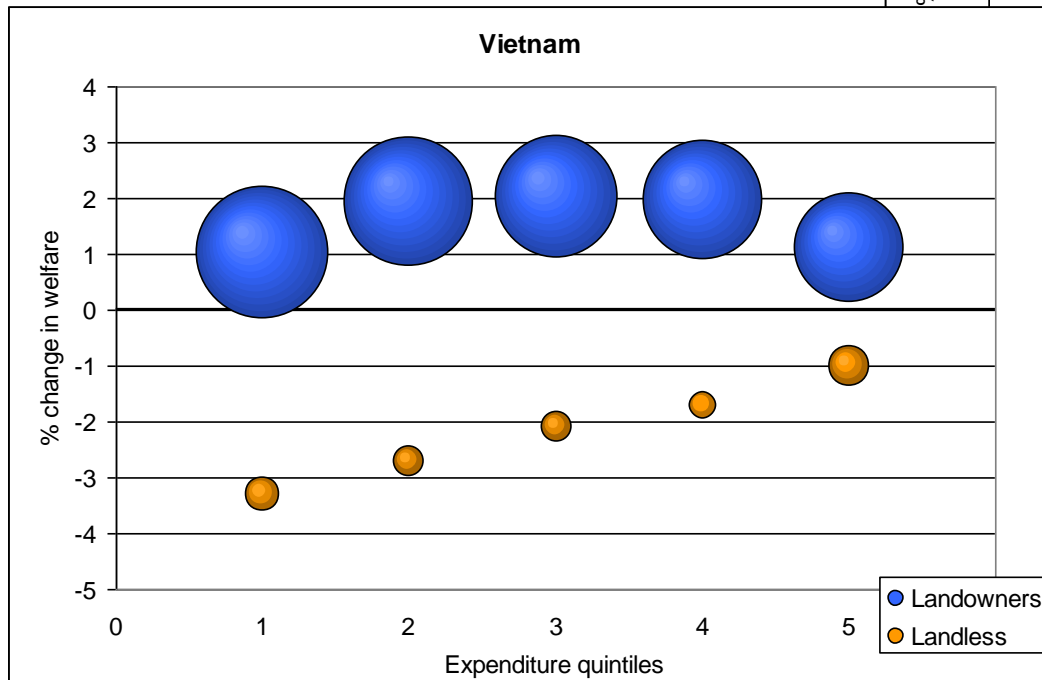
Impact of high food prices

- In the short term, poorer households and households with limited asset endowments and access to agricultural inputs are hit the hardest by an increase in the prices of major tradable staple foods
- Heterogeneity in impacts within the poorer strata

Welfare impact of high food prices

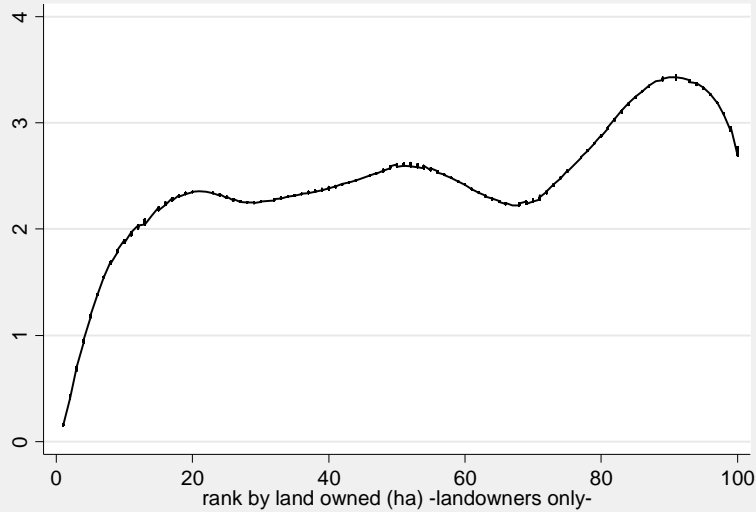


Land owners vs. Landless

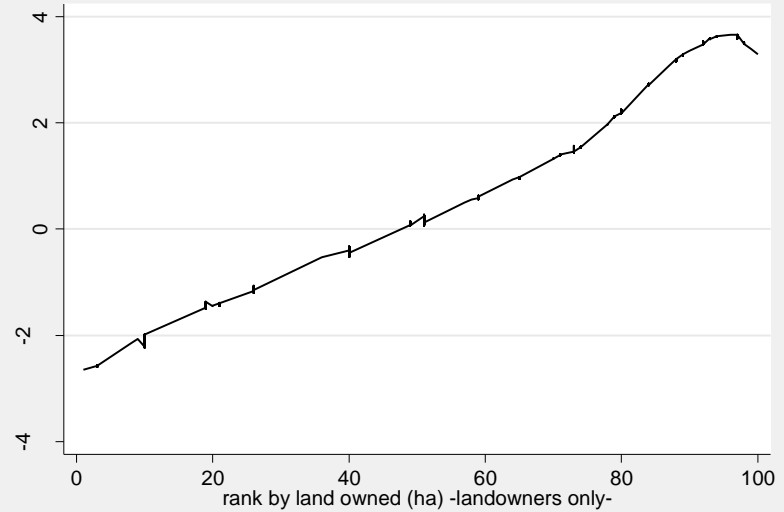


Correlates of welfare losses/gains

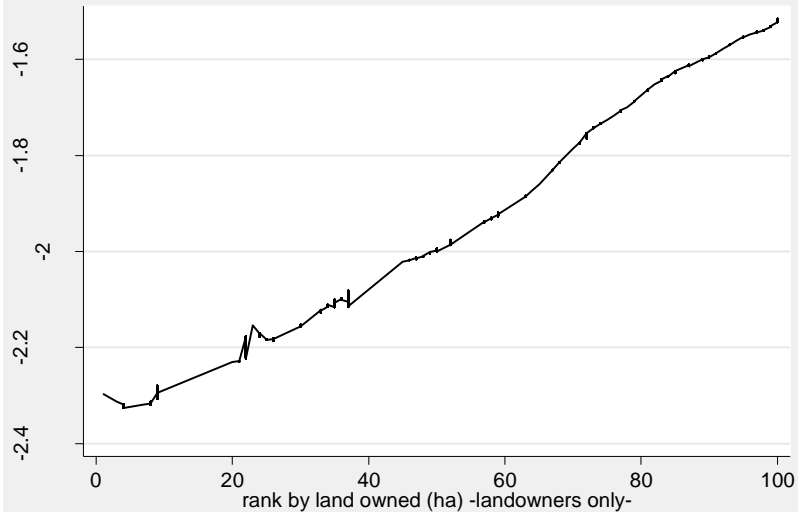
Vietnam 1998 -Rural-



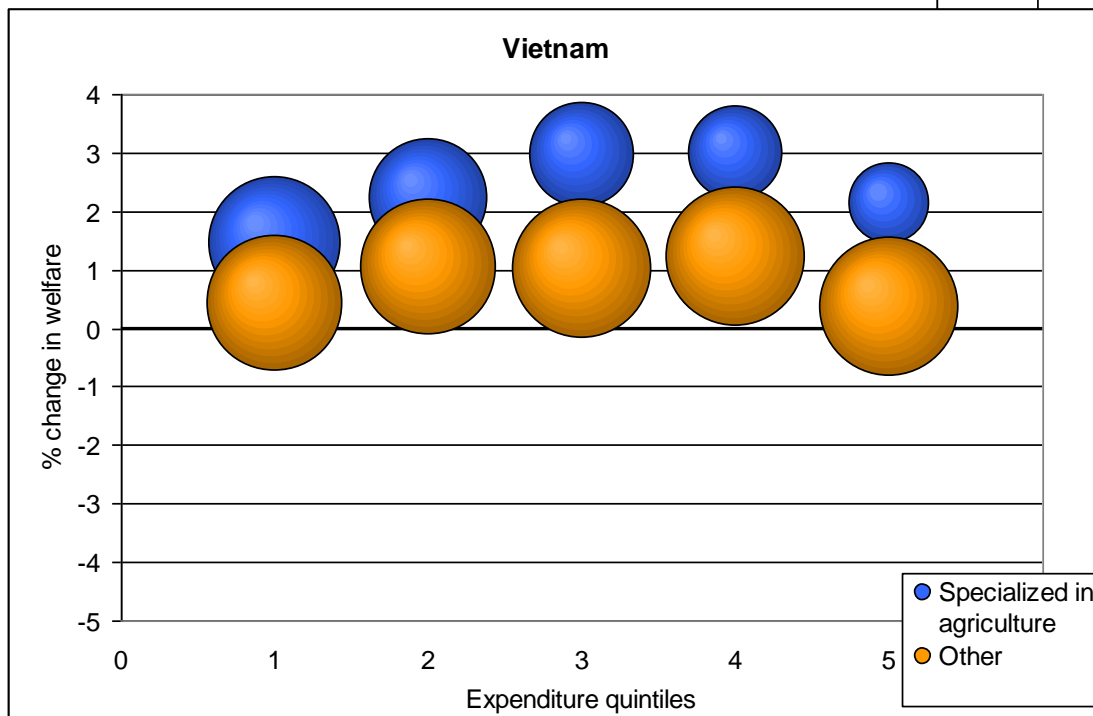
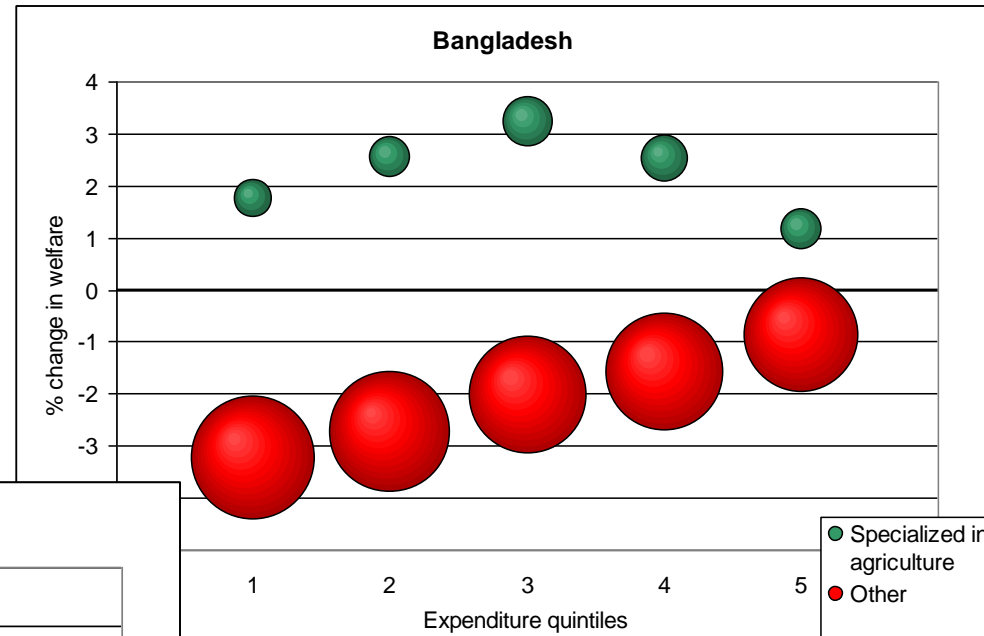
Pakistan 2001 -Rural-



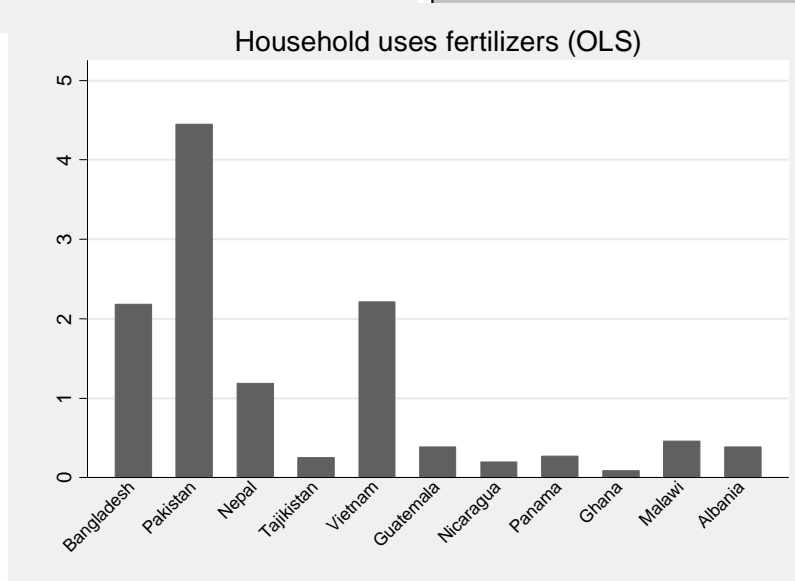
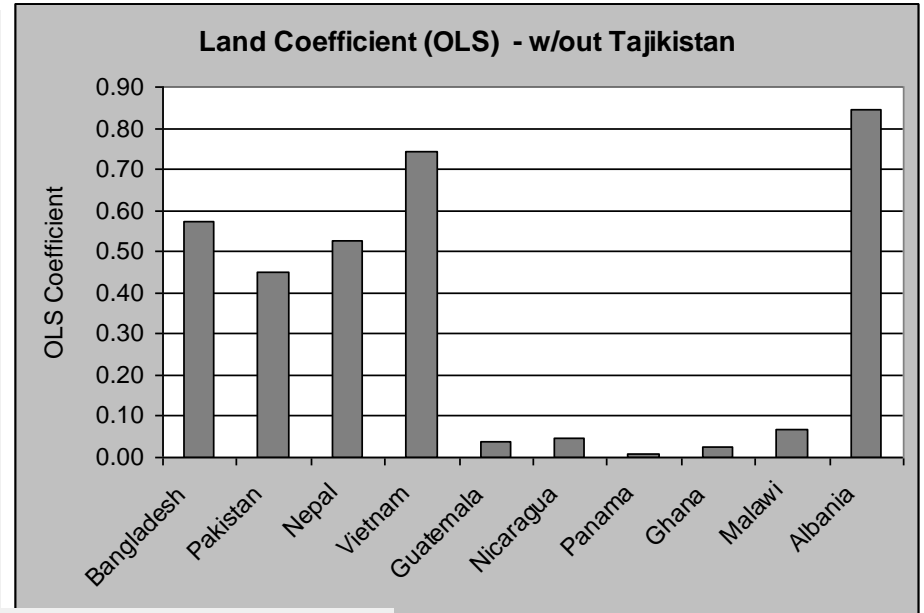
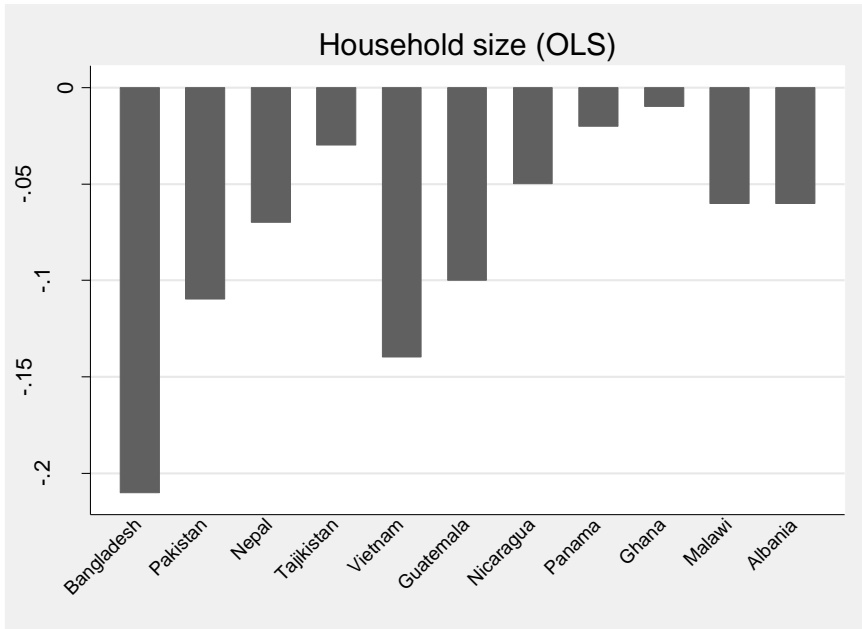
Malawi 2004 -Rural-



Ag specializers vs. Others



Correlates of welfare losses/gains



Conclusions / 1

- Heterogeneity within and across countries
- Predominance of smallholders
- Concentration of land in wealthier hh's
- Dismal level of access to basic inputs and agricultural services
- Importance of access for outcomes of interest (farming; impact of price shock)

Conclusions / 2

- The policy agenda may not be new, but is still valid
- Difficult for ag-based pro-poor strategies to work if imbalances not addressed
- Multi-topic surveys unique source for such type of microdata
- Importance/opportunity to include in modeling