Is Tunisian Trade Policy Pro-Poor?

Inma Martinez-Zarzoso a,b Leila Baghdadi c Hendrik W. Kruse a

a University of Goettingen  b University Jaume I  c University of Tunis

WTO Chairs Programme, Trade Employment and Poverty Alleviation Panel May 26, 2016
Introduction

- Trade liberalization raises important distributional questions
- Tunisia has comparatively high level of tariffs and NTMs
- Level of protection rapidly declining
- Main channel: Change in prices
- Impact of tariffs comparatively low
Literature

- **Similar Studies**

- **Tunisian Trade Policy**
  - Minot et al. (2010) CGE model

- **Companion paper**
  - Baghdadi et al. (2016) estimate tariff pass-through in Tunisia to be about 10%
Methodology I

- Expenditure = HH Income sources
- Expenditure is a function of:
  - Price vector of tradeables
  - Price vector of non-tradeables
  - Constant household utility
- Income sources:
  - Household wages
  - Transfers (Compensating Variation, CV)
Methodology II

- The prices of tradables and the wages depend on tariffs and non-tariff measures.
- Welfare of the HH will be affected by those changes:
  1) The effect of tariffs & NTMs on prices
     - Tariff: Quite low pass-through in Tunisia (ca. 10%) (Baghdadi et al., 2016)
     - NTMs: Often subsidies/standards in Tunisia (Ghali et al., 2013). Pass-through elasticity: 21% (Baghdadi et al., 2016)
Methodology III

2) The effect of tariffs on wages: Mincerian wage equations:

- $\ln \text{ wages} = f(\text{tariffs, skill-level, interaction term, other HH factors})$

Results from 1) and 2) are used to simulate the effects of trade policy changes on household wellbeing along the entire distribution of expenditure per capita across households.
Data

- Trade data (import shares): UN COMTRADE
- Tariffs: WITS
- NTM ad-valorem equivalents (AVE): Baghdadi et al. (2016)
- Household expenditure shares & household characteristics: INS Household Survey harmonized by ERF (2005 and 2010 surveys)
  - Years of schooling unavailable. Definition of skilled labour: Secondary education or higher
  - Income not available. Occupations at ISIC 2-digit level
- Sectoral wages: INS. Combined with ISIC using author made concordance (61 industries for 2005 and 67 industries in 2010)
Main Results (Welfare Effects)

- We will show the consumption, earnings and total welfare effects along the income distribution of households.

- Under several scenarios:
  1. Tariff pass-through 10%
  2. Increase in NTMs
  3. Tariff pass-through 50% when adding NTMs
1. Consumption effect

The solid curve shows the estimated compensating variation, which is downward sloping, indicating a pro-poor bias.
1. Income Effect

Local polynomial smooth

Log Adjusted Per Capita Household Expenditure (Square Root Equivalence Scale)

kernel = epanechnikov, degree = 0, bandwidth = .28
Total welfare effect is pro-poor with poor household showing an increase in welfare which is more pronounced than for richer households and amounts around 2.5% of initial household expenditure for low-income households.
Rural versus urban areas
Welfare effects by gender
2. Consumption effect (NTMs)

- Local polynomial smooth

- Log Adjusted Per Capita Household Expenditure (Square Root Equivalence Scale)
  - kernel = epanechnikov, degree = 0, bandwidth = .28
Conclusions

- The effects are comparable to the gains found in Borraz et al (2013) for Brazil,
- Lower than those in Urald Marchand for India and by Porto (2006) for Argentina.
- Wen using a pass-through of 50 percent, the benefits are very similar –around six percent of initial expenditure– to those estimated in Porto (2006)
Conclusions

- Consumption effect of tariff reduction positive for all income levels
- The poor are more (negatively) affected by the existing tariff scheme (would benefit more from liberalization)
- Increase in NTMs uniform effect across distribution
- Limitations: Wage data only sectoral
  No dynamic effects of trade policy (i.e. sectoral change)
Thank you very much for your attention

imartin@uni-goettingen.de