

## **Liberalization of Euro-Mediterranean trade: customs tariffs are not the main obstacle to European fruit and vegetable imports**

*While the liberalization of trade in industrial products is well underway, access to the market in the agricultural sector still remains limited. The issues of agricultural trade liberalization vary from one side of the Mediterranean to the other. For Southern and Eastern Mediterranean countries, the two main issues are the protection of the basic market products and the improvement in access to the European market for export produce, namely fruit and vegetables. European producers fear an exacerbation of Mediterranean competition in this same sector, sensitive to crises and with relatively little support from the Common Agricultural Policy. The issue of access to the European market for Mediterranean fruit and vegetables is all the more sensitive in that the EU is the main market for horticultural export from these countries. An analysis of the tariff protections applied by the EU to fruit and vegetable imports reveals that Mediterranean countries already enjoy a high level of preference on the European market compared with other exporting countries. Additionally, the estimation of an econometrical model shows that customs protection is not the only trade determinant. Tariff reduction appears to be far from eliminating all the obstacles to trade.*

Since 1995, the European Union and Mediterranean countries have been committed to an economic, social and political partnership called the “Barcelona process”. Up to now, the objectives of the Barcelona process have chiefly been made concrete by the conclusion of bilateral trade agreements between the EU and each partner country. The renewal of these agreements in a perspective of increased liberalization has aroused a lot of debate, in particular in the fruit and vegetable sector (in 2007, Mediterranean countries provided 22.4% of the fruit and vegetables imported by the EU). These products fall under a complex system of trade protection (see frame 1) and a detailed analysis is therefore necessary to measure such liberalization issues.

### **Significant tariff preferences for fruit and vegetables coming from the Mediterranean countries**

Given the complexity of the European system of protection and preferences, it is difficult to determine to what extent some exporting countries, compared to others, have an advantage

in terms of access to the European market. Preferential margin is an indicator which measures this benefit. A country margin corresponds to the difference between the duties actually paid by the country and the amount of duties it would have paid if it had not enjoyed tariff preferences (MNF<sup>1</sup> tariffs). The preferential margins presented in tables 1 and 2 were assessed at the finest level of the products by taking into account the various tools of tariff protection (entry prices, quotas, seasonality).

The mean preferential margin of the Mediterranean countries represents 5.2% of the value of their exports towards the EU. Other countries, in particular those benefiting from the EU neighbourhood policy (Switzerland, Norway), also enjoy high preferences, but are minor exporters of fruit and vegetables.

---

<sup>1</sup> The Most Favoured Nations. MNF tariffs are negotiated at the WTO; the WTO member states commit themselves not to applying higher customs duties than the MNF tariffs towards other member states.

### Frame 1: A complex system of protection for the European fruit and vegetable sector

Like most agricultural produce, fruit and vegetables are subject to *ad-valorem* duties (proportional to the product value) and specific duties (in €/kilo) when entering the European market. For the majority of fruit and vegetables, these rights vary according to the seasons. By implementing seasonal tariffs, the EU aims to enhance the protection of its production at the moment it is marketed, while facilitating access to the Common Market at times when European production is low.

Moreover, for some produce like tomatoes (and fourteen other fruit and vegetables), the amount of specific duties depends on their import price. This system, called the Entry-Price System (EPS) is characteristic of the fruit and vegetable sector. It is based on a threshold price, also called a “trigger price” defined for each product. The amount of specific duties which apply when a product arrives on the Common Market depends on the import price level in relation to the trigger price. These duties are particularly high when the import price is lower than 92% of the trigger price, making taxation quite prohibitive.

Under preferential agreements, the European Union grants reductions in customs duties (ad-valorem or specific duties) to some of its partners. These tariff concessions apply to the entire quantity traded or in some cases to a fixed and pre-determined trading volume, defining what is called a tariff quota. Furthermore, the application period of preferences varies: Reductions may be limited to some periods of the year, defining preferential “windows”. Last, for some products, a reduction in the trigger price may be added to these reductions in *ad-valorem* duties. This last type of preference only applies under the tariff quota.

**Table 1: Exports and preferential margins towards the European Market in the fruit and vegetable sector in 2007 (per tariff system)**

Area	EXPORTS TOWARDS EU (M€)	Preferential margins (%)
No preferences	2,135	-
Generalized system of Preferences	4,507	1.80%
Other bilateral agreements	3,755	3.50%
<b>Euro-Mediterranean agreements*</b>	<b>3,361</b>	<b>5.20%</b>
Africa Caribbean Pacific	956	1.90%
Least developed countries	181	1.40%
Neighbourhood policy	54	18.40%
Balkan countries	28	3.30%
<b>Total</b>	<b>14,977 €</b>	<b>2.80%</b>

\* Nine Mediterranean countries are signatories of bilateral agreements with the European Union under the euro-Mediterranean process (see table 2)

Source: Authors' calculation from Eurostat COMEXT and TARIC databases

**Table 2: Exports and preferential margins towards the European market in the fruit and vegetable sector in 2007 (per Mediterranean country)**

Country	Exports towards EU (M€)	Preferential margin (in %)
Algeria	17	7.0%
Egypt	378	5.7%
Israel	592	3.3%
Jordan	12	5.5%
Lebanon	22	6.4%
Morocco	796	8.0%
Syria	26	2.8%
Tunisia	92	7.0%
Turkey	1,447	4.2%

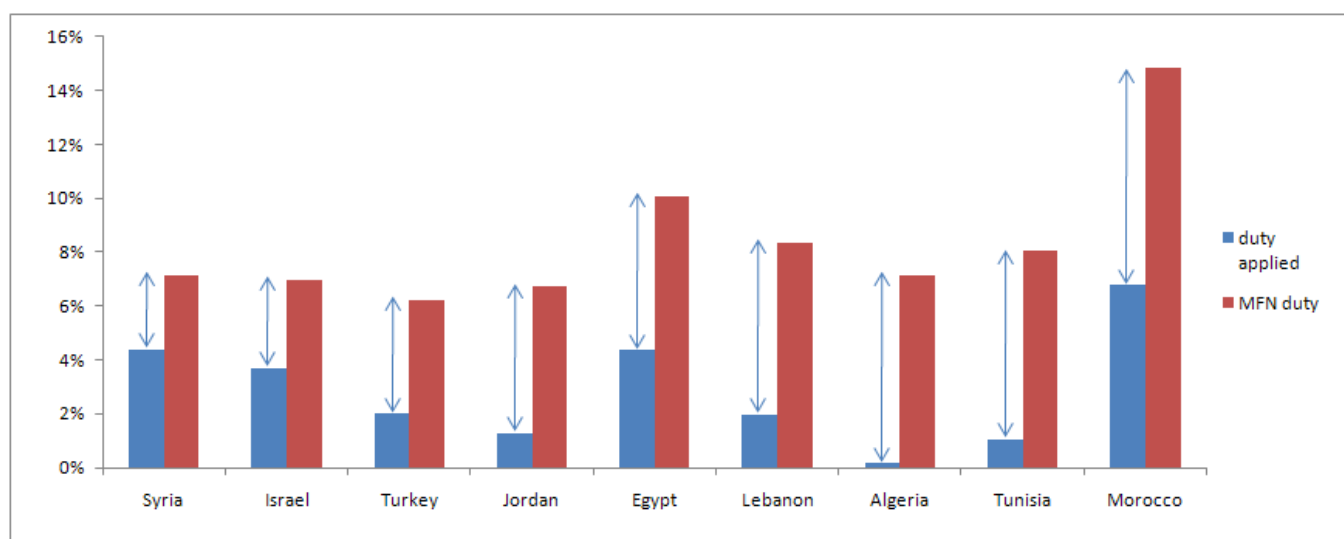
Source: Authors' calculation from COMEXT and TARIC databases

Four countries, Morocco, Turkey, Israel and Egypt, provide 95% of the fruit and vegetable exports from the Mediterranean region towards the EU. But for each country, the EU agreements offer preferential access to the European market for the products that represent a large proportion of their agricultural exports.

Graph 1 presents the classification of the various Mediterranean countries according to their

preferential margin on the European market. For each country, it shows the level of duties paid for fruit and vegetable exports on the European market in 2007 (blue) and that of the duties these countries should have paid if they had not enjoyed any preferences (red). The arrow showing the variation between both duties corresponds to the preferential margin. Algeria, Tunisia and Morocco are the Mediterranean countries which enjoy the highest preferential margin.

**Graph 1: Preferential margins on the European market in the fruit and vegetable sector, per Mediterranean country (2007)**



Source: authors' calculation from COMEXT and TARIC databases

This margin is explained differently according to countries. In the case of Tunisia and Algeria the high level can be explained by the low preferential rights applied to their exports (such as dates). But for Morocco it is explained by the specialization of Moroccan exports in products that are highly taxed in the multilateral system. The customs duties that should have been paid if the country had not enjoyed any preferences are indeed very high (over 14% on average). For this reason, even though that country still has to pay significant taxes to enter the European market (more than 6%), it also enjoys the highest preferential margin. The export structure also explains Turkey's low preferential margin. This country mainly exports low-taxed products in the multilateral system (dried fruit). On the other hand, for Israel the explanation comes more from the low level of preferences granted to this country by the EU than from its export structure. This first statistical analysis of the preferences granted to fruit and vegetable imports from the Mediterranean countries shows the high level of

heterogeneous of the Mediterranean area in terms of access to the European market, either linked to the progress of their bilateral negotiations or to the structure of their exports.

These results show that those countries are already given big preferences on the European market. Taken as a whole, these preferences leave little room for manoeuvre for more advanced liberalization, but significant variations between countries are still observed.

### **Trade barriers are not the only obstacles to trade between the EU and Mediterranean countries**

An econometric assessment of access to the European market for Mediterranean countries completes the detailed analysis of European tariff protection. It takes into account all the barriers to trade on entry to the EU. This estimation was based on a gravity model (see frame 2). Estimation of the model used highly

disaggregated data (at product level, which is to say more than 70 different fruit and vegetables) for all the suppliers of the European market. Trade data come from the UN COMTRADE database, production data and basic prices from

the FAO database, distance data from the CEPII (Office of Prospective studies and International information) and protection data from the Eurostat TARIC database.

### **Frame 2: Border effect and gravity model, an econometric estimation of trade barriers**

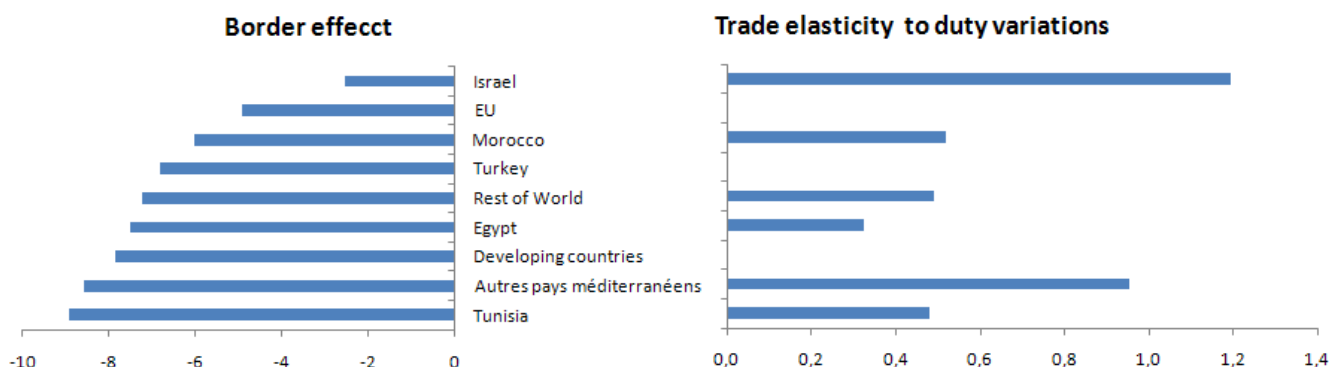
The “border effect” methodology captures the border impact on trade (Mac Callum 1995). It consists in comparing imports from various supplier countries with trade inside the importing country (here, each European country is taken separately). Intra-national flows are used as a reference to apprehend access to the market for the exporting countries, assuming that the best access possible is that of the domestic producers.

The gravity model, an econometric model of trade, is often used to make this comparison between intra and international trading. This model gets its name from the analogy with the Newton law. It is based on the intuition according to which the trade flow between two countries is proportional to their respective weights and inversely proportional to the distance which separates them. Long criticized for its lack of theoretical basis, the gravity model is now the subject of an increasing number of works aiming to explain its specification from a theoretical point of view. Here, the gravity model is based on the model developed by Anderson and Van Wincoop (2004). In that model, bilateral trade depends on the production of the exporting-country, on the relative price-competitiveness of the two partner countries, on the distance separating countries, on the customs duties and the perishability of the products. All the effects which were not captured by the previous variables are taken into account by variables specific to exporting countries (fixed effects). These effects give a global picture of the costs incurred by crossing borders. These costs, commonly called “border effects”, integrate the importing-country’s costs of adaptation to norms, the costs of market exploration, the informal barriers or off-price competitiveness, for example.

Graph 2 presents the classification of the various Mediterranean countries and other regions of the world from the angle of their trade sensitivity to customs duties (elasticity) and border effect (coefficient relative to fixed country effects, estimated in the gravity model). Mediterranean countries are unequally sensitive to EU commercial policy. Trade from Israel is more sensitive to the protection level than trade from other countries while that of Turkey is not at all. In this way, a 1% rise in customs duties would bring about a 1.2% drop in Israeli exports of fruit and vegetables. The border effect showed in the graph is always negative, which means that all exporters are disadvantaged in terms of access to the European market compared with the domestic producers of each European country. For Tunisia and the group of “other countries from the Mediterranean zone” (Syria, Lebanon, Jordan and Algeria) this effect is highly significant.

Therefore, “all things being equal”, the barriers other than tariff barriers greatly reduce the access of these countries to the European market. These barriers (norms, logistics...) represent a major obstacle to European imports from those countries. By comparison with other exporting countries, Israel enjoys greater preferences for exports to the European Union. Its border effect is even lower than that of the European countries, which means that on average Israel is more favoured than the other EU countries. This may be explained by its logistical performances. Morocco and Turkey have a fairly low border effect. Let us add that even for European exporters the border effect is also negative and significant. This means that trade in fruit and vegetable is carried out preferentially at local or national level before giving way to trade between European countries. Therefore, despite the single market, the European market remains fragmented.

**Graph 2: Border effect and trade elasticity in relation to customs duties, resulting from the estimation of the gravity model applied to EU (15) fruit and vegetable imports**



Source: authors' assessments – The X axis corresponds to the value of the coefficients estimated in the economic regression (right graph: trade elasticity at tariff, and left graph: value of the coefficients of the fixed effects)

Furthermore, the econometric estimation shows that the distance between partner countries also plays a significant role in trade, in particular for the most perishable products. These results show that tariff barriers are far from being the only obstacles to trade. Transport costs, but also non observable costs, limit access to the EU market. These costs, high even inside the European market, put the impact of a reduction in trade customs duties into perspective. Even global liberalization would not eliminate all the trade barriers.

## Conclusion

Our results suggest that Euro-Mediterranean liberalization of the fruit and vegetable trade should have a minor impact on trade between the two zones, all things being equal. Mediterranean countries already enjoy highly preferential access

to the EU fruit and vegetable market. Moreover, fruit and vegetable trade from the Mediterranean zone towards Europe is characterized by high non-tariff costs that we highlighted through the border effect. However, liberalization could have a big impact in the case of Israel or Morocco. This heterogeneousness of the liberalization issues for different Mediterranean countries is explained both by the progress of negotiation with the EU, variable according to countries, and by their level of competitiveness.

Therefore, it is unrealistic to assume that agricultural trade liberalization alone may lead to the agricultural development of the Mediterranean countries. Indeed, without any accompanying measures, access to the European market in the fruit and vegetable sector would only bring little gain to Mediterranean countries.

*The results shown here were obtained as part of a thesis and within the EUMEDAGPOL (FP6) European project bringing together several research teams from countries within the Mediterranean region.*

**Charlotte Emlinger**, CEPII Paris  
**Emmanuelle Chevassus-Lozza**, UR 1134 LERECO, INRA Nantes  
**Florence Jacquet**, UMR 210 Economie Publique, INRA Paris Grignon  
[emlinger@iamm.fr](mailto:emlinger@iamm.fr), [chevassu@nantes.inra.fr](mailto:chevassu@nantes.inra.fr), [fjacquet@grignon.inra.fr](mailto:fjacquet@grignon.inra.fr)

### For further information

- Anderson, J. E., van Wincoop, E. (2004)** Trade costs. *Journal of Economic Literature*, 42: 691–751.  
**Emlinger, C., Jacquet F., Chevassus-Lozza, E. (2008)** Tariffs and other trade costs: Which access for Mediterranean countries on the EU15 fruit and vegetables markets? *European Review of Agricultural Economic*, 35: 409-438.  
**Emlinger, C., Chevassus-Lozza, E., Jacquet, F. (2008)** Euromediterranean agreements: which advantages for Mediterranean countries in fruit and vegetables sector? 12th congress AEEA, août 2008, Ghent Belgium.  
**McCallum, J. (1995)** National borders matter: Canada–U.S. regional trade patterns. *American Economic Review* 85: 615–623.