



# *Does trade matter?*

## *Impact channels from trade to poverty and inequality*

Sylvain Chabé-Ferret  
Julien Gourdon

IDDDRI and CATE conference on  
WTO's contribution to sustainable development  
Paris, 20 & 21 of October, 2005

## Introduction

- Context: WTO negotiations and the Doha development round
- Consequences of trade liberalization in developing countries
  - Growth opportunities (long term)
  - Poverty and inequality (short to medium term)
  - Normative problem
  - Equity/efficiency trade-off?
- Focus on trade liberalization, poverty and inequality
- Do not deal with trade and growth

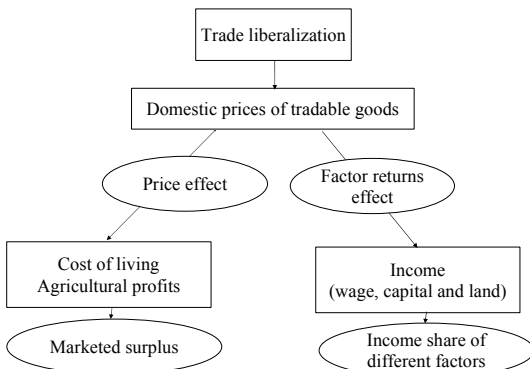
## Presentation outline

- Definitions
- Theoretical channels
- Micro approach
  - Country specific
  - Mainly insights on agricultural reforms
  - Based on household surveys
  - Ex-ante studies
- Macro approaches
  - Wage inequality in industrial sectors (repeated household surveys or cross country)
  - Income inequality (cross country)
- Conclusions

## Definitions

- Poverty
  - Part of the population with real income below a given threshold
  - For example: 1 or 2\$PPP/day
- Inequality
  - Relative income distance between members of society
  - Gini coefficient, wage gap (skilled/unskilled)
- Trade liberalization
  - Unilateral (tariffs, export taxes or subsidies)
  - Multilateral (developed countries agricultural policies (DCAP))

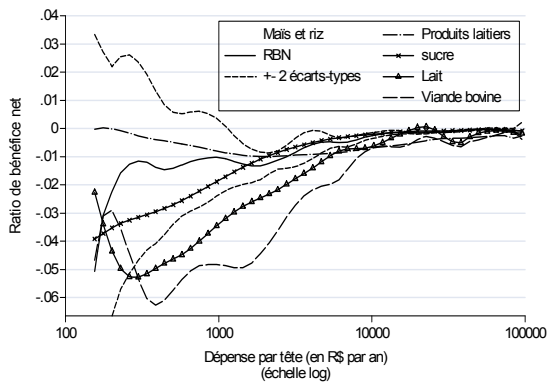
## Theoretical channels



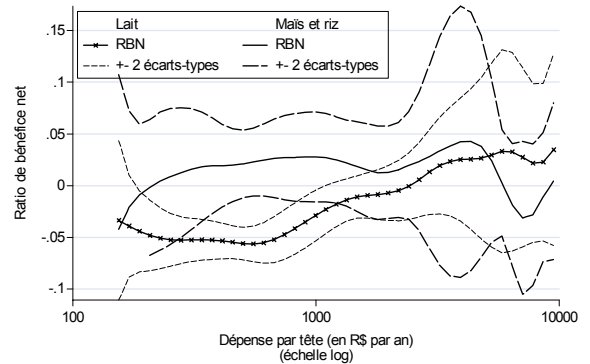
## Micro studies

- Price effect
  - Welfare impact of price change proportional to marketed surplus
- Unilateral liberalization: price decrease
  - Beneficial to net consumers
- Multilateral liberalization: price increase
  - Detrimental to net consumers
- Distributional consequences (Deaton, 1989):
  - Are the poor net consumers?
  - Locate households with positive marketed surplus along the income spectrum
  - Use household surveys

## Example: Brazil



## Example (cont.): rural Brazil



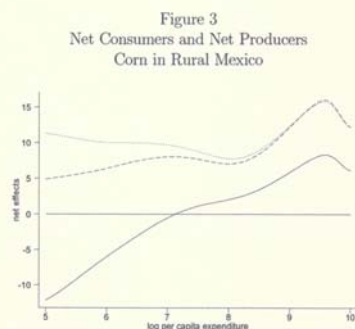
## Micro studies, price effect

- World's poor:
  - Net consumers of agricultural products
  - Rice
    - Produced by intermediate households in Thailand (Deaton, 1989) and Indonesia (Ravallion & van de Walle, 1991)
    - Consumed mainly by the poor in Côte d'Ivoire (Budd, 1993)
  - Cocoa is produced by intermediate households
    - Côte d'Ivoire (Benjamin & Deaton, 1993) and Ghana (Rapsomanikis & Sarris, 2005)
  - Exception of cotton
    - Zambia (Balat & Porto, 2005), Côte d'Ivoire (Budd, 1993), Mali?, Burkina?
- Unilateral liberalization decreases poverty
- Multilateral liberalization increases poverty

## Micro studies, price and wage effect

- Estimation of the general equilibrium relationship between prices of tradable goods and wages
  - Unskilled wages seems to react positively to food and clothing prices (Porto, 2005, Argentina and Mexico)
- Ambiguous effect of price increase on poverty
  - Price effect: poors are harmed because they are net consumers
  - Wage effect: beneficial to the poor because they derive income mainly from agricultural wages
- Magnifying effect: wage effect dominates price effect
  - Porto (2005), Arndt (2005) Mozambique
  - Unilateral liberalization increases poverty
  - Multilateral liberalization decreases poverty
  - Unilateral dominates multilateral

## Example: corn in Mexico (Porto, 2005)



## Macro empirical evaluation

- Two main approaches:
  - Wage inequality in industry
  - Global inequality in income
- Initial point: HO theorem
  - Trade liberalization increases the returns of the abundant factor
  - Unskilled labor is abundant in developing countries.
  - Theoretical prediction: trade openness should decrease inequality
- Empirically:
  - Wage gap increases with openness
  - Global inequality never significantly decreases in developing countries
- How to explain this puzzling results?

## Heterogeneity among developing countries

- Human capital endowment
- Natural resources endowment
- Technology

## Skill endowment heterogeneity among developing countries

Idea: all developing countries do not present a comparative advantage in unskilled labor

- Wage approach:
  - Latin American countries were no longer unskilled labor abundant when they liberalized: Wood (1997)
  - Unskilled-labor intensive sectors were protected with the highest tariffs prior to trade reform in Latin America: Harrison & Hanson (1999) on Mexico, Goldberg & Pavcnik (2004) on Columbia
- Global approach:
  - Developing countries less endowed in human capital experience lower inequality increase
  - Spilimbergo & al. (1999); Fisher (2001)

## Basic education versus No education

Idea:

- Export manufacture oriented industry does not use uneducated workers
- Trade increases demand for basically educated workers
- Wage approach:
  - Trade in manufacture raises the wage of workers with a basic general education relative to skilled workers,
  - This also raises the wage of workers with basic education relative to that of workers with no education (Wood, 1994)
- Global approach:
  - The poor begin to benefit from increased labor demand only when they become reasonably skilled. Milanovic (2005), Gourdon (2005)

## Natural resources

Idea: developing countries specialize in primary products

Global approach : Natural resources are unequally distributed

- Being an exporter of primary commodities increases income inequalities: Bourguignon (1990), Leamer et al. (1999)
- But when interacted with trade openness endowment in natural resources has no clear impact: Spilimbergo et al. (1999), Fisher (2001)
- Should directly control for land inequality: Lundberg & Squire, (1999), Rama (2001): trade openness increases inequality when land is unequally distributed

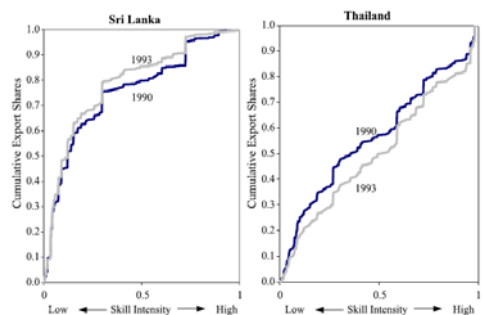
## Technological change

Wage approach: account for technological change

Idea: interaction between trade and technical change increases wage inequality

- Imports
  - Importation of machines increases demand for skilled labor: skilled biased technological change
  - Harrison & Hanson (1999), Gindling & Robbins (2001)
- Exports
  - The impact of technological change on wage inequality through specialization in some high skill products.
  - Zhu & Trefler (2004)

Zhu & Trefler 2004



## Conclusions

- Micro approach:
  - Poverty impacts of trade liberalization hinges on relative magnitude of price vs wage effects
  - Wage effect dominates (but need more country studies)
    - Unilateral liberalization increases poverty
    - Multilateral (DCAP removal) decreases poverty
  - Unilateral liberalization effect seems to dominate multilateral
    - Net increase in poverty after total liberalization
    - Evidence is scarce
- Macro approach
  - Importance of asset distribution to grasp the benefit of trade liberalization
    - Basic education
    - Land distribution
  - Trade liberalization increases inequality
    - Many developing countries does not have a comparative advantage in unskilled labor
    - Technological change due to trade liberalization increases inequality and induces specialization in skill intensive products

## Conclusions (cont.)

- Trade openness and long run growth
- Design of compensation mechanisms
- Importance of sound policies and “good” institutions
- WTO negotiations
  - Compensation schemes
  - Growth promoting institutions