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Research Report

Measures of Tariff Preference Margins

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FONDATION POUR LES ÉTUDES ET RECHERCHES SUR LE DÉVELOPPEMENT INTERNATIONAL

Measures of Tariff Preference Margins

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With the current Doha round of multilateral negotiations and the increasing number of trade preferential schemes under negotiation (e.g. the future free trade area between the EU and the South Korea or with the ASEAN), there is renewed interest in measuring the "tariff preference margins" actually granted to developing countries by the main developed markets and then assessing the potential tariff erosion generated by the changes in existing multilateral and preferential schemes.

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• • • / • • • The usual measure of the preference margin for a product k exported by country i to country j is computed as the difference between the third-country tariff imposed by country j on product k (i.e. the "Most Favored Nation" (MFN) tariff notified at the WTO) and the country i tariff imposed by country j on product k exported by country i. Hence, according to this standard definition, the only possible source of preference erosion comes from multilateral negotiations leading to a reduction in the third country MFN tariff. The originality of our work is to compute a new theoretically-derived measure of preference margins granted by the EU27.This measure takes into account both competition across non-EU exporters as well as competition with domestic producers (i.e. competition with duty-free intra-EU trade). This indicator is derived for differentiated goods under imperfect competition, in a framework extended from Ottaviano, Tabuchi and Thisse (2002).

We actually compute the preference margin granted by the EU27 to country i on good k according to 3 different measures:

1. The "Standard" preferential margin usually computed in empirical literature, as the difference between the third country MFN tariff and the country i tariff:

$$PM_{ik}^{S} = \tau_{k}^{MFN} - \tau_{ik}$$

2. The "Import Competition Adjusted" preferential margin as proposed in Carrere, de Melo and Tchumurchudur (2010) —computed for comparison purpose— which is the difference between the average tariff paid by all non-EU countries exporting to the EU (weighted by the share of each country's export in total EU import) and the country i tariff:

$$PM_{ik}^{ICA} = \left(\sum_{j \notin EU} \left(\frac{m_{jk}^{extra}}{\sum_{h \notin EU} m_{hk}^{extra}} \tau_{jk} \right) \right) - \tau_{ik}$$

3. The "Domestic and Import Competition Adjusted" preferential margin corresponding to the new measure derived in Carrère (2011), as the subtraction of two terms, the first term being the average tariff paid by all countries exporting to the EU including intra-EU trade (weighted by the share of each country's export in total EU import) and the second term being the average tariff that would prevail if all countries benefit from the same tariff applied to country i (except EU countries that still benefit from duty-free trade):

$$PM_{ik}^{DICA} = \left(\sum_{j \notin EU} \left(\frac{m_{jk}^{extra}}{\sum_{h \notin EU} m_{hk}^{extra} + \sum_{l \in EU} m_{lk}^{intra}} \tau_{jk} \right) \right) - \left(\frac{\sum_{h \notin EU} m_{hk}^{extra}}{\sum_{h \notin EU} m_{hk}^{extra} + \sum_{l \in EU} m_{lk}^{intra}} \tau_{ik} \right)$$

with τ_{ik} being the EU27 tariff in 2008 on imports from country i of good k defined at the HS6 level; m_{ij}^{extra} $(i \notin EU)$, being the total EU27 import value from a non-European country i of good k; m_{lj}^{intra} $(l \in EU)$ being the total EU27 import value from an European country l of good k.

We compute each of the 3 preference margin measures for each country/products. Given that we have 222 countries and territories and 5,048 products under the Harmonized System 6 digits (HS6 -2007) classification, we then compute 1,120,656 preference margins by type of measure for the year 2008.

Note that on the 176 developing countries benefiting from the EU Generalized System of Preferences, 171 are included in the sample[1]. Hence, we use a quite *exhaustive* sample included all competitors in the EU market. Tariff structure (MFN and all preferential tariffs) applied by

1. Data are not available for Mayotte, South Georgia and the South Sandwich Islands, Montenegro, Kosovo and Heard Island and McDonald Islands.

the EU27 in 2008 on its imports is extracted from Trade Analysis Information System (TRAINS) database of the UNCTAD, at the HS-10 digit level. Note that when, for a given line, the tariff applied is not an *ad-valorem* but a specific (or complex) tariff, we use the *ad-valorem* equivalent as computed by the UNCTAD. We then consolidate (simple average) the tariff data from the 10 to HS-6 digit level (approximately 5,000 products) to be compatible with trade data available in the Commodity Trade (COMTRADE) database of the UNSD.

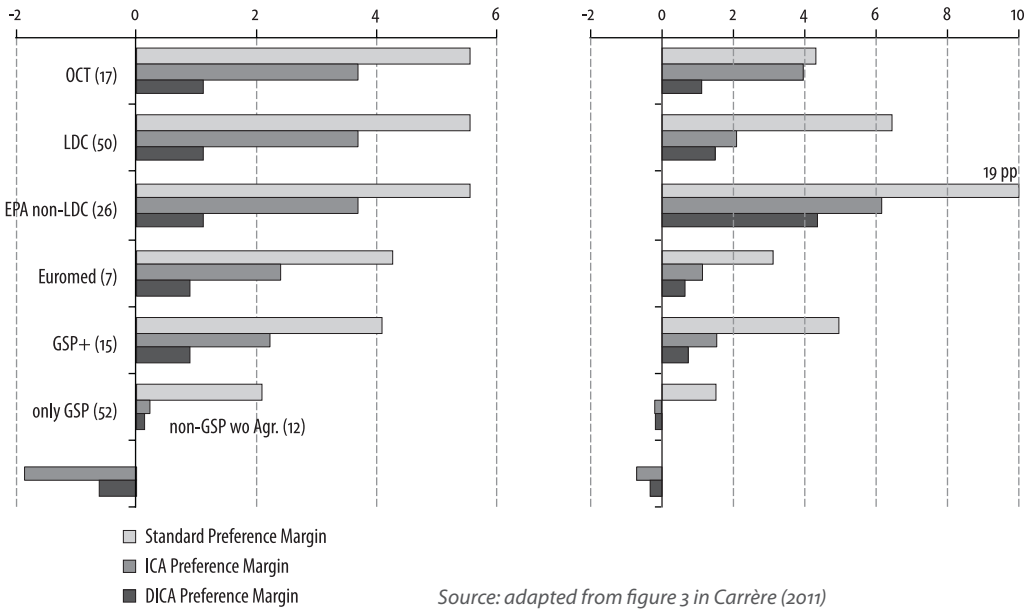
In figure 1, we report results for "an average" developing country belonging to the 6 main categories of the EU preferential network i.e. (i) the Generalised System of Preferences (GSP), (ii) the GSP+, a special incentive arrangement for sustainable development and good governance, (iii) the Everything But Arms arrangement for the Least Developed Countries (LDCs), (iv) the Economic Partnership Agreements (EPAs) negotiated with the group of 79 African, Caribbean and Pacific countries, (v) the Euro-med Agreements with 9 Mediterranean countries and (vi) the Overseas Association signed with Overseas Countries and Territories (OCT). We also add the group of 12 countries without any trade agreements with the EU for comparison purpose. We first report the unweighted measures, using the whole 5048 lines, to have a broad picture of the "*de jure*" — even if not used – preferential agreements.

Whatever the measure used, when looking at the simple average preferential margin given by the EU market to all the 5048 tariff lines, the ranking of EU preferential schemes is the same: the most generous scheme is the one offered to the OCTs (5.58pp for the standard preference margin), followed by the EBA agreements for LDCs and interim or full EPA countries (5.57pp), the Euromed agreements (4.26pp), the GSP+ (4.11) and finally, the standard GSP (2.09).[2]

Figure 1. Preference margin to the EU27 market of an "average" country in each category (number of countries in parenthesis), 2008.

1.a. Unweighted average (5018 products – with or without positive exports)

1.b. Import weighted average



Source: adapted from figure 3 in Carrère (2011)

2. As discussed in Carrère (2011), the only difference between the preferential scheme offered to OCT and EBA/EPA countries concerns "arms and ammunitions" as we assume zero duty on rice and sugar.

However, even if the ranking is maintained, adjusting for the competition between importers on the EU market but also for competition with domestic producers (i.e. intra-EU imports) drastically reduces the preference margin granted by the EU to developing countries. On average, the DICA preference margin is around 20% of the Standard preference margin (only 8% for the countries under the standard GSP). Concerning the group of countries with no trade agreements with the EU (and then with zero standard preference margin), figure 1 reveals a negative DICA preference margin, given that they face a tariff to export to the EU market larger than the average tariff applied to their competitor.

The method has been presented in details in:

- **Carrère, C.** (2011) "A New Measure of Tariff Preference Margins Adjusted for import and domestic competition ", *Working paper* FERDI, http://www.ferdi.fr/Documents-de-travail.html#P19

In the case you use the data, recommended quotation is:
Carrère, C. (2011) "A New Measure of Tariff Preference Margins Adjusted for import and domestic competition ", *Working paper* FERDI, Available on FERDI website: www.ferdi.fr
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