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# Assessing Euro-Med Trade Preferences: The Case of Entry Price Reduction

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# ASSESSING EURO-MED TRADE PREFERENCES: THE CASE OF ENTRY PRICE REDUCTION

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The EU protects some of its fruits and vegetables through the entry price system. This system consists on a two-tiered tariff, with high-priced exports paying an *ad valorem* tariff, whereas low-priced exports pay also a supplementary specific tariff. The breaking point between high and low export prices is the entry price level decided by the EU, generally the same level for all third countries. In a few cases, some Southern Mediterranean partners of the EU have agreed a reduced entry price for their exports, together with the more common *ad valorem* tariff reduction. Among the indicators used for gauge the value of preferences, there is no one devoted to this case of reduced entry price, hence we develop a new indicator that allows to split which part of the preferential gains corresponds to the entry price reduction and which part corresponds to the “usual” *ad valorem* tariff reduction. We apply this methodology to Moroccan clementines trade flows, with two main findings: 1) The entry price reduction ranges up to 39% of the economic value of preferences in some months; 2) Morocco is not maximizing the gains due to this reduction, and could take some trade and policy lessons, mainly trying to better fit to the concession or, if impossible, use it as negotiating capital in future reviews of the agreement.

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# ASSESSING EURO-MED TRADE PREFERENCES: THE CASE OF ENTRY PRICE REDUCTION

## 1. Introduction

The EU protects some of its fruits and vegetables through the entry price system. This system is implemented for “sensitive” products which often are important for the exports of Southern Mediterranean Countries (SMC) such as tomatoes, cucumbers, artichokes, courgettes, peaches and citrus fruits. In many cases, the system applies on a seasonal basis, remaining the protection for a part of the year through the “usual” tariff system. In some cases, SMC have agreed a reduction of the entry price applied for their exports to the EU. In this paper, we show a new indicator to gauge the gains accrued to the SMC in these cases and apply it to the case of Moroccan clementines.

## 2. The entry price system and trade preferences

The entry price mechanism and its differences with its predecessor have been widely discussed by Swinbank and Ritson (1995) and Tangermann (1996). The system consists on a two-tiered tariff. When the border price of exports to the EU is above the entry price, they must pay an *ad valorem* tariff, whereas exports priced below the entry price level must pay a supplementary specific tariff after being burdened by the *ad valorem* tariff. The amount of the specific tariff depends on the relationship between the entry price level and the border price for the shipment: the cheaper is the product, the higher is the specific tariff applied, being the aim to prevent the entry of cheap products that erode the market competitiveness of EU productions. Thus, when the rate [border price

to entry price] ranges between 92% and 100%, the exporter pays the difference between them (rounded in 2% steps). If the rate is lesser than 92%, it must be paid the maximum tariff equivalent (MTE) according to WTO commitments.

The entry price level for each product and period is decided by the EU, to ease the implementation of the system, the European Commission calculates and publishes the Standard Import Value (SIV) for each day and destination, as a proxy of the border price of imports coming from every destination.

Cioffi and dell'Aquila (no date) analyse the effects of the system on exports of apples, tomatoes and oranges from different countries to the EU and state that: 1) The MTE acts virtually as a prohibitive tariff; 2) There is relatively low frequency of SIV undercutting the entry price in oranges and apples, whereas for tomatoes it is more likely this situation to happen; 3) They report a certain reduction of exports to the EU after the system was implemented; 4) The entry prices and MTE cause a twofold segmentation of the EU internal market of fruits and vegetables. There is a market for lower quality products where EU supply is completely insulated from external competition. On the other side there is a market for high quality products where the EU production competes with the production of third countries with the sole protection of the *ad valorem* tariff.

Other consequence of the system that they mention could be that it stimulates non-competitive behaviour among traders and introduces incentives to collusive arrangements in order to get the main part of the preferences rent. In this field, Chemnitz and Grethe (2005) discuss the organization of the Moroccan tomato exporter

sector, stating that there is a relatively high degree of collusion to appropriate the “entry price quota rent”.

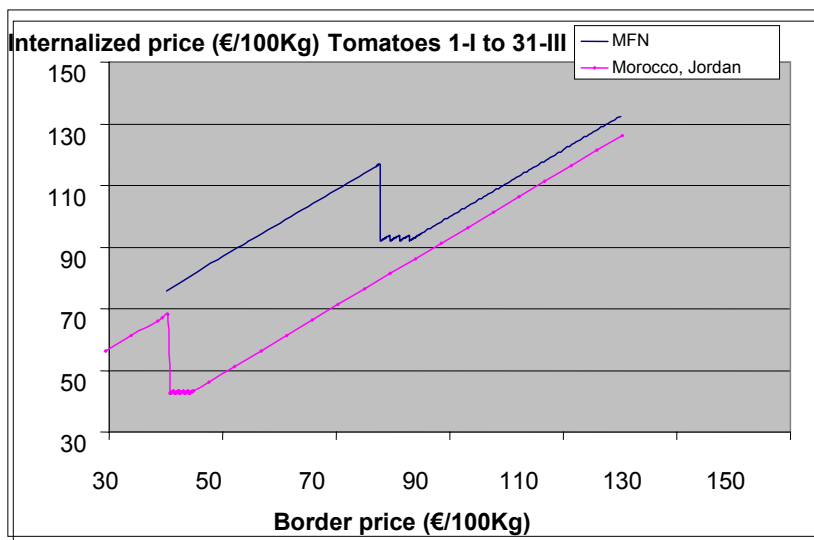
This rent exists because for several cases, SMC have agreed in their Association Agreements -or their reviews- a reduction of the MFN entry price level. This agreed entry price is country and product specific and represents a trade advantage for preference receiving countries, additional to the tariff reductions and exemptions that represent the majority of the preferences that the EU grants to SMC.

Nowadays, Jordan and Morocco have agreed entry price reduction for tomatoes, cucumbers, courgettes, artichokes, oranges and clementines, and both Egypt and Israel have been granted a reduction for their exports of oranges. It is worthwhile to mention that, in the most of these cases, the entry price reduction applies only for a given quantity, and that the preferential entry price is accompanied by a reduction (often elimination) of the *ad valorem* part of the tariff. As the entry price defines the specific part of the tariff, both specific and *ad valorem* tariffs are therefore reduced under these preferential schemes.

### **3. The value of preferences**

The next graph depicts the different border treatments that Moroccan and Jordan tomatoes enjoy compared to MFN tomatoes in a given date and period, according to the reduced entry price.

Graph 1: MFN vs. preferential entry price for tomatoes. Jan-March, campaign 05/06



Source: own calculations based on TARIC database

It can be seen that preferential exporters can take advantage of the reduction of entry price through two alternatives (or a combination of them) (Grethe and Tangermann, 1998): a product with the same border price as a MFN product can be sold at EU markets cheaper than its competitors, increasing market share, or, alternatively, a product sold in destination markets at the same price as a MFN represents higher price perceived by preferential exporters. Hence, eventually there is an economic transfer to the preference-receiver countries.

Among the three alternative strands existing to assess the impact of preferences (Grethe, 2005), one corresponds to the indicators based on actual trade flows –being the other two the *ex post* econometric analysis and the *ex ante* simulation models. These indicators give an assessment about the actual coverage and the utility of a preferential scheme, the deepness of the tariff cut and the value of the preferences compared to the MFN conditions, by using actual trade flows. By construction, they are intuitive and relatively easy to calculate, being their main shortcoming their static nature since they use data on trade happening under given circumstances.

One of these indicators is the Value of the Preference Margin (VPM). By definition, it is the difference in perceived prices between preferential and non-preferential exporters times the quantity that is exported under these conditions.

$$VPM = (P_p - P_w)q_p \quad (1)$$

where, “P<sub>p</sub>” is the price perceived by preferential exporters, “P<sub>w</sub>” is the world price for the product - assuming that MFN exporters perceive it- and “q<sub>p</sub>” is the quantity exported by the preferential country.

Grethe and Tangermann (1998) indicate that both preferential and non-preferential MFN products are sold in the destination market (EU) at the same price “P<sub>EU</sub>”:

$$P_{EU} = P_w(1 + t_{MFN}) = P_p(1 + t_p) \quad (2)$$

where “t” are the *ad valorem* tariffs (both for MFN and preferential countries).

It can be easily shown that the combination of (1) and (2) yields the expression for calculating VPM.

$$VPM = \frac{(t_{MFN} - t_p)}{1 + t_{MFN}} P_p q_p \quad (3)$$



This VPM- is the calculation in monetary terms of the potential value of benefits to a preference-receiving country for a particular product (Yamazaki, 1996). As Grethe (2005) states, it corresponds to the tariff revenue forgone by the donor country.<sup>1</sup>

It is noteworthy to mention the “potential” characteristic of the transfer calculated with this indicator. It is firstly assumed that all rents from preferential access accrue to the exporter country.<sup>2</sup> Grethe *et al.* (2005) elaborate on this issue, being the main reason why the rent might not accrue to exporters a result of the way EU market regimes are administered. In the case of a binding TRQ, where no minimum import price system is in operation, the result strongly depends on the method chosen for allocating licenses for trade under the TRQ. This is because the "owner" of the license is likely to attract (most of) the preference margin as he is in a quasi-monopolist position.

To date, there are few efforts to calculate the VPM in the case of entry price reduction. Martínez and García (2004) adopted an *ad hoc* formulation with this purpose. Their formulation only holds in certain particular cases where export price equals exactly entry price; otherwise, it is an approximation. In general terms, if it is available the *ad valorem* tariff equivalent (AVE) of the whole measure, it is possible to calculate the potential transfer using the usual expression (3). It seems to be the case in Grethe and Tangermann (1998).

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<sup>1</sup> There are other formulations for calculating the VPM. Tangermann (2002) adapts (2) and (3) for the case of specific tariffs, whereas Yamazaki (1996) and Alexandraki and Lankes (2004) calculate VPM using world prices  $P_w$  instead of  $P_p$ .

<sup>22</sup> Alexandraki and Lankes (2004) also assume that products are perfect substitutes irrespective of their country of origin and that preferential access is fully utilized, among other assumptions.

But adopting this approach makes impossible to fully disentangle which part of the transfer corresponds to the entry price reduction and which part corresponds to the *ad valorem* part of the tariff reduction. In a first sight, as the EU seems reluctant to reduce entry prices for its SMC partners while the *ad valorem* tariff reduction is the only concession in most of the products affected by the entry price scheme, one tends to presume that the entry price reduction is of utmost relevance in economic terms.

To check this *a priori* guess, a variation of (3) has been performed. First, it is assumed that the *ad valorem* equivalent (AVE) of the entry price measure is split up into the specific part plus the pure *ad valorem* part, both for preferential and non-preferential exporters:

$$\begin{aligned} t_p &= d_p + \frac{s_p}{P_p} \\ t_{MFN} &= d_{MFN} + \frac{s_{MFN}}{P_w} \end{aligned} \quad (4 \text{ and } 5)$$

Where “t” correspond to the AVE of the measure as a whole, “d” are the *ad valorem* tariffs of the corresponding part of the measure, and “s” are the specific tariffs to be levied.

Then, departing from the ideas articulated in (1) and (2), it is easily got the expression of the value of the preference margin when exists entry price reduction ( $VPM_{EP}$ ):

$$VPM_{EP} = (s_{MFN} - s_p)q_p + \left( \frac{1+t_p}{1+t_{MFN}} d_{MFN} - d_p \right) q_p P_p \quad (6)$$

This expression of the  $VPM_{EP}$  has two addends. The first addend assesses the gain due to the specific tariff cut, which in turn is caused by the entry price reduction as seen in section 2. The second addend of the expression corresponds to the gain due to the cut of the *ad valorem* part of the tariff. For ease in the exposition of the subsequent results, it is “labelled” every addend with a different denomination. The first addend is called “specific gain” and the second is the “*ad valorem* gain”.

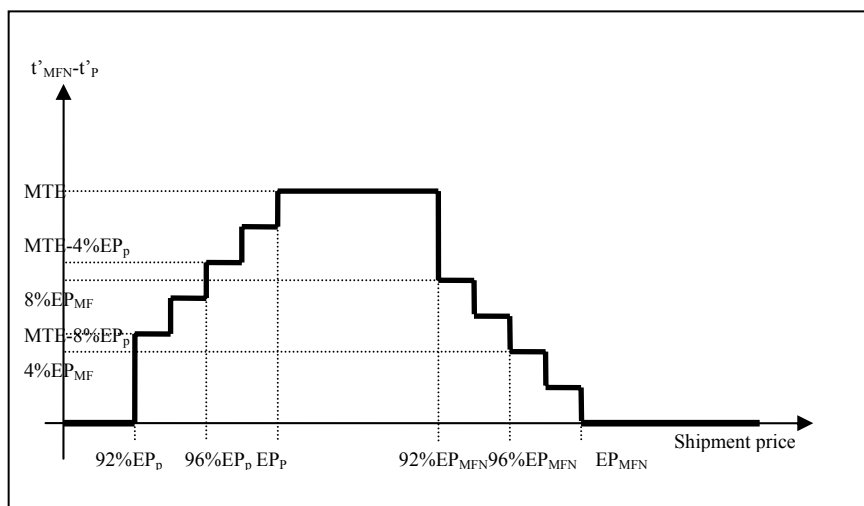
Clearly, when there is no entry price reduction, there is no specific tariff cut and therefore the first addend is zero, being the  $VPM_{EP}$  identical to  $VPM$  as it appears in (3). It could be understood as if “d” tariffs are equivalent to “t” tariffs, neglecting the effect of specific tariffs since they are levied similarly to all the exporters.

In a given period, the total  $VPM_{EP}$  that a preferential SMC can obtain depends mostly on the specific gain, since the *ad valorem* tariff cut is fixed for every country (and shipment, therefore). In turn, the specific gain varies for every shipment since the border price determines the specific tariff to be paid. Moreover, the level of the border price compared with the agreed entry price and the MFN entry price is crucial to determine if the country is maximizing the specific gain.

This gain would be maximized in the case where the shipment is prized so as it would not pay any specific tariff as preferential and it would pay all the MTE as a non-preferential treatment. The worst case would be if the shipment is so cheap that it would pay the MTE both as preferential and as non-preferential treatment: there would not be any specific gain. The same if it was so expensive that would not pay specific tariff in

any case. There is a number of intermediate situations, where the specific gain would exist, but not reaching its maximum amount. Graph 2 depicts all the cases.<sup>3</sup>

Graph 2. Specific MFN tariff – specific preferential tariff, depending on shipment price



#### 4. Empirical application

The formula set out in (6) has been used to calculate the  $VPM_{EP}$  for Moroccan clementines. This product is affected by the entry price under the following MFN treatment between November and February.

Table 1. Entry price regime for MFN clementines

<i>Ad valorem</i> tariff	Entry and border prices	Specific tariff
16%	border price $\geq$ entry price = 64.9 €/100Kg	0
	64.9 €/100Kg > border price $\geq$ 63.6 €/100Kg	1.3 €/100Kg
	63.6 €/100Kg > border price $\geq$ 62.3 €/100Kg	2.6 €/100Kg

<sup>3</sup> The graph has been made under the assumption that the agreed entry price is below 92% of the MFN entry price. Nowadays, it is true in the vast majority of the cases in SMC Association Agreements, indicating again the *a priori* generous concessions made by the EU. In the two cases when the agreed entry price is greater than 92% of MFN entry price, the upper flat segment in the graph would disappear.

	62.3 €/100Kg > border price >= 61 €/100Kg	3.9 €/100Kg
	61 €/100Kg > border price >= 59.7 €/100Kg	5.2 €/100Kg
	border price < 59.7 €/100Kg	10.6€/100Kg

Source: EC Regulation 1789/2003

Morocco has agreed a lower entry price for 130,000 metric tonnes, and these are the conditions for the same period. Actual trade flows are clearly below this quota.<sup>4</sup>

Table 2. Agreed entry price for Moroccan clementines

<i>Ad valorem</i> tariff	Entry and border prices	Specific tariff
0%	border price >= entry price = 48.4 €/100Kg	0
	48.4 €/100Kg > border price >= 47.4 €/100Kg	1 €/100Kg
	47.4€/100Kg > border price >= 46.5€/100Kg	1.9 €/100Kg
	46.5 €/100Kg > border price >= 45.5 €/100Kg	2.9 €/100Kg
	45.5 €/100Kg > border price >= 44.5 €/100Kg	3.9 €/100Kg
	border price < 44.5 €/100Kg	10.6€/100Kg

Source: EU-Morocco Association Agreement, review December 2003 (OJ L 345/119)

We have calculated the monthly  $VPM_{EP}$  from November 2005 to February 2006. The value of the monthly trade flows from Morocco has been extracted from COMEXT. Moroccan daily SIV have been collected from TARIC database, and their monthly averages have been calculated and used as proxies for the monthly border prices. As the VPM indicator assumes that rents are fully accrued by exporters, it is assumed that these border prices and SIV are the prices perceived by Moroccan exporters.

The different tariffs to be applied in the calculations using (6) correspond to the ones to be paid with the calculated monthly prices under both MFN and Moroccan treatment.

<sup>4</sup> If the quota is binding, a new scenario appears where since the measure would have its own AVE.

These data are summarized in table 3, and the results of the final calculations are shown in table 4.

Table 3. Data on Moroccan clementines exports, Nov.05-Feb. 06

	November	December	January	February
Quantity (100Kg)	117,713	373,839	228,622	79,749
Average SIV (€/100Kg)	59.98	60.31	72.75	93.86

Source: COMEXT and own calculations based on TARIC database

Table 4. Monthly  $VPM_{EP}$  for Moroccan clementines

	<b>Specific gain (€)</b>	<b><i>Ad valorem</i> gain (€)</b>	<b>Total gain = <math>VPM_{EP}</math> (€)</b>
November	612,107.60	1,053,690.74	1,665,798.34
December	1,943,962.80	3,096,492.82	5,040,455.62
January	0	2,317,563.72	2,317,563.72
February	0	971,391.72	971,391.72
Total Nov.-Feb.	2,556,070.40	7,417,996.75	9,974,067.15

Source: own calculations based on TARIC database

The overall results indicate that the transfer for Moroccan clementines is about 10 million Euros, out of a total trade of 56 million Euros in the period. Preferences represent therefore less than 18% of the value of trade, indicating their relative importance. The specific gain accounts for 2.5 million Euros of this transfer overall, the rest being due to the *ad valorem* gain. A monthly analysis shows that November and December behave quite differently than January and February.

In November and December, Moroccan monthly SIV are below MFN entry price and hence Morocco obtains some specific gains. Overall, the specific gains for each month

are between 36.7% and 38.7% of total transfer. But it may be worthwhile to stress the fact that this gain, even important, is not the maximum possible. In fact, Moroccan exports are not paying any specific tariff, but if they were cheaper –without undermining their preferential entry price- they would maximize the specific gain since they would fall on the upper flat segment in graph 2.

For January and February, there is no specific gain since Moroccan shipments are more expensive than the MFN entry price level; thus, all the gain comes from the *ad valorem* tariff elimination and the entry price concession is useless in these months.

## **5. Conclusions and implications**

It has been shown a new indicator for gauging the value of preferences in the case of entry price reduction. This indicator, the  $VPM_{EP}$ , belongs to the group of indicators based on actual trade flows and stems from the VPM useful for calculating the potential transfer associated with tariff reductions. The main feature of this new indicator is that it allows decomposing the total transfer into the part associated with the reduction of entry price (e.g., reduction of specific tariff) and into the part associated with the above entry price *ad valorem* tariff reduction -that always happens simultaneously to the aforementioned concession.

In the empirical application, it has been shown that the value of preferences is almost 18% of the value of Moroccan exports of clementines to the EU. It equals 10 million Euro, out of them 2.5 million correspond to the specific gain, and the rest stem from the *ad valorem* reduction. Hence, in spite of the *a priori* assumptions, it seems that the

importance of the entry price reduction is secondary to the one of the *ad valorem* reduction.

The use of the new indicator on a monthly basis allows identifying exporting and negotiating strategies for Morocco. In November and December, a reduction of export prices without undercutting the preferential entry price would allow the country to better exploit the concession and obtain higher preferential transfers. In January and February, the entry price reduction is useless and the country has two options. The first is trying to reduce export prices below the MFN entry price, so to have some specific gain. If the supply conditions make exporters reject this option, the second alternative for Morocco is to use this concession as a negotiating capital in future reviews of the agricultural protocol, with the possibility of giving up to the entry price reduction in favour of more profitable alternatives.

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