

Profits in the "New Trade" Approach to Trade Negotiations

Ralph Ossa

University of Chicago and NBER

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- The terms-of-trade theory has long been the dominant theory of trade negotiations:
 - Johnson (1952), Grossman and Helpman (1995), Bagwell and Staiger (1999), ...
- Recently, a number of "new trade" alternatives have emerged:
 - Ossa (2011a), Mrazova (2011), Bagwell and Staiger (2011), ...
- In this paper, I highlight two advantages of taking such a "new trade" approach:
 - It allows for a focus on producer interests and lends itself to quantitative work

- To this end, I consider a version of my quantitative analysis in Ossa (2011a):
 - I rule out free entry which gives rise to profit shifting effects
- I keep the analysis deliberately simple to clearly highlight the novel elements:
 - I shut off terms-of-trade effects and allow only for aggregate trade policy
- These simplifications imply that the quantitative results are only illustrative:
 - I have recently provided more definite results in Ossa (2011b)

Definition

For given tariffs, an equilibrium is a set of $\{\Pi_i, G_i, X_i, T_{ij}\}$ such that

$$\Pi_i = \frac{1}{\sigma} \sum_{j=1}^J T_{ij}$$

$$G_j = \left(\sum_{i=1}^J n_i (p_i \theta_{ij} \tau_{ij})^{1-\sigma} \right)^{\frac{1}{1-\sigma}}$$

$$X_j = L_j + \sum_{i=1}^J t_{ij} T_{ij} + \Pi_j - TB_j$$

$$T_{ij} = n_i \tau_{ij}^{-\sigma} (p_i \theta_{ij})^{1-\sigma} G_j^{\sigma-1} \mu X_j$$

This is in terms of many unknown parameters!

Definition

For given tariff changes, an equilibrium is a set of $\{\hat{\Pi}_i, \hat{G}_i, \hat{X}_i, \hat{T}_{ij}\}$ such that

$$\hat{\Pi}_i = \sum_{j=1}^J \alpha_{ij} \hat{T}_{ij}$$

$$\hat{G}_j = \left(\sum_{i=1}^J \beta_{ij} (\hat{\tau}_{ij})^{1-\sigma} \right)^{\frac{1}{1-\sigma}}$$

$$\hat{X}_j = \gamma_j + \sum_{i=1}^J \delta_{ij} t'_{ij} \hat{T}_{ij} + \varepsilon_j \hat{\Pi}_j$$

$$\hat{T}_{ij} = (\hat{\tau}_{ij})^{-\sigma} (\hat{G}_j)^{\sigma-1} \hat{X}_j$$

This is in terms of μ , σ , and observable tariffs and trade flows only!

Table 1 - Welfare effects of US optimal tariffs

	Overall Welfare	Consumer Surplus	Producer Surplus	Tariff Revenue
ROW	-0.21%	0.00%	-0.21%	0.00%
EU	-0.07%	0.00%	-0.07%	0.00%
Brazil	-0.10%	0.00%	-0.09%	0.00%
China	-0.29%	0.00%	-0.29%	0.00%
India	-0.07%	0.00%	-0.07%	0.00%
Japan	-0.08%	0.00%	-0.08%	0.00%
US	0.15%	-0.45%	0.31%	0.29%

Notes: US optimal tariffs average 21 percent and vary little across trading partners. I use trade and tariff data for the year 2004 and assume $\mu = 0.188$ and $\sigma = 4.6$ following Dekle et al (2007). In Ossa (2011b), I find that US optimal tariffs average 66 percent, the US gains 2.6 percent, and other countries lose 1.6 percent on average.

Table 2 - Welfare effects of world Nash tariffs

	Overall Welfare	Consumer Surplus	Producer Surplus	Tariff Revenue
ROW	-0.46%	-0.56%	-0.23%	0.34%
EU	-0.12%	-0.33%	-0.01%	0.20%
Brazil	-0.24%	-0.17%	-0.14%	0.07%
China	-0.79%	-1.01%	-0.50%	0.72%
India	-0.23%	-0.12%	-0.15%	0.05%
Japan	-0.20%	-0.20%	-0.13%	0.13%
US	-0.03%	-0.45%	0.13%	0.29%

Notes: World Nash tariffs average 21 percent and vary little across trading partners. I use trade and tariff data for the year 2004 and assume $\mu = 0.188$ and $\sigma = 4.6$ following Dekle et al (2007). In Ossa (2011b), I find that world Nash tariffs average 63 percent and the welfare losses average 4.1 percent.

Table 3 - Welfare effects of worldwide free trade

	Overall Welfare	Consumer Surplus	Producer Surplus	Tariff Revenue
ROW	-0.05%	0.41%	-0.08%	-0.38%
EU	0.08%	0.06%	0.08%	-0.06%
Brazil	-0.08%	0.38%	-0.15%	-0.31%
China	0.23%	0.36%	0.23%	-0.36%
India	-0.11%	0.42%	-0.20%	-0.33%
Japan	0.10%	0.02%	0.01%	-0.02%
US	0.04%	0.08%	0.04%	-0.08%

Notes: I use trade and tariff data for the year 2004 and assume $\mu = 0.188$ and $\sigma = 4.6$ following Dekle et al (2007).

- The main goal of this paper was to highlight two advantages of adopting a "new trade" approach to trade negotiations
- First, it allows for a view of trade negotiations in which producer interests play a prominent role
- Second, it lends itself naturally to quantitative analyses of non-cooperative and cooperative trade policy
- In my view, these advantages point to numerous exciting opportunities for further theoretical, empirical, and quantitative work