The Impact of Euro-Mediterranean Partnerships on Trade Interests of the OIC Countries

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Paper Presented at the Workshop on
"Implications of Regional Economic Groupings,
Particularly the European Union,
for the Economies of the Member Countries"

Organized by
Statistical, Economic and Social Research and
Training Centre for Islamic Countries,
Organisation of the Islamic Conference
18-19 September 1997, Ankara

Introduction and Background

The ongoing process of global integration has intensified since the establishment of the World Trade Organization (WTO) in January 1995. The WTO principles and declarations (for example the declaration by the WTO Ministers meeting in Singapore in December 1996) place a lot of emphasis on member countries commitments: to create and maintain a rule-based system that is fair, equitable, open and that promotes trade without discriminatory treatment and maintain and ensure highest degrees of transparency; to liberalize trade and remove tariff and non-tariff barriers as well as other forms of protectionism from trade in goods and services; and to integrate developing, least-developed and countries in transition into the multilateral system and encourage further development and reforms.

While most countries (those that are already members of the WTO and those that are considering membership) are in the process of implementing the obligations associated with WTO principles, most countries in the Mediterranean region have gone an extra step by either having signed an individual agreement with the European Union (Tunisia, Morocco, Jordan and the Palestinian Authority) or be in the process of reaching and agreement with the EU (Lebanon and Egypt) or having started negotiations (Algeria) or starting to discuss the idea (Syria). The countries involved in these agreements commit to the implementation of obligations that are considered to be deeper than those of the WTO and are, therefore, expected to have significant impacts on these countries as well as other countries in the region (Organization of the Islamic Conference members make-up the majority of the countries expected to be directly affected). According to Hoekman and Djankov (1996) the commitments of the Mediterranean partners to these Euro-Med agreements include implementing obligations associated with the following six elements: (1) political dialogue; (2) free movement of goods; (3) right of establishment and supply of services; (4) payments, capital, competition and other safeguards; (5) economic, social and cultural cooperation; and (6) financial cooperation.

Various aspects of the Euro-Med partnerships have been discussed by many authors. Hoekman and Djankov (1996) and Laanatza (1997) provide in-depth analysis and evaluation of these agreements. They reach a number of interesting conclusions and provide many useful insights. We highlight the conclusions relevant to our main objective of assessing the impacts of the agreements on countries of the OIC region. Two of the conclusions reached by Hoekman and Djankov are that in the long run the Euro-Med agreements are expected to be beneficial to all partners involved, and that in the short run these agreements are likely to be economically welfare-reducing. The first conclusion is supported by facts such as: the trade liberalization required by the agreements is expected to improve productive capacity and efficiency; commitments by the partners to the agreements are likely to enhance the credibility of the reform paths pursued by the countries involved; and the agreements are likely to be very beneficial in inducing competition, encouraging investments and decreasing transaction costs associated with trade. The second conclusion is supported by arguments such as: the agreements are discriminatory by definition and may, therefore, involve significant trade-diversion; the transition path to free trade with the EU and the gradual liberalization of the economies involved are likely to take a long time due to the absence of binding commitments in foreign direct investment, services and government procurement and the broad safeguards; and the level of economic and financial cooperation between the partners and the degree of MFN tariffs (imposed on third countries) liberalization are critical factors in ensuring that the agreements are welfare improving.

Laanatza's main conclusion is that given the formidable challenges associated with fulfilling the obligations of the Euro-Med agreements (and the WTO obligations as well) very significant restructuring of the Mediterranean economies is expected to take place. Strong regional economic cooperation is needed to meet such challenges. She suggests strongly that the agreements be reviewed completely so as to avoid hindering the development of intra regional trade (between the Mediterranean countries and with other countries in the region - e.g. OIC members). To support her suggestion and conclusion

she critically reviews the agreements with respect to the following elements: trade facilitation; product standards and certification systems; competition policy; government procurement; trade in services; intellectual property rights; foreign direct investment measures; market access conditions; rules of /origin; and subsidies within the EU. She points out significant shortcomings with all the elements of the agreements. We restate briefly two of her arguments and refer the reader to Laanatza (1997) for the rest. Regarding rules of origin she notes that the current legal frameworks of the agreements work against the goal of creating a free-trade area in the region by 2010 since they do not allow countries that do not have similar rules of origin to conclude bilateral free trade agreements with each other. Regarding EU policy for subsidies (which significantly supports the agricultural and industrial sectors), the inequality concerning access to funds (e.g. Spain is entitled to ten times the amount Morocco could receive over the next five years) is likely to favor EU firms over their Mediterranean counterparts in competition and to attract foreign investments into the EU through the "hub-spoke" effect (i.e. investments that could have gone to one of the Mediterranean countries would instead go to the EU (the hub) and have access from there to all the Mediterranean partners (the spokes)).

It is with conclusions similar to the above that we embark in quantifying and assessing the impact of regional economic groupings, in particular the Euro-Med partnerships on the trade prospects of the OIC countries. In order to do this we study the export potential of countries in the region by analyzing the similarity and correspondence of their exports and imports with the imports and exports of their alternative trading partners from the OIC and the EU regions. The idea is simple: we construct trade similarity indices (to be defined below) for the periods of the mid-1980s and early 1990s and for certain commodity groups and use them to analyze the export prospects of the countries in the OIC region and the expected impacts of the Euro-Med partnerships. This is work in progress and due to time and data limitations we report here on the first half of the project where data for selected OIC members and selected industrial countries (including some of the EU members) from the period between 1982 to 1987 is used.

This study has two purposes. One to understand the potential for bilateral trade between OIC member countries and their alternative trading partners and assess their export prospects. The other is to analyze the impact of the formation of discriminatory trade liberalization on third partners. The potential for trade between these countries and their trading partners is assessed taking into account the commodity composition of trade of the countries involved. This is done using a measure of the similarity between the export and import vectors of pairs of countries. This would reveal both the export prospects of the countries and whether formation of partnerships by some of the countries (or example with the European Union) are likely to help or harm trade between them and other countries (OIC members).

The Potential for Trade

One formal way of assessing trade flows that have not yet taken place is by tests of correspondence between exports and imports of pairs of countries. Given a vector of economy i's exports and a vector of economy j's imports, the greater is the similarity between the two vectors the greater is the potential for exports from country i to country j. Using vector analysis, two vectors A and B are said to be similar the closer the value of the cosine of the angle between them is to 1. The value of the cosine of the angle between two vectors is given by the scalar product of the two vectors divided by the product of their magnitudes. That is,

$$Cosa = A.B \Big/ |A||B|$$

where A and B are the vectors and a is the angle between them. Denoting the vector exports of country i by X_i and the vector of imports of country j by M_j, then similarity between the exports supply of country i and the imports demand of country j can be measured by the trade similarity index, TS_{ij} (= cosine of the angle between X_i and M_j), given by

$$TS_{ij} = X_i . M_j \Big/ \left| X_i \right\| M_j \left|$$

$$= \frac{\sum_n x_{in} m_{jn}}{\sqrt{\sum_n x_{in}^2 \sum_n m_{jn}^2}}$$

Where x_{in} = exports of commodity *n* by country *i*

m_{jn} = imports of commodity *n* by country *j*

TS_{ij} is a measure of commodity correspondence in the trade structure of the two countries. $TS_{ij} = 0$ implies that no trade will take place as the commodities of the exporting country do not correspond to the commodities of the importing country. There is potential for trade when $(0 < TS_{ij} < 1)$, with trade possibilities increasing as the value of TS_{ij} gets closer to 1. TS is an ordinal measure ranking items within a given collection from highest to lowest without measuring their magnitudes. In order to decide on what the magnitude of TS implies for the relationship, we will use the following standard rule of thumb: TS values of 0.8 to 1.00 indicate very high similarity, values of 0.6 to 0.8 indicate high similarity, values between 0.4 and 0.6 indicate moderate similarity, values between 0.2 and 0.4 indicate low similarity, and values between 0.0 and 0.2 indicate little if any similarity.

Some comments are in order. This index was developed originally by Allen (1959), and has been used in a number of studies by Linnemann (see for example Linnemann (1966), Linnemann and van Beers (1988) and van Beers and Linnemann (1991)) and van Beers and Biessen (1995). The export and import vectors at SITC-3 digit level were taken from the UN International Trade Statistics Yearbook for the 1986-87 period where available. This index is based on total trade of the country to all destination and does not reflect (or use) actual bilateral trade. It does, however, reflect the potential for bilateral trade flows between pairs of countries.

The TS values are calculated for a sample of 25 countries, with 5 industrial countries (France, Germany, Japan, United Kingdom and United

States) and 20 countries from the OIC region (including some of the Euro-Med partners).

Table 1 gives the values of the TS indices for the expected bilateral trade flows in three-digit commodity levels between the countries in the sample as well as the average values of the indices for trade with blocks of partners taken from the sample (the blocks are: all countries in the sample, industrial countries and OIC members). One general result that emerges from the table and confirms conventional wisdom is that, countries with large, developed and diversified export bases tend to have higher similarity between their exports and the imports of other countries when compared with non-diversified economies. This result is evident by the higher TS measures of most industrial countries (as exporters) and the lower TS measures of other countries (as exporters).

Table 1 reveals that Egypt, Tunisia, Syria, Oman and Indonesia (with indices bigger than 0.34) seem to have export vectors that correspond relatively better on average with the import vectors of other countries in the sample, compared with other OIC members in the sample. While their TS measures indicate that their exports have low similarity on average with all countries in the sample, their potential is reasonable when we note that the values of most industrial countries in the sample fall in the 0.4 to 0.5 range. TS figures for the one and two digit commodity levels (not reported here) reveal better correspondence among all countries in the sample. Many of the OIC members have TS measures that fall below the 0.2 level for their export and their import vectors, at the three digit commodity level. On the export side the countries with little or no similarity with the rest include Turkey, Kuwait, Pakistan, Saudi Arabia, Morocco, Jordan, Somalia, Yemen and Sudan. On the import side the list includes Saudi Arabia, Malaysia, Kuwait, Algeria, Egypt, Qatar, Somalia, Sudan and Libya. These OIC members seem to have exports and/or imports at the three digit-level that are concentrated in a few products, thus decreasing the likelihood of a good match with the import and/or export vectors of other countries. TS figures for commodities at the one and two digit levels are much higher. The import

vectors of all countries in the sample corresponds relatively better with the export vectors of industrial countries, as stated in the last paragraph except for Bahrain, Syria, Turkey and Japan which seem to match better with members of the OIC.

The diagonal elements (TS_{ii}) of Table 1 reflect the possibilities for intra-industry trade (i.e. a country exporting and importing goods falling within the same product classification). A high value for the index would indicate that the set of commodities produced and traded by the country give rise to product differentiation and situations where the country could export and import different varieties of the same good. The TS_{ii} values for the Syria, Malaysia and UAE are high (within the 0.51-0.78 range), while the values for the rest of OIC members in the sample are substantially lower (below 0.2 for the majority). This suggests that these countries have more possibilities, relative to the rest of the group, for intra-industry trade.

We now turn our attention to the countries of the Mediterranean region that have or are in their way to having free trade agreements with the European Union. These countries are Tunisia, Morocco, Jordan, Egypt, Algeria and Syria. Table 1 reveals that while exports of this group match better on average with imports of the industrial countries, Bahrain, Turkey, Jordan, Syria, Oman and to some extent Indonesia represent potentially good destinations for the exports of most members of the group. Table 1 also shows that while import vectors of the group correspond better with the export vectors of industrial countries, Tunisia, Oman, Libya, Indonesia, Egypt and to some extent UAE represent potentially good sources of imports to the group.

Table 1: Trade Similarity Indices

Notes: **- Data is for 1986 unless indicated otherwise**
- Imports vector for Yemen was not available
- Exports vector for Bahrain and Qatar were not available

Source: Calculated by author from trade data at the SITC 3-digit level in the 1990 UN *International Trade Statistics Yearbook*.

Using this information, revealed by Table 1 we conclude that free trade partnerships of each of the countries in the group with the EU are likely to be harmful to Indonesia, Syria, Tunisia, Morocco, Pakistan, Turkey and to some extent Algeria, Oman, Libya and Egypt by attracting some of the beneficial trade that could take place with them to the EU. This could happen also due to the fact that the limited absorptive capacity of foreign goods by the Mediterranean countries could lead to a situation where an increase in imports (say) from Germany (as a result of the partnership) leads to a decrease in imports from (say) Indonesia even if the set of imports from Indonesia is different from the set of imports from Germany. It is also likely that the partnerships would harm Tunisia, Syria and Egypt if the rules and obligations embodied in the agreements prevent them from forming preferential trading arrangements with other countries in the region.

The evidence, so far, suggests that industrial countries (including most EU members) are potentially the best trading partners for most OIC countries in the list. Actual trade figures confirm this. In the mid-eighties approximately 40% of Jordan's imports came from Europe and approximately 20% of its exports went to Europe, the figures were, respectively: 75% and 75% for Tunisia and Algeria; 60% and 65% for Morocco; 55% and 50% for Egypt; and 50% and 70% for Syria. While the Euro-Med partnerships are to create free trade areas within approximately ten years, it is expected that trade in certain sectors (sensitive) would remain restricted. Relatively little changes have taken place regarding market access of certain commodities (agricultural goods and clothing and textiles) from the partners to the EU. While the agreements involve fundamental changes regarding market access of EU exporters into the partners' markets the opposite is not true, except may be for industrial goods. In order to capture the effects of these and related restrictive aspects of the agreements we calculated trade similarity indices for sensitive and non-sensitive products for the group of Mediterranean partners. The list of sensitive and non-sensitive goods, which

follows similar work by Aggion et al (1992) and van Beers and Biessen (1995), is given in the Appendix.

Table 2 gives the TS values for the Mediterranean partners as exporters and importers respectively, with all countries in the sample, at the three-digit commodity level for three categories: all goods, sensitive sectors and none-sensitive sectors. While TS values are somewhat low for both exports and import in all categories, on average Syrian and Tunisian vectors match relatively better with the vectors of other countries in the sample. With respect to exports, however, Egyptian and Tunisian export vectors correspond relatively better to the import vectors of other countries in the sample in the all commodities and in the none-sensitive sectors, while Jordanian and Moroccan vectors have the better match in the sensitive sectors category. On the import side, Jordanian and Syrian import vectors correspond better with the export vectors of other countries in the sample in the all commodities and the none-sensitive sectors, while Tunisian and Moroccan vectors match relatively better with others in the sensitive sectors.

Table 2: Trade Similarity Indices for Euro-Med Partners with all Countries in the Sample

Tables 3 and 4, which give Similarity indices for trade with the industrial countries and members of the OIC respectively, indicate that on average in all commodity categories Tunisia, Algeria and to some extent Egypt make relatively better trading partners with the industrial group of countries while Jordan, Tunisia and to some extent Syria and Egypt make better trading partners with countries of the OIC. As for specific sectors, Egypt, Tunisia, Algeria and Syria seem to have exports that match relatively better with the imports of the industrial and the OIC countries in both the all sectors combined and the none-sensitive sectors. In the sensitive sectors Moroccan, Tunisian and Syrian exports match relatively better with the industrial countries while Jordanian exports match relatively better with the members of the OIC. On the side of imports, the TS indices of all six countries with the industrial countries are very close in value ranging from 0.31 to 0.55. Syria, Jordan and Morocco seem to have the relatively better match of their imports with the exports of members of the OIC, especially in the all-goods and the none-sensitive-goods categories.

The proceeding analysis reveals that the export potential of the group in the sensitive sectors is relatively weaker than that of the none-sensitive sectors, except for Morocco and Jordan. This suggests that the restrictive policies of the EU are not likely to be more harmful to these countries in sensitive as compared with none-sensitive sectors. The harm, however, could come from whether the rules and obligations embodied in the agreements would prevent the Mediterranean partners from taking advantage of export possibilities, that may have risen more recently. In order to find the likelihood of that, one needs to analyze more recent evidence on trade potential and similarity. This is forthcoming.

Table 3: Trade Similarity Indices for Euro-Med Partners with Industrial Countries

Table 4: Trade Similarity Indices for Euro-Med Partners

with Members of the OIC

Conclusions

Using a measure of commodity composition of trade, that provides insights on the export potential of countries and the bilateral trade possibilities between them, it appears that the Euro-Med agreements are likely to have some negative impacts on some of the OIC members. The analysis also suggests that in order to take advantage of export possibilities and realize export potential, for all countries involved, the agreements should be carefully reviewed. This point is in agreements with what Laanatza (1997) suggested from her analysis of the contents of the agreements themselves. We should note, however, that while this work sheds some light onto the issue of the impact of the Euro-Med partnerships on OIC members, it is incomplete. More recent evidence should be reviewed in order to build a stronger picture of the trade possibilities of countries in the region. More decompositions of the data into various commodity groups are needed in order to make the effects more specific and the general picture more complete. A number of authors have been studying the determinants of actual bilateral trade. We are currently introducing the trade similarity index as an explanatory variable in such models. The benefit of doing this, for our interests here, is to find whether countries, in the region, with export potential have been able to turn that potential into actual exports.

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Appendix

Table A1: Classification Scheme of

the SITC, Rev. 2 at Three-Digit Level

Table A2: Sensitive Sectors

Table A3: Non-Sensitive Sectors