

# **Winners and Losers in a Free Trade Area between The United States and MERCOSUR**

February, 2004  
Comments welcome!

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# OBJECTIVES

- The development of a methodology for the construction of two lists of products, one expansive (opportunities) and one defensive (perils), for each country that participates in the creation of an FTA.
  - Mercantilist focus: exports are good and imports are bad. Trade negotiations are mercantilist.
  - The idea is to identify the private interest groups that are for or against the trade arrangement. Political economy of trade policy.
  - We argue that a government will try to include in the trade liberalisation agreement those industries on the opportunities list and to exclude those on the perils list.
- The application of the developed methodology to a particular FTA: US-MERCOSUR.

# ORGANIZATION

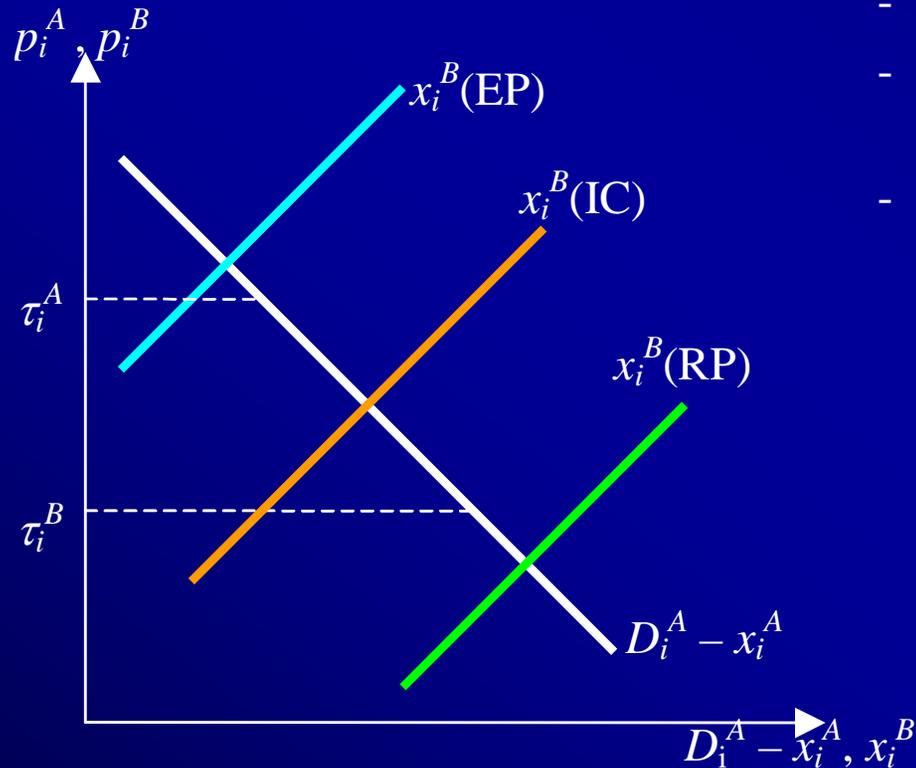
- I) Economic and Welfare Effects of an FTA: Regimes of Protection Typology (Grossman and Helpman, 1995)
- II) Methodology for the Construction of the Opportunities and Perils Lists
- III) US-MERCOSUR: Results and Conclusions

# STRUCTURE OF THE ECONOMY

- Production framework: specific factor trade model; all goods are produced with labour and a sector-specific factor with constant returns to scale; and there are fixed endowments of all specific factors.
- Each consumer is endowed with labour, and possibly with some sector-specific factor. The consumer receives a lump sum transfer from the government, which corresponds to the uniform redistribution of tariff revenue.
- The owners of specific factors are all organised in lobby groups, and ownership is highly concentrated in the population. Contribution game with the government.
- Economic interests are given by the specific factor owners in a certain sector (the producers), who seek to maximise their own industry profit function, and those consumers who are only endowed with labour.
- The economy is small: the world prices are exogenous.

# Typology of Cases: Regimes of Protection

## Country B's Supply and Country A's Import Demand



- Countries A and B are negotiating an FTA.
- In a certain product, A is the less efficient producer.
- Three cases according to the size of country B's supply of product  $i$ :

- **ENHANCED PROTECTION**  
(B small)

- **REDUCED PROTECTION**  
(B big)

- **INTERMEDIATE CASE**

# EN: Economic and Welfare Effects of an FTA

- Under an FTA, *A* has to continue importing from the ROW and its domestic price remains unchanged.
  - **Producers in *A*** are not affected.
  - Consumers in *A* are negatively affected: loss in tariff revenue.
  - Country *A*: welfare loss.
  - **Producers in *B*** are positively affected: they benefit from the higher protection in market *A* (Enhanced Protection).
  - Production expansion (exports expansion).**
  - Consumers in *B* are not affected.
  - Country *B*: welfare gain.
  - Zone as a whole: welfare loss (trade diversion).

# RE: Economic and Welfare Effects of an FTA

- Under an FTA,  $A$  stops importing from the ROW and its domestic price falls to  $\tau_i^B$ .

- **Producers in  $A$**  are negatively affected: less protection under the FTA than in the initial equilibrium (reduced protection).

## **Production contraction (imports expansion).**

- Consumers in  $A$  are positively affected: loss in tariff revenue lower than the increment in consumers' surplus.

- Country  $A$ : welfare gain.

- **Producers in  $B$**  are not affected.

- Consumers in  $B$  are not affected.

- Country  $B$ : welfare not affected.

- Zone as a whole: welfare gain (trade creation).

# METHODOLOGY

- The FTA implies a trade off between the gain in access to the new partner market and the loss in protection in the domestic market.

**FIRS STEP:** Industries with high Trade Complementarity (SITC 4 digits)

- Identify the industries where the greatest contractive or expansive adjustments are expected.
  - The industries in which the differences in the conditions of production in the two countries are greatest.
  - One country is an exporter and the other an importer.
  - **High Trade Complementarity Set:**

$$HTC^{BA} = \left\{ s \in S / XS_s^B > 1 \text{ and } MS_s^A > 1 \right\}$$

## SECOND STEP: Sensitive Products (HS 6 digits)

- Identify the products for which the FTA means an improvement in access conditions to the other market.
  - **Sensitive products set** when  $B$  is the exporter and  $A$  the importer:

$$SP^{BA} = \left\{ i \in S \in HTC^{BA} / X_i^B > 0 \text{ and } M_i^A > 0 \text{ and } t_i^{AB} > t_0 \right\}$$

## THIRD STEP: Opportunities and Perils

- Classify the sensitive products in trade opportunities and trade perils.
  - **Opportunities** set for  $B$  in  $A$ :

$$OP^{BA} = \left\{ i \in SP^{BA} / x_i^{B^{FTA}} > x_i^B \right\}$$

- **Perils** set for  $A$  generated from  $B$ :

$$PE^{AB} = \left\{ i \in SP^{BA} / x_i^{A^{FTA}} < x_i^A \right\}$$

# FINAL LINK

- **Enhanced protection** implies an **opportunity** but not a peril:

$$EN = \left\{ i \in s / i \in OP^{BA} \text{ and } i \notin PE^{AB} \right\}$$

- **Reduced protection** implies a **peril** but not an opportunity:

$$RE = \left\{ i \in s / i \notin OP^{BA} \text{ and } i \in PE^{AB} \right\}$$

- The **intermediate case** implies an **opportunity and a peril**:

$$IN = \left\{ i \in s / i \in OP^{BA} \text{ and } i \in PE^{AB} \right\}$$

# Application to US-MERCOSUR FTA

- **Data sources:**
  - Trade data (SITC 4 digits): World Trade Flows (2000)
  - Trade data (HS 6 digits):
    - MERCOSUR countries: LAIA
    - US: USITC
  - Trade policy data:
    - MERCOSUR CET: LAIA
    - US MFN tariffs (ad valorem equivalent of complete MFN rate) + GPS preferences: USITC
  - Production data: World bank (Trade and Production Data Base), GTAP, IBGE.
  - Import elasticities: GTAP

# SETS OF PRODUCTS

		Argentina	Brazil	Paraguay	Uruguay	USA
<b>Total Exports</b>	Value (mill USD)	25187	52053	1034	2631	680474
	Industries (SITC4)	470	468	254	393	482
	Products (HS 6)	4142	4250	499	1873	5091
	Imposed Tariff	4.70	5.55	3.04	5.87	9.89
	Big division (SITC1)	0	7	2	0	7
	Big division share	0.38	0.24	0.56	0.46	0.52
<b>Trade Complementarity</b>	Export share	0.26	0.47	0.11	0.27	0.47
	Industries (# SITC4)	46	85	19	36	134
	Products (# HS 6)	323	799	34	181	1781
	Imposed Tariff	5.12	7.24	8.25	6.03	9.42
	Big division (SITC1)	0	7	0	0	7
	Big division share	0.38	0.27	0.68	0.76	0.62
<b>Sensitive Products</b>	Export share	0.07	0.15	0.07	0.17	0.38
	Industries (# SITC4)	23	35	4	17	129
	Products (# HS 6)	86	168	19	96	1686
	Imposed Tariff	15.53	21.55	13.11	9.13	11.66
	Big division (SITC1)	0	0	0	0	7
	Big division share	0.48	0.32	0.77	0.77	0.57

# OPPORTUNITIES AND PERILS

		Argentina	Brazil	Paraguay	Uruguay	USA
Sensitive Products	Export share	0.07	0.15	0.07	0.17	0.38
	Industries (# SITC4)	23	35	4	17	129
	Products (# HS 6)	86	168	19	96	1686
	Imposed Tariff	15.53	21.55	13.11	9.13	11.66
	Big division (SITC1)	0	0	0	0	7
	Big division share	0.48	0.32	0.77	0.77	0.57
Reduced Protection	Export share	0.06	0.11	0.06	0.13	0.38
	Industries (# SITC4)	20	25	8	7	129
	Products (# HS 6)	47	61	12	16	1686
	Imposed Tariff	16.99	26.57	13.73	7.98	11.66
	Big division (SITC1)	0	0	0	0	7
	Big division share	0.53	0.44	0.87	1.00	0.61
Enhanced & Intermediate	Export share	0.01	0.04	0.01	0.04	
	Industries (# SITC4)	10	19		12	
	Products (# HS 6)	25	64	6	80	
	Imposed Tariff	22.61	8.53	8.72	13.04	
	Big division (SITC1)	7	8	8	8	
	Big division share	0.90	0.65	0.63	0.97	

# FINAL REMARKS

## ■ **Initial Conjecture:**

- Exports from the US to MERCOSUR would enter under a regime of reduced protection.
- Exports from the MERCOSUR to the US would enter under a regime of enhanced protection.

## ■ **Results:**

- All sensitive products with the US as the exporter enter under a regime of reduced protection.
  - They are not opportunities for US producers.
  - They are perils for MERCOSUR producers.
  - They are concentrated in capital goods and transport equipment.
- A majority of the sensitive products with the MERCOSUR as the exporter enter under a regime of reduced protection.
  - They are opportunities for MERCOSUR if international prices increase.
  - They are perils for US producers.
  - They are concentrated in agriculture (frozen concentrated orange juice, bovine meat, sugar, tobacco).

# FINAL REMARKS

- Some of the sensitive products with the MERCOSUR as the exporter enter under a regime of not reduced protection.
  - They are opportunities for MERCOSUR countries.
  - They could be perils for US producers (intermediate case).
  - They are concentrated in lighter manufactures
    - Brazil: footwear, rubber products, apparel.
    - Argentina: leather manufactures, apparel.
    - Paraguay: jackets of cotton, cotton fabrics.
    - Uruguay: articles of wool or fine animal hair, footwear.
- The majority of sensitive products in the reduced protection sets suggests that consumers in both sides would enjoy a welfare gain under an FTA.