Israel — Middle East North Africa (MENA) Trade: Is There Truth to the NEG Theory as Applied to the Israel-Jordan QIZs?

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IS THERE ANY TRUTH TO THE NEG THEORY AS APPLIED TO THE ISRAEL-JORDAN
QIZs?

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I.   INTRODUCTION

The existence of bilateral Israel- Middle East and North Africa (MENA) trade in the 20th century was an oxymoron. That fact has not hindered some states to tinker with rules or origin and tariff barriers in order to engineer a new reality. The Clinton's administration's Qualifying Industrial Zone (QIZ) initiative is just such a case. (Singer, 2003) Apart from the standard paradigm that reducing barriers to trade will increase international trade and will improve a country's economic development, the QIZ initiative arose because of a number of political events, — Israel-Jordan Treaty of Peace, the Oslo process, and because of inconsistencies between the export regime that allowed duty free access to the US market for Israeli products under the U.S.-Israel Free Trade Area Agreement (U.S.-Israel FTA), did not offer the same treatment for products originating in the West Bank and Gaza.[1] As of 1996, the QIZ initiative extended the same kind of free access to the U.S. market for goods produced inside QIZs as it does to Israeli goods under the provision that these goods were manufactured in jointly-administered industrial zones along the Israeli-Jordanian border.

The QIZ approach to trade liberalization essentially extended the benefits of the US-Israel FTA to include exports from geographically circumscribed areas in Jordan. The QIZ rules of origin stipulate that a minimum of 35% of the exported good's value must be composed of local content: 11.7% of this must be Jordanian and 8% must be provided by Israeli manufacturers (7% for high-

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[1] Despite the Paris Protocol, which established a Customs Union among Israel, the West Bank, and Gaza, thereby allowing products from all three territories to have duty free access within the Union and established a unified export/import licensing and customs regime applying to the outer envelope of these territories, only Israeli products received duty free access in the US market. Granting the West Bank and Gaza GSP status was considered a temporary measure because it did not cover agriculture nor textiles. "The Paris Protocol was signed on April 29, 1994. It was included as an annex to the Israel-Palestine Liberation Organization Agreement on the Gaza Strip and the Jericho Area, May 4, 1994, 33 IL.M. 622 (1994) (known as "'the Cairo Agreement"). The Protocol was later partially incorporated and expanded upon in the Agreement on Preparatory Transfer of Powers and Responsibilities, Aug. 29, 1994, 34 I.L.M. 455 (1995). Finally, it was included as Annex V of the Israel-Palestinian Liberation Organization Interim Agreement on the West Bank and the Gaza Strip, Sept. 28, 1995, 36 I.L.M. 551 (1997)." See note 7 in Gross (2000).

tech products); the remainder to reach the 35% value-added requirement can come from Jordan, the US, Israel, and/or or the West Bank and Gaza.

The permissible accumulation of Israeli and Jordanian content for the purpose of calculating the QIZ rules of origin, were designed to provide economic assistance to Jordan. By providing duty free access to the U.S. market for Jordanian goods produced within the QIZs it was intended to promote foreign and local investments in Jordan, with the expected positive employment effects within Jordan. Moreover, the program was an explicit compensation to Jordanian businesses who cooperated with Israeli businesses. The underlying premise was that the QIZ initiative would be an economic incentive to greater Israeli-Jordanian peaceful cooperation. (U.S. House of Representatives, 1996).

Despite the fact that the US initiative was designed to promote peace and development between Israel and her Arab neighbors, it was and continues to be largely unsuccessful. Moreover, while the White House was counting on the QIZs, to promote employment in the West Bank, the real intent was to promote U.S.-Jordanian trade. Even here, despite both the US-Jordan FTA and the QIZ initiative, there has had a modest impact on promoting bilateral trade and on job growth in Jordan. A major explanation for this poor performance is the reality of Jordanian mistrust of Israel and proclivity to refrain from any meaningful joint activities with Israeli businessmen. Of Jordan's 13 QIZs, a large number are publicly operated industrial estates (better known as State Owned Enterprises [SOEs]) and function under the supervision of the Jordan Industrial Estates Corporation (JIEC).[2] In late 2003, the State Department estimated that QIZs had created more than 40,000 new jobs in Jordan, mainly for women.[3] This report however, did not mention that close to

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[2] The JIEC is 'semi-governmental corporation' with financial and administrative autonomy. The JIEC was created by Jordanian law in 1985 to promote the establishment of industrial estates in Jordan and is the key stakeholder in the development of QIZs in Jordan.

[3] U.S. Department of State, (Oct. 16, 2003.)

half of these jobs have been filled by expatriates, mainly from southern Asia. To make matters worse, a May 2006 report published by the National Labor Committee (NLC), based on worker interviews reported sweatshop-like conditions in 28 out of 100 QIZ plants in Jordan.[4]

Can the poor performance of the QIZ initiative be explained by the fact that there is no logical economic model which would make it work? To test this hypothesis we look at the theoretical literature on "New Economic Geography" (NEG) models which have stressed five crucial elements that distinguish them from other approaches to understanding international economic activity where geography should matter. (Baldwin, et.al. (2003); Fujita, Krugman, Venables, (1999); and Fujita, Thisse, (2002), among many others). These elements include (1) increasing returns to scale that are internal to the firms; (2) imperfect competition; (3) trade costs; (4) endogenous firm locations; and (5) endogenous location of demand. With all of these five elements (assumptions), the initial symmetry can be broken and agglomerations can form through a process of circular causation.

Empirical work testing NEG-based hypotheses benefits from the consideration of a set of plausible alternatives. The leading alternatives to NEG include: (1) Natural advantages [Ellison and Glaeser (1997, 1999)] - also known as "First Nature" [Krugman (1993)] and "locational fundamentals" [Davis and Weinstein (2002)] - and the closely related "factor proportions theory." (2) Human capital externalities models link the return to skill in a location to the number of skilled workers there. High skill areas tend to attract larger numbers of employers of skilled workers. [Krugman (1991); Helsley and Strange (1990) and Moretti (2004)] (3) Technological externalities/Knowledge spillovers. Producers benefit from spatial proximity of their counterparts in the same industry via flows of productive knowledge. [Rosenthal and Strange (2004)].

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[4] The NLC report was compiled from interviews with over 100 foreign guest workers in Jordan and workers forcibly returned to Bangladesh.

The purpose of this paper is to examine the Israel-Jordan QIZs and investigate under what circumstances it would fit into the agglomeration and trade literature noted above. Are the 5 key assumptions for the existence of a NEG model applicable to the Israel-Jordan QIZs?

Section II will present a primer on the Jordanian QIZs and present the current trade and employment data that is available. Section III will summarize the NEG model and point out why its core assumptions are not present in the case of Jordan's QIZs. Section IV presents a more viable alternative to improved Israel-Jordan-US bilateral trade.

II. WHAT ARE JORDANIAN QUALIFYING INDUSTRIAL ZONEs?

QIZs are typically industrial parks housing manufacturing operations. They simplify cooperative production between countries because they: 1) are enclaves of infrastructure in developing countries where infrastructure may be sparse; and 2) are fiscally outside the customs territory of a country. Thus, on raw materials flowing into and goods moving out of zones, customs procedures are streamlined and tariffs do not apply until the item formally enters a country as an import for consumption. QIZs are distinguished from other trade zones as follows: Trade zones in general: (a) are stand-alone entities within *one* country (not directly connected to *other* countries); (b) produce for export to or domestic consumption in *any* country; and (c) operate solely under the authority of and conditions determined by the host government. The Jordanian QIZs, however: (a) have operations in two countries (Israel and Jordan); (b) produce goods solely for export to the United States; and (c) operate under both the authority of the host countries and the oversight authority of the United States, which determines conditions for and authorizes tariff relief for QIZ imports.

Under the agreement between the parties, [P.L. 104-234] articles eligible for QIZ status must: (1) be wholly the growth, product, or manufacture of, and must be imported directly from, the West Bank/Gaza Strip (administered by the Palestinian Authority), or a QIZ; and (2) meet the following rules-of-origin requirements: At the time the product enters the United States, material and processing costs incurred in a QIZ[5] must total not less than 35% of the appraised value of the product. Of this 35%, 20% must come from Israel and Jordan, and 15% may be either U.S. materials or materials from Israel, the West Bank/Gaza Strip, and/or Jordan.[6] The remaining 65% can come from anywhere in the world. In addition, the article must have been "substantially transformed in the manufacturing process." [Section 1 of P.L. 104-234, amending Section 9 of P.L. 99-47.]

The incentives for foreign and local investment in these newly extended regions are simple - the QIZs are expected to induce entry in companies that want duty-free access to the U.S. market. For example, if a company sets up a manufacturing facility of consumer electronic goods or textile and apparel products in a QIZ along the Jordanian-Israeli border, it can import parts and components from any country in the world into the QIZ and assemble those parts and components into a finished electronic or textile and apparel product. As long as those parts and components undergo a "substantial transformation" and the 35% minimum value requirement is met, the finished product is eligible for duty-free access into the U.S. market. If the parts and components were assembled in their country of origin, the finished product would be ineligible for duty-free access under the U.S.-Israel FTA Implementation Act. As long as the duty are substantial there is an economic rational to assemble products in a QIZ.

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[5] Examples of such costs are originating materials, wages and salaries, design research and development, depreciation of capital investment, and overhead.

[6] The manufacturer from the Jordanian side must contribute at least 11.7% of the final produce and the manufacturer on the Israeli side must contribute 8% (7% on high tech products).

To demonstrate the degree of mistrust between Jordanian businessmen about working with Israeli firms, a QIZs product does not carry the label .Made in Israel., .Made in Jordan., or .Made in QIZs.. Merely marking a product to indicate that it is a product of a QIZ would not satisfy the U.S country of origin marking statute.[7] In order to pacify the Jordanian business community, a QIZs product carries the label *Made in Jordan/QIZs.* Note that there is no reference to Israeli content.

In March 1998, the A1-Hassan Industrial Estate in Irbid, Jordan, became the first Qualifying Industrial Zone ("QIZ"). The standard argument is that QIZ initiative encouraged investment in goods manufactured within the QIZ. Since 1998, the United States has designated thirteen QIZs in Jordan. On March 6th, 1998, the United States Trade Representative (USTR) designated Jordan's Al-Hassan Industrial Estate in the northern city of Irbid as the world's first QIZ. Table 1 presents the list of QIZs that were established by USTR. It also lists the number of new establishments in the QIZs from 2005 to 2008. Other industrial parks designated by the U.S. government as QIZs in Jordan include; the Al-Hassan Industrial Estate (Irbid), and Al-Hussein Ibn Abdullah II Industrial Estate (Al Karak), both owned and operated by the Jordan Industrial Estate Corporation. Also, the now privately owned and operated Al-Tajamouat Industrial Estate (Amman), Ad-Dulayl Industrial Park (near Zarka), Jordan Cyber City (Irbid), Al-Qastal Industrial Zone (Amman), and El-Zai Ready-wear Manufacturing Co. sub-zone (Zarqa). Other QIZs that have been initiated include the Gateway QIZ (northern Jordan-Israel border), Aqaba Industrial Estate (Aqaba), and the Mushatta International complex (Amman).

Table 2 presents the registry of companies operating the QIZ. The primary products produced in Jordan's QIZs are textile and apparel. This is not surprising given that the primary cost advantage for these Textiles and Apparel is cheap labor cost.

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[7] See Determination of Origin of Goods Processed in a Qualifying Industrial Zone or in Israel and the West Bank or Gaza Strip, 63 Fed. Reg. 34960-02, 34961 (June 26, 1998).

Although, there are no data independent factory-level labor data provided by Jordan that provides a detailed breakdown of employment by gender and hourly wages. A recent report by the National Labor Committee (2006) outlines a whole set of illegal labor market practices. For one, young women usually work in QIZs. The second large subgroup is workers from Asia. The guest workers from Bangladesh, Sri Lanka, China, India and other countries do not speak Arabic and are paid less that the Jordanian minimum wage. The official 'legal' minimum wage in Jordan's free trade zone factories is $120 a month and 58 cents an hour for the regular 48-hour workweeks. All overtime must be paid at a 25 percent premium, or 72 cents an hour. Foreign workers who represent over 50 percent of the QIZ employees, are paid the just $5, $10, $20 or $30 a month at most for both regular and overtime hours. (NLC, 2006). With these low wages it is not surprising that Jordan created for itself a short-run comparative advantage. Not surprisingly, the US administration, in its political desire to bring Jordan into the 21st century did not include in the QIZs agreement between Israel and Jordan any reference to labor and environmental laws or regulations.

Table 3 presents the exports of Public Estates under the QIZ program. A comparison of these figures with the trade data presented in Table 4 for non-QIZ exports, clearly points to the importance of the QIZ initiative. Not surprisingly these QIZs can be described as processing or assembly plants. Textile and apparel goods are the main products produced within QIZs and enjoy substantial duty-free access to the United States. With the end of the quota system in Textiles and Apparel, the advantages of cheap labor for Jordanian QIZs assembling Textile and Apparel is very doubtful. Moreover, from a development perspective there is no economic evidence that assembly alone will contribute to the industrialization of a country. Even though QIZs had resulted in increased export earnings in Jordan, the QIZ initiative has not induced significant benefits for backward linkages with domestic suppliers and far less in the way of investment that would transform the Jordanian economy. Table 5 presents the investment activity of public industrial

estates by sector. The key sector benefiting from these investment flows remains cotton and weaving industries. In order to maximize the returns from installation of QIZs, the host country should have a developed industrial base, and companion research and development (R&D) and investment strategies. (Pelzman, 2011).

In fact, reviewing the investment data for Public Estates, in Table 5, point to the creation of a closed processing zone, where most of the investments stay within the QIZ and where nearly 100% of demand for raw material is met through imports. This lack of spillover contributes very little to the long-term economic development of Jordan. The Jordanian QIZs are no more than "assembly" factories that import all their intermediate goods for simple assembly and repackaging for export. One crucial measure, on which the QIZ initiative should be evaluated, is whether the dynamic trade-creating and investment inducing impacts of the scheme have outweighed some of the trade-diverting effects.

One element to keep in mind is that job creation is very limited. Of the 54 thousand employees in the QIZs during 2005-06, 32 percent are local women, and another 30 percent are from Central Asia.[8] The obvious question is how to make these QIZs effective instruments of economic development.

III. CAN THE NEG MODELS ADD ANYTHING TO OUR EVALUATION OF JORDAN's QUALIFYING INDUSTRIAL ZONEs?

The New Economic Geography (NEG) models have been initiated by three authors, namely Fujita (1988), Krugman (1991) and Venables (1996). All of these authors assume the existence of two sectors, one modern and the other traditional. The institutional paradigm is monopolistic

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[8] Boyenge, Jean-Pierre Singa (2007)

competition. Given that we are dealing with Jordan in the 21st century, our two sectors are the QIZs who are geographically concentrated and who engage in manufacturing and the second sector should be the service sector. In order for the QIZs to have a positive long-term development impact there should be a predisposition toward agglomeration. These are positive spillover effects.

Modern theories of agglomeration are very much dominated by a simple principle outline by Helpman and Krugman (1985, p.197) noted as the 'home market effect'. According to them, once transport costs are explicitly accounted for, this effect arises when imperfectly competitive industries tend to concentrate their production in their larger markets and to export to smaller ones. In the context for Jordan's QIZs the "home market effect" should attract imperfectly competitive sectors towards larger markets. In the context of Jordan's QIZs this basic ingredient is missing and we are lacking the heart of the models of agglomeration.

Before we start with agglomeration and its applicability to Jordan's QIZs the first question to set aside is if there are any sectors where Jordan has had a competitive advantage. A useful and traditionally accepted model for analyzing a country's relative export performance is the Constant Market Share (CMS) model. This model divides the actual growth of a country's exports into four components: the world trade effect, the commodity effect, the market effect, and the competitiveness effect. The first three components are designed such that they reflect the extent to which a country's exports have either maintained the same rate of growth as world trade (world trade effect), or have deviated from a constant share norm and, further, the extent to which this deviation can be explained by the concentration of the country's exports in either commodities or markets with above or below average (world) rates of growth. The fourth component in the CMS identity is derived as a residual and represents the difference between the actual increase in a country's exports and the increase that would have occurred had the country maintained a constant share in each market for each commodity.

Formally, the CMS identity can be written as:

$$X^{00} - X^0 \equiv rX^0 + \sum_i (r_i - r)X_i^0 + \sum_i \sum_j (r_{ij} - r_i)X_{ij}^0 + \sum_i \sum_j (X_{ij}^{00} - X_i^0 - r_{ij}X_{ij}^0)$$

where:

r = the growth rate of total world trade in value terms;
r_i = the growth rate of international trade in commodity I;
r_{ij} = the growth rate of total imports of commodity i by country j;
X = total exports of the focus country;
0 = initial period;
00 = second period;
i = commodity group;
j = country of destination.

The first term on the right hand side of identity (l) indicates what the focus country's exports would have been had they expanded at the same rate as world trade. The second term, the commodity effect, indicates the influence of changes in the composition of the focus country's exports on growth. For example, if the focus country specializes in commodities for which international trade is growing rapidly, one would expect to see its exports of those commodities also growing rapidly. The third term indicates the effect of market distribution. If the focus country's exports are primarily directed toward rapidly growing (declining) markets then its exports should rise (decline). The last term on the right hand side is referred to as the competitiveness effect. This residual effect indicates the extent to which the growth of the focus country's exports was above the CMS norm and is therefore unexplained by either the world, market, or commodity effects. It is to be noted that an increase (i.e., a positive value) in this competitiveness factor may be due to both demand factors and supply factors, such as increased productivity, or to marketing and government policies such as reduced trade interference or inducements to export.

Despite the usefulness of the CMS procedure as a tool for assessing a country's export performance, this methodology is hampered by a number of conceptual limitations as well as problems in empirical application. On a conceptual basis, the CMS equation is an identity and therefore cannot provide any causal explanation for a country's export expansion. In the case of the Jordanian QIZs we have a general market incentive duty to a reduction in tariffs. Furthermore, because the CMS analysis is usually based on value shares and not on quantity shares, price movements hamper the interpretation of the identities' components. On this latter point, Richardson (197la, p. 231) has noted that a positive commodity effect, which would normally be ascribed to the focus country's exports being more skewed toward goods which are growing rapidly, can also be explained by the relative skewness of the country's exports toward those goods whose (relative) prices are rising. Finally, the CMS procedure is an ex-post methodology and therefore provides only an evaluation of the past shifts in a country's export shares. Thus, it may provide little, if any, indication of the future shifts in a country's export shares.

A review of Jordan's key exports which are primarily in the QIZs zones will provide a better snapshot of its competitiveness. In Tale 6 we present the competition indicators for textile exports. These exports have been growing between 2005 and 2009. However, its share in Jordan's total exports remains at 1 percent. Likewise their share in world markets is less than 3 percent. The diversification measures point to a limited market and limited product variety. In terms of the CMS competitiveness measures, textiles are not Jordan's competitive sector.

Shifting to another QIZ product – Leather goods, we present in Table 7 the competitiveness indicators. Exports of these products have increased from 2005 to 2009, and its competitiveness index increased over the 2005-09 period. Table 8 presents the competitiveness indicators for Clothing exports. Jordan does not have competitive advantage in that sector. The final product

investigated is chemical exports. This set of exports represents more of a positive competitiveness for Jordan.

In this trade environment how can the agglomeration model help Jordan's QIZs?

Table 1

List of Industrial Parks Designate by USTR as Jordanian QIZs

QIZs Established in Jordan	Notice in Federal Register	Number of Establishments Added			
		2005	2006	2007	2008
Shoubak	1/26/2009 FR 74:15				
Shouneh Wistah	1/26/2009 FR 74:15				
Madaba/Daliliet	1/26/2009 FR 74:15				
Irbid/Al-Westieyn	1/26/2009 FR 74:15				
Al-Tafileh	1/26/2009 FR 74:15				
Al Hallabat Industrial Park, registered as Jordan	1/28/2004 FR 69:18				
International Industries Company.	1/28/2004 FR 69:18				
Hillwood-Hashemite University LLC, registered under the name of Global Investments in Industrial Zones & Technology Parks Company ("Zarqa Industrial Zone"), as aQIZ.	06/15/2001 FR 66:116				
Expansion of the already designated QIZ area of the Ad-Dulayl Industrial Park.	06/15/2001 FR 66:116				
Mushatta International Complex	12/12/2000 FR 65:239				
El Zay Ready Wear Manufacturing Company	12/12/2000 FR 65:239	1	1	na	na

Al Qastal Industrial Zone	12/12/2000 FR 65:239	1	1	na		na	
Industry and Information Technology Park Development Co. (Jordan Cyber City Co.)	10/27/2000 FR 65:209	2	2	na		na	
the Aqaba Industrial Estate.	10/27/2000 FR 65:209						
Al Hussein Bin Abdallah II Industrial Estate	10/27/2000 FR 65:209	3	3	na		na	
the Al-Kerak Industrial Estate	10/15/1999 FR 64:199						
the Ad-Dulayl Industrial Park,	10/15/1999 FR 64:199	15	13	na		na	
the Al-Tajamouat Industrial City.	10/15/1999 FR 64:199	1	1		2		1
Gateway Projects Industrial Zone	03/19/1999 FR 64:53						
Irbid Qualifying Industrial Zone	06/26/1998 FR 63:323						
Al Hassan Industrial Estate	06/26/1998 FR 63:323	17	17	na		na	

Table 2

Consolidated List of QIZ Manufacturers

QIZ Company	Location	Product
Al Aham Garment Manufacturing Co. Ltd	Tajamouat	Knited/Woven Sportswear
Al Fan Lisinat Al Albisah	Tajamouat	Knitted Garments
Assel Universal Garments	Tajamouat	Knitted Garments
Best Medal Apparel Company Ltd.	Tajamouat	Knitted & Woven Garments, Polo Shirts
Caliber Garment Factory Ltd.	Cyber	Woven Garments
Camel Textile International Corporation	Karak	Knitted Garments
CCKM Apparel Manufacturing Jordan Ltd.	Tajamouat	Ladies Underwear and Sportswear, Polo
Century Miracle	Hassan	Knitted Garments
Century Standard Textile	Hassan	Medical Garments
Century Tailoring Company	Hassan	Men's Suites
Dawhyma Jeans Apparel Manufacturing Co.	Tajamouat	Jeans
Eagle Apparel Company		Knitted Garments
El Zay Readywear Manufacturing Co.	El-Zay	Men's Formal Wear
Falcon Jordanian Intl. Garment Industris	Hassan	Woven Garments

Fine Apparel Ltd.	Dulayl	Knitted Garments
Formosa Jordanian Garment Industry Co. Ltd	Tajamouat	Knitted Garments & Sportswear, Polo Shirts
Golden Wear	Tajamouat	N/A
Hi-Tech Textile LLC	Dulayl	Woven Garments
Honorway	Karak	Knitted Garments
Italian Gold Manufacturing Company		N/A
I-Texfil Ltd.	Tajamouat	Knitted Garments & Sportswear
Jerash Manufacturing Company	Tajamouat	Polo Shirts
Jordache Group of Companies		Woven Garments / Jeans
Jordan Dragon	Tajamouat	Knitted & Woven Garments
Maintrend International Corporation	Tajamouat	Fleece Jackets and T-Shirts, Polo
Mediterranean Resources Apparel Ltd.	Dulayl	Knitted Garments
Millennium Garment Factory	Hassan	Knitted Garments
Needle Craft Est.	Dulayl	Knitted Garments, Polo Shirts
New World Textile Company Ltd.	Tajamouat	Knitted Garments
Oasis Garments Ltd.	Hassan	Knitted Garments
Panorama	Dulayl	Polo Shirts and Sportswear
Petra Apparel Factory	Dulayl	Twills, Denim, Stretch, Jeans
Prestige Apparel Manufacturer	Tajamouat	Pants
Prime Five Manufacturing	Qastal	Woven Garments
Rainbow	Dulayl	Polo Shirts & Crew Necks
Rich Pine Intl. Group Limited	Cyber	Polo Shirts
Royal Fashion	Tajamouat	Knitted Garments

Sari International	Hassan	Woven Garments
		Outwear, shorts, jackets, sports,
United Creation Textile Ltd.	Dulayl	Polp
	Tajamouat	Knitted Garments
United Garment Manufacturing Co.		
		Knitted Garments, Yarn, Fabric,
United Textile Group	Qastal	Polo
Silver	Tajamouat	Polo
Planet		
Business Faith	Hassan	Polo
American Jordnian Company for Apparel	Hassan	Polo
Al Manar	Hassan	Polo
Mustafa & Kamal	Dulayl	Polo
Gals	Hassan	Polo
Al-Qadir	Dulayl	Polo
Pacific	Tajamouat	Polo
Sun	Dulayl	Polo
Jordan		
International Business	Hassan	Polo

Source : Ministry Industry and Trade, Israel.

Table 3

Exports from Public QIZ, Total and Textile and Apparel

(Million Dollars and Percen)

	2006	2007	2008	2009	2010*
Ad-Dulayl Industrial Park	13,131.0	10,983.7	16,920.0	23,449.5	266.0
Percent HS61	80.8	47.3	30.3	19.5	47.7
Percent HS62	19.2	52.7	NA	NA	NA
Al Hassan Industrial Estate	46,194.8	51,951.3	46,422.0	32,992.9	983.7
Percent HS61	92.3	94.4	93.6	96.7	47.7
Percent HS62	7.7	5.6	NA	NA	NA
Al Hussein Bin Abdallah II Industrial Estate	53,713.3	57,455.1	84,453.9	76,935.1	3,123.1
Percent HS61	100.0	100.0	100.0	100.0	100.0
Percent HS62	0.0	0.0	NA	NA	NA
Al-Tajamout Industrial Park	59,775.2	48,711.4	26,130.9	8,849.5	36.4
Percent HS61	91.6	97.4	99.1	98.8	88.6
Percent HS62	8.4	2.6	NA	NA	NA
Al-Zay Ready Wear	0.1	0.1	0.1	0.0	0.0
Percent HS61	0.0	0.0			
Percent HS62	100.0	100.0	NA	NA	NA
Cyber City Park	14,821.0	15,172.7	19,359.5	12,083.2	193.3
Percent HS61	100.0	100.0	100.0	100.0	100.0
Percent HS62	0.0	0.0	0.0	0.0	0.0

Source: Jordan Ministry of Industry and Trade, * provisional.

Table 4

Non QIZ Exports of Public Industrial Estates

(Million Dollars)

	2004	2005	2006	2007	2008	2
Abdallah II Ibn Al-Hussein Industrial Estate	294.2	410.9	649.3	419.6	419.6	4
Al-Hassan Industrial Estate	415.0	333.1	397.5	291.7	300.8	
Al-Hussein Bin Abdallah II Industrial Estate	171.4	125.5	171.1	154.4	154.4	1

Source: Jordan Ministry of Industry and Trade, Trade and Investment Information System. * provision

Table 5

Investment Activities - Public Industrial Estates

(Million Dollars and Numbers)

Industrial Estate	2004	2005	2006	2007	2008	2009	2010
Construction Industry: Investment							
Abdallah II Ibn Al-Hussein Industrial Estate	30.7	31.0	26.1	64.5	64.5	64.0	21.7
Al-Hassan Industrial Estate							
Al-Hussein Bin Abdallah II Industrial Estate							
Construction Industry: Number of Factories							
Abdallah II Ibn Al-Hussein Industrial Estate	10	11	8	12	12	13	11
Al-Hassan Industrial Estate							
Al-Hussein Bin Abdallah II Industrial Estate							
	2004	2005	2006	2007	2008	2009	2010
Cotton and Weaving Industries: Investment							
Abdallah II Ibn Al-Hussein Industrial Estate	113.1	104.7	95.4	203.3	203.3	204.4	202.1
Al-Hassan Industrial Estate	248.8	256.4	270.1	272.0	215.6	182.2	182.8

	2004	2005	2006	2007	2008	2009	2010
Al-Hussein Bin Abdallah II Industrial Estate	60.6	57.3	57.3	45.1	45.1	28.2	28.2
Cotton and Weaving Industries: Number of Factories							
Abdallah II Ibn Al-Hussein Industrial Estate	40	36	28	30	30	29	25
Al-Hassan Industrial Estate	47	54	60	40	39	25	28
Al-Hussein Bin Abdallah II Industrial Estate	6	6	5	3	3	2	2
Engineering – Metalic: Investment	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Abdallah II Ibn Al-Hussein Industrial Estate	252.7	293.1	263.8	210.8	210.8	199.1	192.5
Al-Hassan Industrial Estate	44.0	44.0	33.9	33.0	33.1	30.5	30.7
Al-Hussein Bin Abdallah II Industrial Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engineering – Metalic: Number of Factories							
Abdallah II Ibn Al-Hussein Industrial Estate	84	85	72	68	68	63	65
Al-Hassan Industrial Estate	12	12	13	7	8	7	9
Al-Hussein Bin Abdallah II Industrial Estate	0	0	.	1	.	2	2

Chemical Industries: Investment

Abdallah II Ibn Al-Hussein Industrial Estate	115.0	124.4	123.2	151.8	151.8	132.5	131.5
Al-Hassan Industrial Estate	8.3	8.3	8.7	11.6	11.6	12.7	12.7
Al-Hussein Bin Abdallah II Industrial Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Chemical Industries: Number of Factories

Abdallah II Ibn Al-Hussein Industrial Estate	60	64	58	52	52	54	54
Al-Hassan Industrial Estate	4	4	6	8	7	8	8
Al-Hussein Bin Abdallah II Industrial Estate	0	0	1	2	2	2	2

Source: Jordan Ministry of Industry and Trade, Trade and Investment Information System

Table 6

Competition Indicators for the Textile Industry

Category	Code	Indicator's Description	2009 (Value)	2009 (Rank)	2008 (Value)	2008 (Rank)	2007 (Value)	2007 (Rank)	2006 (Value)	2006 (Rank)	2005 (Value)	2005 (Rank)
	N	Number of exporting countries for the ranking in the sector	127		130		131		131		133	
	G1	Value of exports (in thousand US$)	56,054		62,393		59,543		48,674		41,520	
General Profile	G2	Export growth in value, p.a. (%)	8%	28	10%	40	15%	39	6%	73	-2%	108
	G3	Share in national exports (%)	1%		1%		1%		1%		1%	
	G4	Share in national imports (%)	4%		4%		5%		6%		7%	
	G5	Relative trade balance (%)	-80%		-82%		-84%		-87%		-89%	
	G6	Relative unit value (world average = 1)	1.7		0.6		0.8		0.7		0.6	
	P1	Net exports (in thousand US$)	-461,859	96	-588,225	96	-610,722	100	-676,670	110	-639,875	110
	P2	Per capita exports US$/inhabitant)	9.5	69	10.6	70	10.4	66	8.8	67	7.7	69
Position in 2009 for Current Index	P3	Share in world market (%)	0.03%	80	0.03%	83	0.03%	77	0.02%	80	0.02%	82
Position in 2008 for Current Index	P4a	Product diversification (N° of equivalent products)	16	56	13	62	16	62	14	67	18	60
Position in 2007 for Current Index	P4b	Product concentration (Spread)		71		71		74		79		72
Position in 2006 for Current Index	P5a	Market diversification (N° of equivalent markets)	9	40	11	34	10	37	11	35	12	30
Position in 2005 for Current Index	P5b	Market concentration (Spread)		62		60		63		63		62
Change 2005 - 2009 for Change Index	C1	Relative change of world market share p.a (%)	0.06%		0.03%		0.05%		-0.02%		-0.06%	
Change 2004 - 2008 for Change Index	C1a	Competitiveness effect, p.a. (%)	0.01%	39	-0.02%	65	0.00%	62	-0.06%	97	-0.03%	85
Change 2003 - 2007 for Change Index	C1b	Initial geographic specialisation, p.a. (%)	0.01%	60	0.09%	19	0.08%	20	0.08%	12	0.39%	1
Change 2002 - 2006 for Change Index	C1c	Initial product specialisation, p.a. (%)	0.03%	24	0.16%	10	0.06%	17	-0.06%	116	-0.33%	132
Change 2001 - 2005 for Change Index	C1d	Adaptation effect, p.a. (%)	0.02%	30	-0.20%	121	-0.08%	115	0.01%	41	-0.09%	121
	C2	Matching with dynamics of world demand		105		111		88		69		115
	A	Absolute change of world market share (% points p.a)	0.00%	32	0.00%	42	0.00%	41	0.00%	74	0.00%	86
Indicators included in chart	P	Average Index: Current Index		73		73		69		79		78
	C	Average Index: Change Index		77		97		73		70		128

Source: WTO

Table 7
Competition Indicators for Leather Products

		Indicator's Description	2009 (Value)	(Rank)	2008 (Value)	(Rank)	2007 (Value)	(Rank)	2006 (Value)	(Rank)	2005 (Value)	(Rank)
	N	Number of exporting countries for the ranking in the sector	116		119		113		113		111	
	G1	Value of exports (in thousand US$)	9,453		9,990		10,141		6,270		5,573	
	G2	Export growth in value, p.a. (%)	14%	19	21%	12	36%	9	13%	40	-27%	109
General Profile	G3	Share in national exports (%)	0%		0%		0%		0%		0%	
	G4	Share in national imports (%)	0%		0%		0%		0%		0%	
	G5	Relative trade balance (%)	-73%		-71%		-63%		-76%		-75%	
	G6	Relative unit value (world average = 1)	3.1		0.5		1.2		0.4		0.2	
	P1	Net exports (in thousand US$)	-51,026	62	-48,178	61	-35,092	56	-39,145	62	-33,325	59
	P2	Per capita exports US$/inhabitant)	1.6	88	1.7	92	1.8	89	1.1	93	1	95
Position in 2009 for Current Index	P3	Share in world market (%)	0.01%	94	0.01%	96	0.01%	98	0.01%	98	0.01%	101
Position in 2008 for Current Index	P4a	Product diversification (N° of equivalent products)	8	37	18	1	10	26	7	45	7	48
Position in 2007 for Current Index	P4b	Product concentration (Spread)		48		11		33		62		66
Position in 2006 for Current Index	P5a	Market diversification (N° of equivalent markets)	6	45	6	54	4	68	5	60	7	45
Position in 2005 for Current Index	P5b	Market concentration (Spread)		86		85		86		90		76
Change 2005 - 2009 for Change Index	C1	Relative change of world market share p.a (%)	0.07%		0.08%		0.23%		0.01%		-0.16%	
Change 2004 - 2008 for Change Index	C1a	Competitiveness effect, p.a. (%)	0.09%	18	0.14%	9	0.78%	4	0.12%	12	-0.12%	103
Change 2003 - 2007 for Change Index	C1b	Initial geographic specialisation, p.a. (%)	0.03%	19	0.07%	9	0.05%	14	0.08%	3	-0.01%	92
Change 2002 - 2006 for Change Index	C1c	Initial product specialisation, p.a. (%)	-0.10%	99	0.07%	9	0.15%	5	0.08%	5	0.04%	6
Change 2001 - 2005 for Change Index	C1d	Adaptation effect, p.a. (%)	0.05%	33	-0.20%	112	-0.75%	113	-0.27%	110	-0.07%	107
	C2	Matching with dynamics of world demand		93		103		84		47		75
	A	Absolute change of world market share (% points p.a)	0.00%	46	0.00%	37	0.00%	38	0.00%	47	0.00%	72
Indicators included in chart	P	Average Index: Current Index		78		70		76		91		92
	C	Average Index: Change Index		76		75		57		24		99

Source: WTO

Table 8
Competition Indicators for Clothing Products

		Indicator's Description	2009 (Value)	(Rank)	2008 (Value)	(Rank)	2007 (Value)	(Rank)	2006 (Value)	(Rank)	2005 (Value)	(Rank)
	N	Number of exporting countries for the ranking in the sector	124		124		124		123		124	
	G1	Value of exports (in thousand US$)	851,864		1,040,674		1,217,595		1,257,305		1,061,051	
	G2	Export growth in value, p.a. (%)	-5%	79	1%	71	16%	27	25%	15	38%	12
General Profile	G3	Share in national exports (%)	13%		13%		21%		24%		25%	
	G4	Share in national imports (%)	2%		2%		2%		2%		2%	
	G5	Relative trade balance (%)	48%		52%		61%		67%		73%	
	G6	Relative unit value (world average =1)	1.7		0.4		1.5		1		0.4	
	P1	Net exports (in thousand US$)	554,860	25	714,653	27	921,588	25	1,010,769	23	896,903	25
	P2	Per capita exports US$/inhabitant)	144.2	28	176.2	29	212.9	20	227	17	196.1	24
Position in 2009 for Current Index	P3	Share in world market (%)	0.27%	43	0.29%	44	0.37%	43	0.43%	39	0.40%	42
Position in 2008 for Current Index	P4a	Product diversification (N° of equivalent products)	5	107	7	99	10	87	11	77	16	59
Position in 2007 for Current Index	P4b	Product concentration (Spread)		96		84		74		71		68
Position in 2006 for Current Index	P5a	Market diversification (N° of equivalent markets)	1	111	1	113	1	114	1	114	1	116
Position in 2005 for Current Index	P5b	Market concentration (Spread)		82		86		83		78		85
Change 2005 - 2009 for Change Index	C1	Relative change of world market share p.a (%)	-0.07%		-0.06%		0.03%		0.11%		0.28%	
Change 2004 - 2008 for Change Index	C1a	Competitiveness effect, p.a. (%)	-0.07%	87	-0.06%	72	0.01%	32	0.07%	20	0.20%	14
Change 2003 - 2007 for Change Index	C1b	Initial geographic specialisation, p.a. (%)	-0.04%	111	-0.02%	99	-0.02%	109	-0.02%	113	0.00%	76
Change 2002 - 2006 for Change Index	C1c	Initial product specialisation, p.a. (%)	-0.05%	117	-0.03%	112	-0.05%	116	-0.06%	118	-0.01%	102
Change 2001 - 2005 for Change Index	C1d	Adaptation effect, p.a. (%)	0.09%	5	0.05%	10	0.09%	5	0.12%	4	0.09%	6
	C2	Matching with dynamics of world demand		45		49		37		36		52
	A	Absolute change of world market share (% points p.a)	-0.03%	99	-0.03%	100	0.01%	20	0.03%	9	0.05%	11
Indicators included in chart	P	Average Index: Current Index		56		58		51		45		49
	C	Average Index: Change Index		63		58		38		34		41

Source: WTO

Table 9
Competition Indicators for Chemical Products

Section	Code	Indicator's Description	2009 (Value)	2009 (Rank)	2008 (Value)	2008 (Rank)	2007 (Value)	2007 (Rank)	2006 (Value)	2006 (Rank)	2005 (Value)	2005 (Rank)
	N	Number of exporting countries for the ranking in the sector	152		152		152		150		150	
	G1	Value of exports (in thousand US$)	1,823,947		2,648,120		1,503,137		967,997		903,154	
	G2	Export growth in value, p.a. (%)	19%	28	35%	23	25%	43	13%	110	14%	96
General Profile	G3	Share in national exports (%)	29%		34%		26%		19%		21%	
	G4	Share in national imports (%)	11%		10%		10%		9%		9%	
	G5	Relative trade balance (%)	7%		22%		6%		-5%		-5%	
	G6	Relative unit value (world average = 1)	1.2		0.9		0.7		0.7		1.6	
	P1	Net exports (in thousand US$)	235,102	24	957,309	17	167,772	21	-104,268	34	-90,020	38
	P2	Per capita exports US$/inhabitant)	308.8	44	448.4	41	262.8	48	174.8	52	166.9	49
Position in 2009 for Current Index	P3	Share in world market (%)	0.12%	55	0.15%	54	0.10%	58	0.07%	60	0.08%	59
Position in 2008 for Current Index	P4a	Product diversification (N° of equivalent products)	8	83	7	97	8	84	9	77	10	71
Position in 2007 for Current Index	P4b	Product concentration (Spread)		68		67		65		62		63
Position in 2006 for Current Index	P5a	Market diversification (N° of equivalent markets)	9	60	6	83	12	42	11	47	11	48
Position in 2005 for Current Index	P5b	Market concentration (Spread)		50		60		44		48		47
Change 2005 - 2009 for Change Index	C1	Relative change of world market share p.a (%)	0.11%		0.19%		0.07%		-0.03%		-0.02%	
Change 2004 - 2008 for Change Index	C1a	Competitiveness effect, p.a. (%)	0.06%	46	0.04%	52	0.09%	24	-0.03%	116	0.00%	91
Change 2003 - 2007 for Change Index	C1b	Initial geographic specialisation, p.a. (%)	0.03%	32	0.05%	33	0.04%	24	0.03%	37	0.03%	17
Change 2002 - 2006 for Change Index	C1c	Initial product specialisation, p.a. (%)	-0.02%	114	0.00%	73	-0.04%	135	0.12%	9	0.04%	21
Change 2001 - 2005 for Change Index	C1d	Adaptation effect, p.a. (%)	0.05%	26	0.10%	17	-0.02%	117	-0.14%	144	-0.09%	136
	C2	Matching with dynamics of world demand		90		103		78		28		63
	A	Absolute change of world market share (% points p.a)	0.01%	24	0.01%	23	0.00%	34	0.00%	127	0.00%	121
Indicators included in chart	P	Average Index: Current Index		31		33		28		34		33
	C	Average Index: Change Index		66		67		71		21		49

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APPENDIX ON CMS ANALYSIS.

The WTO-ITC generates a CMS analysis based on 6-digit HS. The variables reported in Tables 6 to 10 are as follows: These explanations are reproduced from their report

UNCTAD/ WTO. (2007) International Trade Center. *The Trade Performance Index Technical Notes.*

P1- Value of net exports: Net exports are defined as exports less imports. A country's net exports are a reliable indicator of its position on the world market for two reasons. Firstly, net exports eliminate re-exports, which would otherwise introduce a bias into the raw data. Secondly, the indicator takes into account the international division of production processes, since a large part of imported intermediate products found within exports usually belong to the same sector (e.g. electronic parts and assembled computers). Hence, net exports provide a very simple but reliable correction for dealing with the globalization of production processes and the induced vertical specialization of countries at various stages of production.

P2- Per capita exports: The value of per capita exports indicates the level of outward looking of a country and the extent to which a country's population produces for the world market.

P3- Share in world market (percentage share of world exports): the world market share for a specific country is the ratio of total country exports to total world exports.

P4- Product diversification: diversification, measured through exports, is a good indicator of production structures and industry's development level. Diversification limits the dependence on a small number of products and hence reduces a country's vulnerability to industry-specific external shocks. In order to capture the degree of product diversification, two separate indicators are calculated: the equivalent number of products and the spread. The spread is the inverse of the corresponding concentration. The equivalent number (EN=1/Herfindal), is a theoretical value which represents the number of markets of identical size that would lead to the degree of export

concentration exactly equal to the observed one. Because this indicator is not highly sensitive to activities of relatively weak importance, it is a measurement that is suited to sectoral studies. We start by presenting these indicators and then turn to an example illustrating the value added of combining the two indicators.

Calculating product differentiation by means of the equivalent number distinguishes for each country the equivalent number of exported goods of equal importance (either within each sector or in the whole national economy) leading to the same concentration of exports. The increase in rank is a function of the increase in the level of diversification (both for products and markets). The larger the index value, the greater the diversification of exports, and consequently the better the ranking. The spread index complements the equivalent number. Spread indices measure the dispersion between the highest and lowest value in a given statistical series. They are calculated using a weighted standard error. The spread index for products calculates for each country the distribution of export products and compares it to the average export value. The greater the distribution (i.e. spread) of exports from a country as compared to the average, the higher the value of the index. If all countries export all products, one of these indicators would be sufficient. Since this is not the case, the combination of the two indicators is useful.

$$NE_{icl}^{t} = \frac{1}{\displaystyle\sum_{k=1}^{n}\left(\frac{X_{ik}^{t}}{X_{icl}^{t}}\right)^{2}}$$

with:

X_{ik}^{t} the export of product k by country i at year t.

X_{icl}^{t} country i exports of all products belonging to the cluster cl at year t.

$\dfrac{X_{ik}}{X_{icl}}$ the share of product k in total exports of country i in cluster cl.

The next index of weighted spread, indicates that the standard deviation divided by the number of products times the average value of exports for individual products has been used

$$S_{cl}^t = \left[\frac{\sqrt{\sum_{k=1}^{cl}(X_{ik}^t - \overline{X_{icl}^t})^2}}{N(\overline{X_{icl}^t})} \right]$$

where:

X_{ik}^t = country i exports of product k to market i in year t.

$\overline{X_{icl}^t}$ = the average value of country i exports in year t for the cluster cl.

$(X_{ik}^t - \overline{X_{icl}^t})$ = the deviation to the average of product k in cluster cl for country i.

$\sqrt{\sum_{k=1}^{cl}(X_{ik}^t - \overline{X_{icl}^t})^2}$ = the standard deviation.

S_{cl}^t = the weighted spread.

P5- Diversification of markets: diversifying partner countries reduces a country's dependence on a small number of export markets and hence the vulnerability to shocks within destination countries. In order to capture the degree of market diversification, the same two complementary indicators referred to above are used: the equivalent number of markets and the spread.

The equivalent number used for calculating market diversification distinguishes for each country, the number of partner countries weighed according to their importance. The increase in rank is a function of the increase in the level of diversification of markets. The bigger the index value, the greater the diversification of markets and consequently the better the ranking.

$$NE_i^t = \cfrac{1}{\displaystyle\sum_{j=1}^{p}\left(\cfrac{X_{ijcl}^t}{X_{tcl}^t}\right)^2}$$

where:

X_{ijcl}^t = country i exports of all products belonging to the cluster cl to country j in year t.

X_{icl}^t = country i total exports of all products belonging to the cluster cl.

$\dfrac{X_{ijcl}}{X_{icl}}$ = the share of market j in country i total exports of products belonging to the cluster cl.

Spread indices measure the existing dispersion between the highest and lowest value of a given statistical series. They are calculated using the weighted standard error (next equation). The spread index for markets compares for each country, the share of its exports directed to different partner countries with the average export value. The greater the dispersion of exports from this country (i.e. the greater the spread) as compared to the average, the higher the value of the index.

Concerning positions, the ranking of the 184 countries is a function of the degree of diffusion of exported products (of a country's exports to partner countries). The smaller the index, the more exported products are evenly distributed (amongst partner countries) and the better the ranking.

$$S_{pcl}^t = \left[\cfrac{\sqrt{\displaystyle\sum_{j=1}^{p}(X_{ijcl}^t - \overline{X_{ipcl}^t})^2}}{N(\overline{X_{ipcl}^t})}\right]$$

X_{ijcl}^{t} = country i total exports to market j in cluster cl in year t.

$\overline{X_{ipcl}^{t}}$ = country i average export to the p markets of products belonging to the cluster cl in year t

$\sqrt{\sum_{k=1}^{cl}(X_{ijcl}^{t} - \overline{X_{ipcl}^{t}})^2}$ = the standard deviation.

In addition to these indicators, the TPI includes a composite index (CI), which is based on a simple average of the five rankings of indicators P1 to P5, above.

The composite index reflects the position of a country in a given sector for a given year, in terms of trade performance. Changes over time of this position reflect improvements or deterioration in trade performance of the country under analysis.

A second set of indicators aims at giving the general profile for the country considered. However, these indicators are not used in the calculation of the final ranking provided by the TPI.

G1- Value of exports: Value of total country exports by sector is given in million of US$ for the current year.

G2- Trend of exports: Average per annum growth of export values since the year 2001 or later.

G3 (G4)- Share in national exports (imports): This refers to the share of exports (imports) by sector in relation to total country exports (imports).

G5- Change in per capita exports: The level of exports is determined by the demand for a country's products on world markets and a country's ability to satisfy that demand, which can be related to its size. Hence, the value of per capita exports shows how outward looking is a country, and the extent to which the population produces for the world market. The change in per capita exports reflects changes in a country's outward looking stance and performance for the group of products considered.

G6- Relative unit value: The RUV of each sector is calculated as the ratio of the average unit value of exports for a country to the world average unit value. The reference point or average relative unit value is 1 (the unit value in the targeted country equals the unit value in the world market). If the RUV is below (above) 1, then the country exports its product at a lower (higher) price than the world average unit price.

Traditionally, the comparison of unit values for homogeneous products gives an indication of exporters' relative prices. However, according to the new theories of international trade, products are differentiated by quality, which is often reflected by differences in price. Accordingly, prices are considered as an indirect indicator of the quality of differentiated products: assuming that a consumer has access to product information, two products of different quality cannot be sold at the same price. However, since prices are not available for individual products, or even for industries, unit values (values divided by quantities) are taken as proxies for prices. Higher unit values are considered as reflecting a higher quality, other things being equal, and not as an indication of poor price competitiveness.

G7- Adaptation to world demand: this index is calculated with a view to ranking countries according to their ability to adapt to the dynamics of world demand. It is based on Spearman's rank correlation between the ranking share of the exporting countries' export products in its total exports, and the rank of growth trends in worldwide exports of those products.

Each country is given a correlation index that takes a value between 1 and –1. A value of 1 (-1) indicates that the relative importance of a country's exported goods is in full accordance (discordance) with the ranking of world export growth rates for the same goods. The country ranking is dependent on the rank correlation index. The closer the index is to 1, the better the country ranking under analysis.

G8- Change of world market share (in % points) since 2001: The change (variation over time) in a country's world market share is the difference in the world market share between time 0 and time t. If it is positive, country i has increased its world market share. In addition to the general profile indicators, we also provide detailed figures on the decomposition of the relative change in world market share in different effects. The decomposition of the change in the world market share provides information on the competitiveness of the country considered. The market share variation can be tabulated as the simple average of the rankings according to four criteria: competitiveness, initial geographic specialization, initial product specialization and responsiveness to changes in world demand. These indicators are calculated by decomposing changes in a country's market share in elementary markets.