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Trade Liberalisation and Poverty: What do we know?

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Trade Liberalisation

- generally stimulates growth
- and through it poverty alleviation
- BUT
- it creates losers
- some of whom may be or become poor

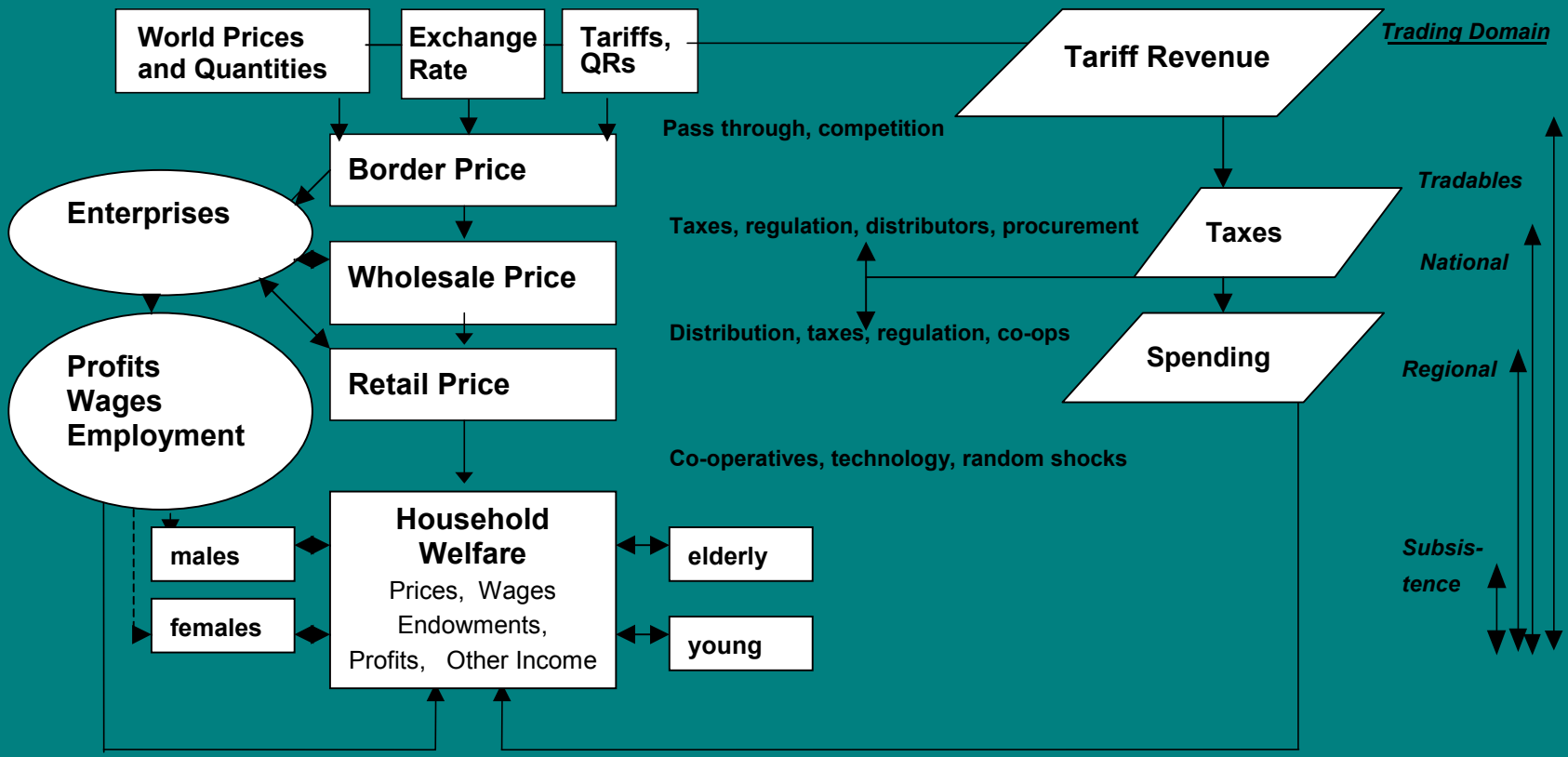
What do we know about these latter - static - effects?

- Conceptual framework
- Some empirical results from the literature
- A case-study of Vietnam

- Growth is probably more important, but
  - Difficult to measure – especially with CGE models
  - Most critiques focus on static effects

Conceptual Framework

Figure 4.2: Trade Policy and Poverty – Causal Connections



Households and Markets

- Do border price shocks get transmitted to poor households?
- Are markets created or destroyed?
- How well do households respond?
- Do the spillovers benefit the poor?
- Does trade liberalisation increase vulnerability?

Wages and Employment

- Does liberalisation raise wages or employment?
- Is transitional unemployment concentrated on the poor?

Government Revenue and Spending

- Does liberalisation actually cut government revenue?
- Do falling tariff revenues hurt the poor?

Households and Markets

- first order approximation of the welfare effect

$$\Delta W = \Sigma_i (q_i - c_i) \Delta p_i$$

Barrett and Dorosh (1996)
Sahn and Sarris (1991)
Thomas et al (1999)

The Transmission of Border-Price Shocks

$$P^m_1 = P_w r(1 + t_m) + \gamma_m$$

P_w is the world price
r the exchange rate
t_m the proportional tariff or tax and
γ_m the transaction costs on importables

$$P^x_1 = P_w r(1 - t_x) - \gamma_x$$

Are markets created or destroyed

- Romer (1994)
  - New technologies
  - Variety of productive activities and commodities
- Consumers also benefit from increased availability
- Discontinuous change
- de Janvry, Falchamps and Sadoulet (1991)
  - Non-tradabilities

How do households respond I

- Affects magnitude not sign
- Production
  - Farm level data show major constraints
  - Absence of key productive assets
  - Capital inputs
  - Less educated
  - Poorer quality land
  - Complementary policies

How do households respond II

- Consumption and Labour Supply
- Friedman and Levinsohn (2002)
- Subsistence activities, wage employment, self employment and consumption jointly determined
- But separability cannot be rejected

Do the spillovers benefit the poor?

- Growth linkages
- Locally produced non-tradeables are important
  - Services
  - Bulky starch items
  - Perishable foods
  - Locally processed foods

Does trade liberalisation increase vulnerability?

- Portfolio choice
  - From subsistence to cash crops
  - Risk aversion
  - Fully informed decisions?
- Variability of existing income sources or prices
  - Can go up or down with openness
  - Poor less well insured
- Poverty traps

Wages and Employment

- Stolper-Samuelson Theorem
- Reserve Army Model
- Segmented labour markets
- Common feature
- Apparently small wage and employment effects

Is transitional unemployment concentrated on the poor?

- Parallel with OECD countries not valid
- Little evidence for developing countries
- Transitional unemployment may be quite long lasting
- Adjustment costs greater
  - The more protected the sector
  - The greater the shock

Trade Liberalisation and Poverty: The Empirical Evidence

L. Alan Winters, Neil McCulloch and Andrew McKay

Working Paper 88

Department of Economics
University of Sussex

Key External Sector Reforms

- Relaxation of controls on trade and introduction of Harmonised System of tariffs
- Regional and multilateral trading agreements
- Unification of multiple exchange rates into one market-based exchange rate
- Relaxation of licensing procedure
- Phasing out of controls on retention and remittance of foreign exchange
- Initiation of an ‘open door policy’ to promote foreign investment

Trade indicators

	Trade as % of GDP	Average Tariff Rate
1991	50.9	..
1992	51.9	10.7
1993	**52.4**	**11.8**
1994	60.6	12.3
1995	65.4	12.3
1996	74.7	12.9
1997	73.9	13.4
1998	**70.5**	**13.6**
1999	79.9	16.3
2000	..	16.2

Source: GSO statistics, CIEM (2001)

Real Price Changes 1993-98

Goods / Services	Change (%)*	Goods / Services	Change (%)
Mackerel	76.9	Chicken	11.8
Sea shrimps	33.3	Petrol	10.4
Paddy	26.2	Soya beans	-3.7
Spring rice	26.1	Pork	-4.0
Haircut	16.5	Sugar	-6.3
Cotton fabrics	13.8	Woollens	-38.0

Source: Calculations based on GSO statistics.
Note: * Change between 1993 and 1998.

Dynamic Trade Sectors

Exports	Increase (US$m)	Imports	Increase (US$m)
Footwear	1071	Textiles	633
Garments	773	Electrical machinery and parts	522
Rice	517	General machinery	301
Electrical machinery and parts	503	Iron and steel	301
Coffee	490	Plastic	281
Petroleum	338	Special machinery	268
Seafood	292	Leather	214

Source: Calculations based on World Bank Mirror Statistics
Note: Increase between 1993 and 1998.

Labour demand per $1 of trade
Direct labour coefficients

	EX93	IM93	NET93	EX98	IM98	NET98
Unskilled	0.1415	0.0859	0.0556	0.1270	0.1009	0.0261
Medium-Skilled	0.0285	0.0330	-0.0045	0.0275	0.0313	-0.0038
Highly-Skilled	0.0015	0.0027	-0.0012	0.0015	0.0027	-0.0012
Total	0.1715	0.1216	0.0499	0.1560	0.1349	0.0211

Note: calculations based on adjusted data

Multinomial Logit Model

The model analyses probability of being in one of 4 possible outcomes:

1. being poor in both periods
2. being non-poor in 1992-93 and becoming poor in 1997-9
3. being poor in 1992-93 and becoming non-poor in 1997-98
4. being non-poor in both periods; is expressed as:

$$\text{Prob}(Y_i = j) = \frac{e^{\beta_j' x_i}}{\sum_{k=1}^{4} e^{\beta_k' x_i}}, \; j = 1,2,3,4$$

Relative Risk Ratios: Ratio of the probability of each outcome relative to the probability of the base category (Y = 1):

$$\frac{\Pr ob(Y = 2)}{\Pr ob(Y = 1)} = e^{\beta^{(2)} x}$$

Poverty Dynamics: Non-Trade

The following variables were significant in explaining movements out of poverty:

Increase probability

- White-collar occupation of household head
- Education of household head
- Spouse educated to technical level
- Household head being older
- Access to food shops, electricity, road, clinic
- Residing in urban area
- Residing in Central Highlands, South East, Mekong or Red River Deltas
- Longer period between the two surveys
- Interviewed in the last quarter of survey

Decrease probability

- Unemployment of household head
- Having young children
- Belonging to a non-Kinh non-Chinese ethnic group
- Access to a post office

Multinomial Logit Model (RRRs)

	Prob. of escaping from poverty	Prob. of falling into poverty
Quantity of rice production	***1.75	*0.51
in Mekong River Delta	**0.60	1.51
in Red River Delta	**0.85	1.15
Quantity of coffee production	***2.32	1.00
Quantity of fertiliser for rice	***1.46	1.13
Quantity of fertiliser for non-rice	*1.70	*0.79
Ratio of household members working in export to no. of adults (1)	***1.25	*1.19
Change in ratio	**1.17	1.06

Note: *** significant at 1% level; ** significant at 5% level; * significant at 10% level.
(1) The export sector includes seafood, food processing, garment, and shoes (+rubber and plastic products).

The Benefits of Modelling Trade

	pseudo-R^2	%correct predictions	predicted no. in poverty in 1998 (of 4302) (σ)
without trade variables	**0.230**	**59.90**	**1624**
with trade variables	**0.266**	**61.5**	**1374**

(σ) Predictions of number in poverty from 'preferred equation' and from that equation with trade variables' co-efficients set at half their estimated values.

Trade Liberalisation and Poverty Dynamics in Vietnam

Yoko Niimi, Puja Vasudeva-Dutta
and L. Alan Winters

Working Paper

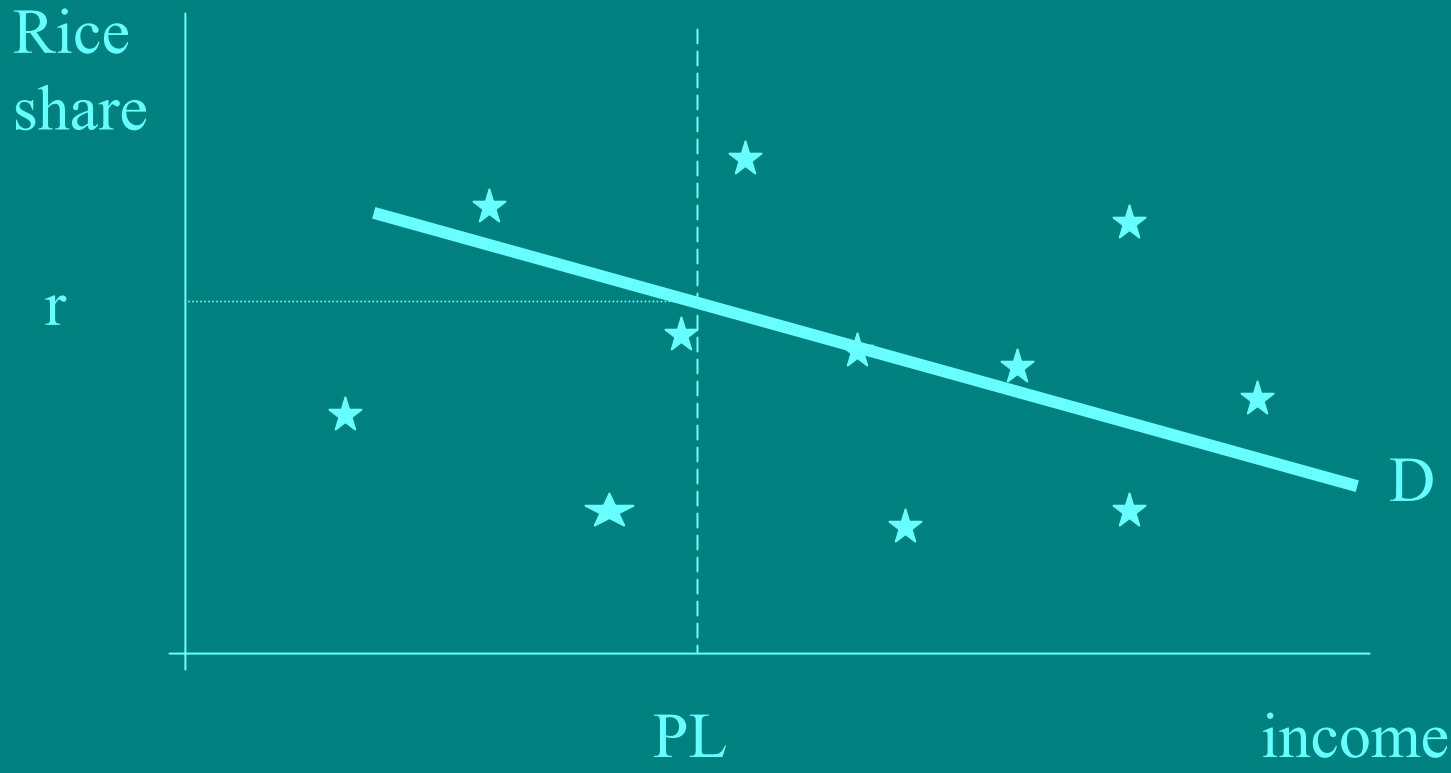
Poverty Research Unit, Sussex (PRUS)
March 2003

Household Consumption I

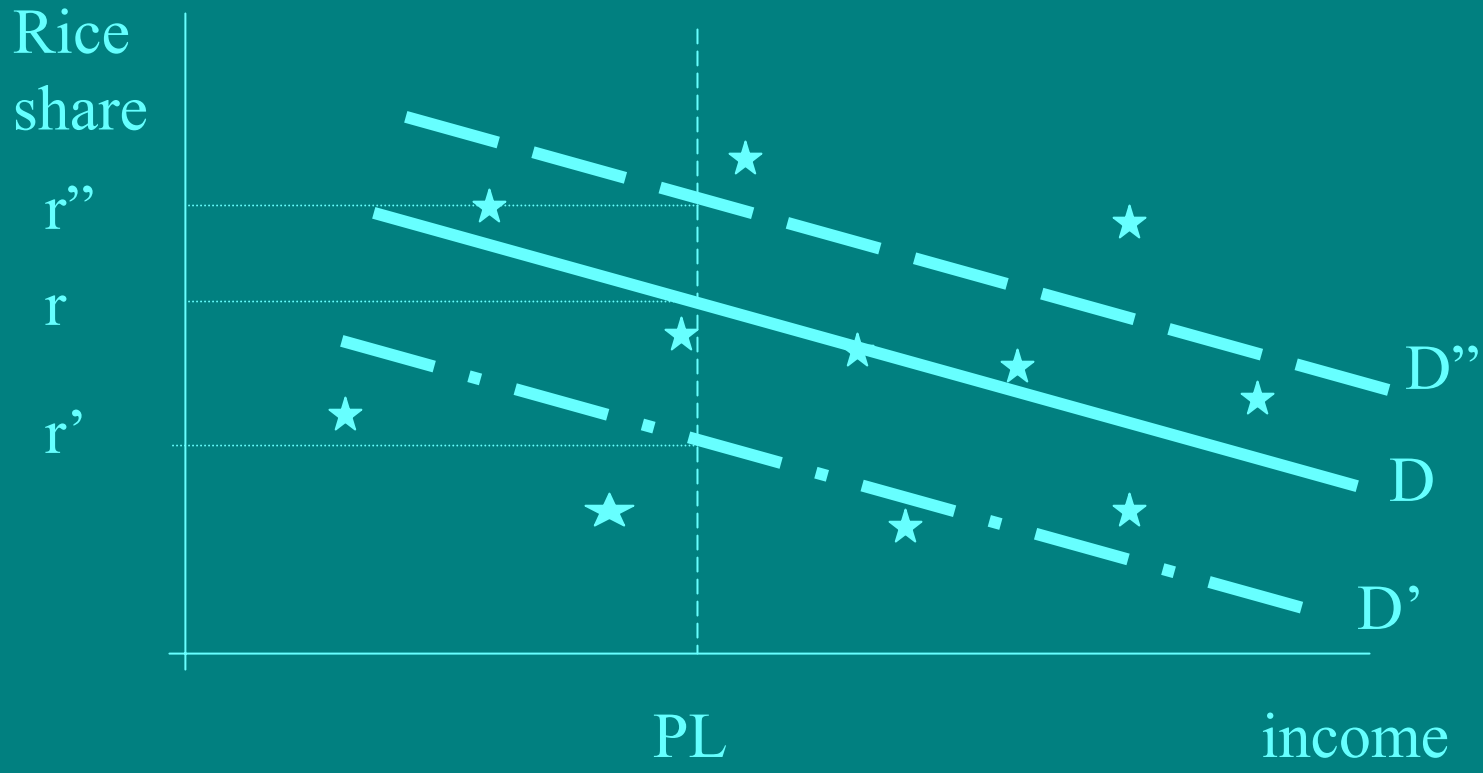
- Regress rice share on:
  - Demographics, geography, ethnicity, infrastructure and seasonality

$$w_{ht} = \alpha_t + \beta_t \ln x_{ht} + \sum_{m=1} \gamma_{mt} Z_{mht} + u_{ht}$$

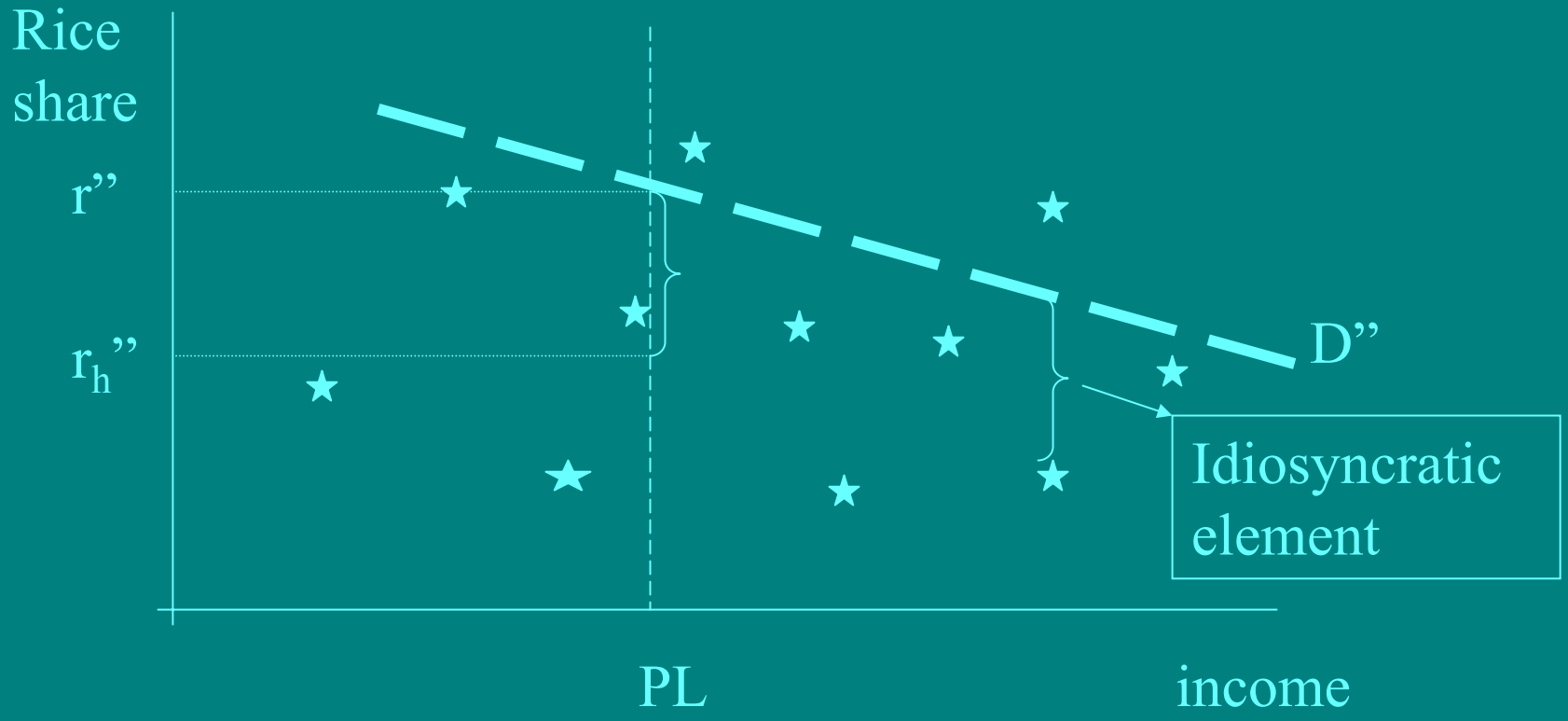
Household Consumption II



Household Consumption III



Household Consumption IV



Rice shares

	Official Basket	Mean from VLSS	Predicted by equation
1993	0.260	0.271	0.267
1998	0.284	0.200	0.240

Differences to Poverty Dynamic

- With predicted shares: 21 households
- With predicted shares plus residuals
  - 39 households (<1%)

- Regression results – no change

Conclusions

- The reform process in Vietnam has resulted in significant changes in the economy.
- Exports and imports have boomed during the 1990s and the prices of some tradables have increased strongly.
- Trade reforms may have stimulated the demand for labour and increased net labour income a little.
- Sectors of major export and import growth have had identifiable consequences for household poverty dynamics.
- Consumption differences hardly matter