

MEASURING THE QUALITATIVE COMPETITIVENESS OF THE MACEDONIAN ECONOMY

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Abstract

The empirical evidence on trade patterns clearly indicates the fact that globalization has rapidly altered the international economic space, introducing some new forms of competitiveness. International marketplace has been increasingly transformed from price to one dominated by non-price factors, quality in particular. Products having the price as a major determinant of competitiveness have recorded a decreasing market share, which implicitly points towards the possible loss of this kind competitive performance. Innovations and new lines to create value might, therefore, designate higher average prices, as an indicator for a better quality, but at the same time, they lead towards the higher productivity and trade growth. Indeed, creating competitiveness in the targeted sectors is a serious task for national economies distinguished mainly by their rigid production structure and limited funds. These features certainly bound the possibilities for an economy and the supporting sectors (technological infrastructure, R&D capacity, educational policy) to promptly adjust so as to capture the benefits of knowledge and innovation-driven global economy. Hence, this paper, primarily, aims at estimating the qualitative competitiveness of the Macedonian economy. At first, “unit value”, the signal of the Macedonia’s quality position, is to be calculated. This indicator may possibly be defined for exports and imports, and it is available at all levels of disaggregation. Within the analysis made for the Macedonian economy, we will refer to data for the total exports and imports according to 3-digit SITC (0-9). Additionally, we develop a country specific segmentation of markets in line with the concept of revealed price elasticity (REVELAST 1). The findings obtained suggest a low unit value for the Macedonian exports due to the country specialization in those industries to be found at lower levels of “quality ladder”. The analysis made for the product groups subdivided into different segments indicates certain deterioration in the competitiveness of the Macedonian economy, i.e. there is an inadequate position either in levels or the type of competitive performance. Finally, the estimates about the changes of product groups’ number according to SITC sectors point to rather divergent results. It is of particular importance the growth of product groups’ number in the segment with structural problems, especially in those sectors as considered the most important for achieving a competitive performance with dynamic potentials.

Keywords: *qualitative competitiveness, Macedonian economy, unit value, revealed price elasticity, Standard International Trade Classification*

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Introduction – the Importance of Quality

The quality is considered a relatively intricate concept with no generally accepted definition. In a certain context, the high quality product could possibly be regarded like a “good which possesses one or more additional characteristics, which are valued by buyers” (Aiginger, 2000, p.4). These features, usually reflected in higher prices, might be physically measurable (size, speed, etc.) or intangible (reliability, goodwill, etc.). Yet, despite the possible movements of prices up, note that higher quality permits the one not to lose the markets. The possibility to improve the quality depends upon the components such as: the noble materials, skilled labor, R&D etc.

The differentiation of goods in terms of crucial elements or minimal details is to be an important strategy for businesses to defend their own prices. At the market level, differentiation associates with the possibility to improve the quality of products owing to innovations. The radical shifts which refer to new products with completely new performance make for the changes in the market share and industry structure. The possibility to arrange the products from the highest to the lowest level in line with their quality is commonly referred to as “vertical product differentiation”. It may perhaps be obtained: “along one decisive feature; along a few features, each of which has a wide possible range of (continuous or discrete) values; across a large number of features, each of which has only a presence/absence “flag” (Piana, 2003). In the last two scenarios a certain product may perhaps be better in line with one parameter, but not as good as the other according to another criterion. This imposes strains and trade-offs, with competing firms making efforts to accentuate the relevance of the feature their products are better off. The vertical differentiation is a kind of freehold of the goods offered, yet the observed difference in quality by the customers will have a major influence in decisions they make to buy a certain product. Generally, there is an upward-slopping relationship between the price and quality owing to higher cost of production, as well as benefits the customers expect to obtain. That is to say, consumers having no personal opinion or ability to directly assess the quality may perhaps make an appropriate decision by the price of a product.³² Note that quality is at variance with productivity, since the second is commonly expressed in quantitative terms. The quality refers typically to heterogeneity of outputs concerning the heterogeneous inputs, while productivity relates to the quantity of output with regard to the quantity of inputs for indicators to be as much as homogenous in nature. “If, however, value added is used as a numerator, then the prices and quality of output are taken into account. And if we distinguish between several qualifications for labour, the quality of inputs can be incorporated into the denominator of productivity” (Aiginger, 2000, p.5). Higher quality is, by and large, considered a prerequisite to maintain the competitiveness of producers making higher costs in the production process, since the supply of product with the same quality and higher prices is not to be sustainable in long term. Despite the fact that higher productivity may countervail the higher wages in certain countries nevertheless, such a strategy is not always likely to succeed due to technology and managerial skills diffusion. Hence, the higher quality is considered as an alternative, but also a supplement to higher productivity. Yet, such approach is mostly acceptable in quality-sensitive industries in which certain quality improvements, instead of low prices, define the competitive advantage. Hence, the “quality competition” may be described as “a competitive environment, in which upgrading quality, and increasing the willingness to pay is important relative to competing at low prices” (Aiginger, 2000, p.6).

Considering the aforementioned, this paper is to assess the quality position of the Macedonian economy. At first, we will highlight the concept of quality as regards the theoretical models. The

³² In contrast, horizontal differentiation occurs when products differ along with features that may not be sort through an objective way. It is related to variations in tastes, colors, etc. Note that difference can be made to elements of the supply structure and those appertain to consumers’ bias. This contributes certain consumers to have a steady preference for one or another kind. If they are not likely to have a steady preference, the consumers behave in a way to often change the selected product, loving variety as such.

next section defines the methodology implemented to estimate the qualitative competitiveness. Finally, we exhibit the empirical results and the foremost conclusions we obtained thereafter.

The concept of quality in theoretical models

The literature on trade theory is being extremely affluent and diversified, primarily due to frequent changes and improvements set off by the necessity to study and adequately explain the socio-economic reality. Its reflection has been expressed in classical authors and several neo-classical variants, for certain evolution to be experienced in the mid-20 century owing to changes in technological development.

The mainstream trade theories are generally founded on the principle of comparative advantage. In other words, international trade in goods owns to differences among countries in relative or comparative costs, and, hence, in relative prices. Each country is to export the product in which it has a comparative advantage and import the one with comparative disadvantage.

The principle of comparative advantage stems from the Ricardian model of international trade based on the classical labor theory of value. Under this model, comparative costs are determined by the relative productivity of labor. In his model, Ricardo presumes different production functions with constant returns to scale (Ricardo, 1817). Almost a century after Ricardo had set up the principle of comparative advantage, Eli Heckscher blends international trade with the prices of agents of production, pursuing the tradition of neo-classical school (Heckscher, 1919). Heckscher has actually broadened the Ricardian model including other factors of production into his analysis. Thereat, the assumption of identical technologies across the countries is to be of particular importance for the main propositions of the neoclassical model of international trade (Heckscher-Ohlin model). Principally, Heckscher was mostly interested in the relation between international trade and income distribution. He has thereof argued the hypothesis of equalizing the relative prices of the production factors (Heckscher, 1919), which was further elaborated by Samuelson (Samuelson, 1948). Additionally, the Heckscher's model was restructured by Ohlin (Ohlin, 1933), which therefore the neo-classical analysis of international trade became known as Heckscher-Ohlin or Heckscher-Ohlin-Samuelson (H-O-S) theory. The neo-classical model argues that comparative advantage rises out of differences among countries in factor endowments. That is to say, differences in relative scarcity of production factors have an effect on the relative costs, and hence the trade flows. Consequently, the neo-classical trade theory predicts that country will export the products that make relatively intensive use of the most abundant production factors.

During the sixties, the theorists were particularly focused on examining the importance of specific variables, such as technology. In this context, the model on “technology gap” has explicitly proved the changes set off by the technological developments and their influence on patterns of international trade. The model suggests that process of technological innovations creates comparative advantage and significantly contributes to international trade. On the other hand, it stimulates the foreign producers (potential competitors) to respond all through the imitation of the country's innovations. The idea that comparative advantage may alter over time was further elaborated in the “product life cycle” model (Goncavles, 1996). At the origins of this theory were the articles of Raymond Vernon, Seev Hirsch and Harry Johnson, while significant contribution to its development was given by the research of Simon Kuznets, with the final elaboration and formalization made by Krugman. The product life cycle theory has played a significant role in further development of international trade doctrine, especially after the replacement of H-O-S theorem achievements, when a new generation of trade models, drawing heavily on the insights of the New Endogenous Growth Theory, comes to develop. Grossman and Helpman developed a model of the product cycle with endogenous innovation and endogenous technology transfer and quality competition (Grossman, Helpman, 1991a, 1991b, 1991c). The theoretical approach is founded on models of endogenous technical change formulated by Romer (1990) and Aghion-

Howitt (1990) and takes product and process innovation owing to R&D by firms. Furthermore, Grossman and Helpman decide between horizontal and vertical product innovation. The authors set up the concept of “quality ladder” by identifying innovations with the new products having a higher quality as compared to the similar ones. Each product is considered to occupy a certain position on the “quality ladder”. The model defines two countries (“North” and the “South”). The position of North, as innovative country, is jeopardized by the imitations of low cost South. Innovation is the only way for the North to recover its advantage (Wolfmayr-Schnitzer, 1998). “In this process of ongoing product upgrading and imitation the North and South are consecutively climbing up the quality ladder. Or in the words of Krugman (1995, p. 353): “In a North-South set-up, the quality ladder would actually predict a product seesaw rather than a one-way product cycle. When an improved variant is introduced, it would first be exported by high-wage North; when the technology diffuses, the industry would move south; but North would reclaim the industry when a still better variant was introduced” (Wolfmayr-Schnitzer, 1998).

Data and Methodology

One of the indicators we implement to assess the qualitative competitiveness of the Macedonian economy is the unit value (UV). Additionally, we make use of the revealed price elasticity (REVELAST 1) concept for a country specific segmentation of markets (Aiginger, 1998). The unit value is expressed as ratio of nominal value and some measure of physical volume. For the data applied in this paper it is the value of exports and imports in USD divided by kilogram. The unit value may indicate the qualitative features of competitiveness, i.e. moving toward the dimensions that increase the value (e.g. advertising, service components, etc.). It is available at almost any level of disaggregation and for a huge number of countries. The analysis we make for the Republic of Macedonia is based upon data for the total exports and imports of the three-digit Standard International Trade Classification (SITC 0-9) provided by UN Comtrade database. Generally, the countries with high shares in industries mostly using the physical capital reveal the lower unit values despite those specializing in technology-driven and skill-intensive industries. Yet, reprocessing may cause a problem. Namely, “goods are shipped into low wage countries and return at a somewhat higher unit value, indicating that the high wage country exports the lower quality product (as compared to the re-imported good)” (Aiginger, 2000, p.13). Likewise, there are some restraints about the application of unit values as to the precious metals due to the limited supply in respect to demand. Nevertheless, the high-skill and high-tech industries are generally among those having the highest export unit values (Aiginger, 2000). Hence, a positive correlation may perhaps be expected between GNP per capita and export unit values if those reflect quality in particular and countries constantly improve their production from low to high quality products. Yet, if there is an export driven growth and exports rise due to the lower costs than the quality-growth relationship may possibly fail. On the contrary, if exports are dependent upon the higher quality, the relationship is expected to be stronger. Finally, there is not so straightforward linkage between import unit values and GNP per capita (Aiginger, 1998).

The main problem to use the unit value is that it either be considered a cost indicator (e.g. small unit value reflects low costs) or it may signal the quality and product differentiation (e.g. high unit value as an indicator of greater performance). In order to make a difference between the markets where unit value reflects the quality and those with the costs being notified, we apply the following notion: “If unit values reflect costs and the product is homogenous, than countries with lower costs should be net exporters in quantities and countries with higher costs should be net import countries. If a country is net exporter in quantities despite the fact that is has higher unit values, then this must be due to quality differences. This assertion makes use of the fact that economic theory tells us that under quite broad circumstances demand is price elastic” (Aiginger, 1998, p.98).

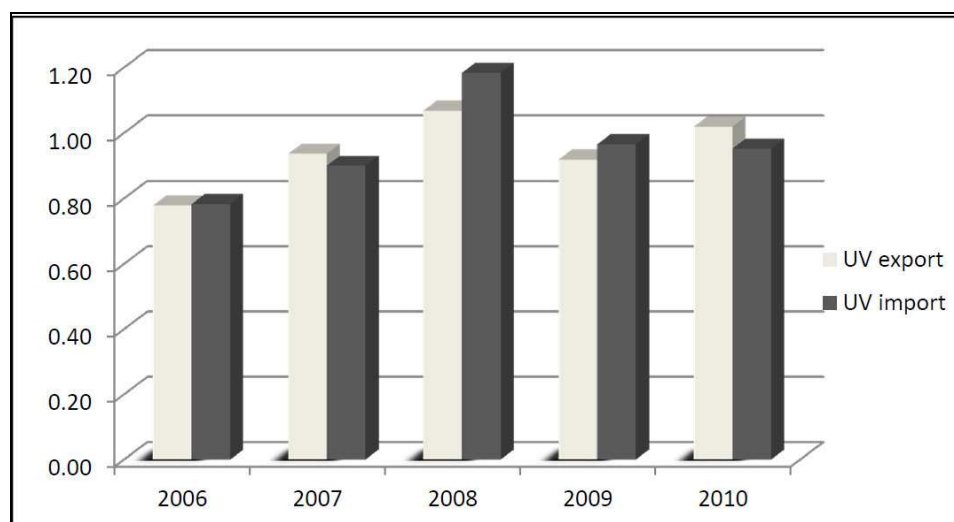
The price elasticity may perhaps be a good sign for the market structure, i.e. it can certainly indicate the predominance of price or non-price factors. The price competition prevails if higher prices impose exports of smaller quantities and vice versa. If however the opposite is true, then the quality competition is said to dominate. Hence, one may split the markets for a certain country along with the prevalence of price or quality competition in accordance with the following criteria (Aiginger, 1998):

- The first segment comprises those industries where export quantities outstrip the imports even with the higher unit values ($Q_{exp} > Q_{imp}$, $UV_{exp} > UV_{imp}$). This situation is essentially the result of better quality or it is about the effective specialization in the market segment as considered the most sophisticated one. This is to be a segment one should focus on (*successful quality competition*);
- The second segment covers the price elastic goods distinguished by the low unit values in the home country. There is a trade surplus attained hereby with the relatively lower unit value ($Q_{exp} > Q_{imp}$, $UV_{exp} < UV_{imp}$). It is therefore denoted a segment of *successful price competition*;
- The third segment includes those products having the high unit values in the home country and therefore they incite a trade deficit. The particular industries have actually lost the price competitiveness in those markets where the prices are of the great importance ($Q_{exp} < Q_{imp}$, $UV_{exp} > UV_{imp}$). The vast production costs are considered those causing this part of the deficit, i.e. the segment is designated as *deficit in price competitiveness*;
- The fourth segment is the one where a trade deficit is being obtained even though the prices are low ($Q_{exp} < Q_{imp}$, $UV_{exp} < UV_{imp}$). There are must be some *structural problems* hereby.

Empirical results

The evidence suggests that unit value of the Macedonian exports has increased from 0.78 USD/kg in 2006 to 1.02 USD/kg in 2010 (Figure 1). Generally, the transitions and less developed countries feature a low unit value of exports, unlike the developed ones where it reaches up to 7.5 USD/kg (Jefferson Institute, 2003). The reasons behind follow on specialization of the Macedonian exports in those groups of manufactures to be found on lower levels of “quality ladder”. Namely, labor- and resource intensive product groups prevail with the structure of the Macedonian exports. The slight increasing tendency in the share of medium-technology exports is not to reflect significantly the technological modernization of the Macedonian manufacturing exports. This is primarily the result of the slow progress in structural reforms during the second half of the nineties.

At the same time, low figures have been also recorded for the Macedonian imports (Figure 1). Generally, the Macedonian imports feature a relatively higher share of human capital intensive industries. Yet, an in depth analysis of this category indicates that the Macedonian economy, throughout imports, incorporates the modern technological content mostly in the segment of medium technology, primarily in the sphere of private consumption. In other words, it is not only that the Macedonian economy cannot produce technology intensive products, but the country is not able to adequately absorb these components. The benefits of modern technologies intended for investment of the businesses are not embedded within the Macedonian imports.

Figure 1 Unit value of exports and imports

Source: Republic of Macedonia, State Statistical Office and own estimates

The comparative analysis for the product groups subdivided into corresponding segments points to certain deterioration of the Macedonian competitiveness (Table 1).

The number of competitive groups from the first and second sector is much lower than that of non-competitive segments (Figure 2). It is of particular concern hereby the decreasing number of the product groups from the first segment indicating the successful qualitative competitiveness, i.e. it has been halved in 2011 compared to 1998 along with the declining share of these groups in total exports (45.13% and 58.75%, respectively). The second segment, that where the Macedonian products are relatively cheap and the market is price elastic, has a positive contribution in the trade balance. Note the increasing number of product groups in this segment. There is a certain decline in 2007 compared to 2005 mostly coming from the increased costs of production (e.g. the growth in the import price of electricity) (National Bank of the Republic of Macedonia, 2008). Yet, the number of product groups in this segment is still higher in 2007 than that in 1998 and 2002, followed by the higher percentage share in total exports. Hence, the trade surplus obtained in this segment is moving up, except for the unexpected situation in 2002 and 2011 when the trade surplus decrease despite the higher number of groups in 2002 with respect to 1998 (31 and 25, respectively) and 2011 compared to 2007 (37 and 36, respectively).

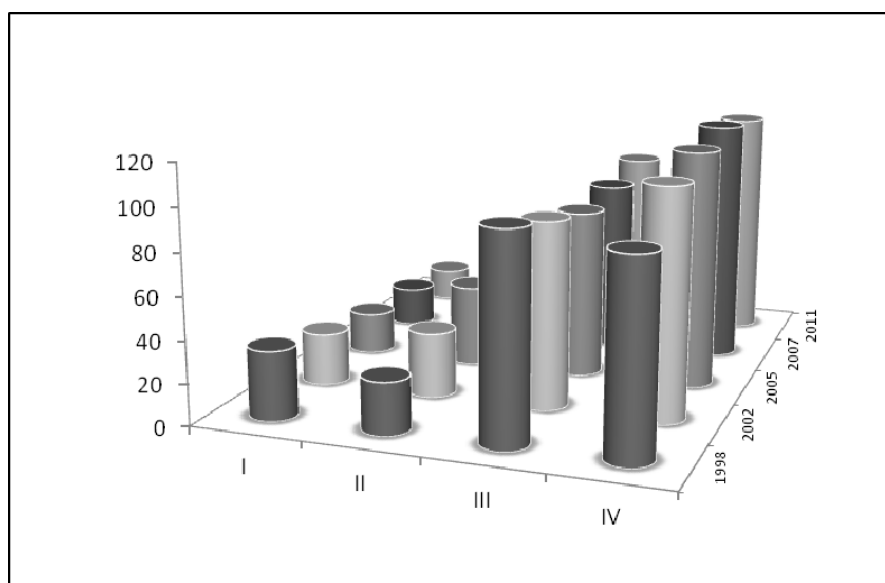
Table 1 Segmentation of the product groups*

Year	Segment	Number of 3-digit SITC groups	Share in exports (%)	Trade balance (million USD)
1998	First segment $UV_{exp} > UV_{imp}, Q_{exp} > Q_{imp}$	33	58.75	676.29
	Second segment $UV_{exp} < UV_{imp}, Q_{exp} > Q_{imp}$	25	23.82	251.58
	Third segment $UV_{exp} > UV_{imp}, Q_{exp} < Q_{imp}$	98	10.65	-555.16
	Fourth segment $UV_{exp} < UV_{imp}, Q_{exp} < Q_{imp}$	92	5.91	-551.38
2002	First segment $UV_{exp} > UV_{imp}, Q_{exp} > Q_{imp}$	25	49.78	492.03
	Second segment $UV_{exp} < UV_{imp}, Q_{exp} > Q_{imp}$	31	26.31	195.39
	Third segment $UV_{exp} > UV_{imp}, Q_{exp} < Q_{imp}$	89	16.49	-547.99
	Fourth segment $UV_{exp} < UV_{imp}, Q_{exp} < Q_{imp}$	109	7.06	-622.93
2005	First segment $UV_{exp} > UV_{imp}, Q_{exp} > Q_{imp}$	20	42.31	758.08
	Second segment $UV_{exp} < UV_{imp}, Q_{exp} > Q_{imp}$	39	38.29	392.40
	Third segment $UV_{exp} > UV_{imp}, Q_{exp} < Q_{imp}$	81	11.68	-657.78
	Fourth segment $UV_{exp} < UV_{imp}, Q_{exp} < Q_{imp}$	114	7.50	-1680.71
2007	First segment $UV_{exp} > UV_{imp}, Q_{exp} > Q_{imp}$	19	43.85	1360.22
	Second segment $UV_{exp} < UV_{imp}, Q_{exp} > Q_{imp}$	36	36.19	666.30
	Third segment $UV_{exp} > UV_{imp}, Q_{exp} < Q_{imp}$	83	13.04	-1191.44
	Fourth segment $UV_{exp} < UV_{imp}, Q_{exp} < Q_{imp}$	117	6.87	-2699.56
2011	First segment $UV_{exp} > UV_{imp}, Q_{exp} > Q_{imp}$	16	45.13	1824.16
	Second segment $UV_{exp} < UV_{imp}, Q_{exp} > Q_{imp}$	37	24.48	325.99
	Third segment $UV_{exp} > UV_{imp}, Q_{exp} < Q_{imp}$	87	17.25	-1243.53
	Fourth segment $UV_{exp} < UV_{imp}, Q_{exp} < Q_{imp}$	112	13.14	-3177.70

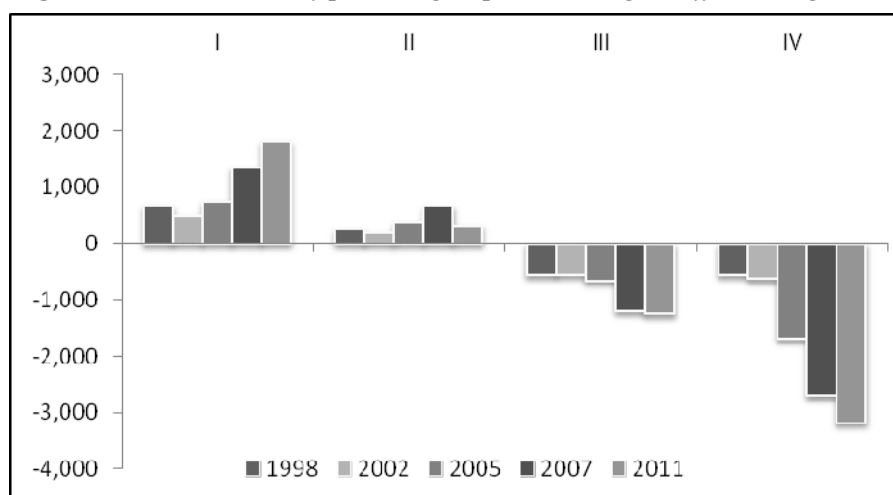
*according to three-digit SITC

Source: UN Comtrade and own estimates

After the decreasing tendency in the number of product groups, a certain growth has been recorded in 2007 and 2011 within the segment where the Macedonian exports are relatively expensive and therefore impose a trade deficit. Generally, the number of product groups increases in the fourth segment, followed by the growing trade deficit that amounts to 3.18 billion USD in 2011 (Figure 3). Taking the non-competitive position of the Macedonian exports in this segment despite the low export prices, one may note that the quality of products is the main reason for the negative results obtained.

Figure 2 Number of product groups according to different segments*

*according to three-digit SITC
Source: UN Comtrade and own estimates

Figure 3 Trade balance of product groups according to different segments*

*according to three-digit SITC
Source: UN Comtrade and own estimates

The analysis about the changes of product groups' number according to SITC sectors in different segments points to somewhat divergent results (Table 2). Generally, the number of product groups in the segment of successful qualitative competitiveness has recorded either a decreasing or equal movement in 2011 with regard to other periods taken into analysis. It is of particular concern hereby the decline of the product groups' number within the seventh and eighth SITC sector (2011 compared to 1998), since it implies a loss in the qualitative competitiveness of products with higher processing levels. There is either increasing or equal movements of the product groups' number in the second segment (2011 compared to 1998). The particular change has been noticed within the "Food and live animals" SITC sector for even the six product groups. In other words, there is a general tendency of growth for the product groups' number achieving a successful export at low unit value. The number of product groups that lost the competitiveness in markets where the prices prevail has been reduced within the 0 SITC sector (2011 compared to all other periods). By contrast, there is an increasing tendency in the number of product groups in

sectors with higher processing levels (seventh sector in 2011 with regard to 2007; sixth sector in 2007 compared to 2005). Noteworthy is the growth of the product groups' number in the segment with structural problems, particularly in the fifth sector (3 product groups), the sixth sector (12 product groups) and the eighth sector (7 product groups) in 2011 compared to 1998. That is to say, there is a huge loss of competitiveness, especially in manufacturing as considered the most important in achieving the competitive performance with dynamic potentials, predominantly followed by the impact of non-price factors.

According to variable structure of the product groups at different sectors, one may note that product groups within the first segment exhibit a kind of “fictional” qualitative competitiveness. Namely, those are the products that are exported, but more difficult to sell in domestic market owing to low purchasing power of domestic demand which is mainly satisfied by lower quality imports (e.g. textile). Furthermore, export of clothing and textile has been largely dependent upon the imports of products for further processing (National Bank of the Republic of Macedonia, 2004) and it still dominates the Macedonian textile industry (University American College, 2011). This segment also comprises several product groups with smaller imports, as well as those in which the qualitative lead of exports is mostly due to natural advantages (e.g. ores and tobacco). Moreover, some of the product groups revealing the price competitiveness are those predominantly sold on the markets of neighboring countries. They may possibly be sold as cheaper products in near locations owing to the high unit costs of transport (e.g. fruit, vegetable, cement, etc.).

The segment with deficit in price competitiveness contains several product groups with potentials to improve their performance. In other words, some of them can reach certain levels of price competitiveness and possibly shift to other segment by succeeding to complete a more efficient production and optimize the transportation costs. As mentioned above, the number of product groups within the extremely uncompetitive segment increases along with the growth of trade deficit. Yet, the structure of fourth segment exhibits large variations. That is to say, there are product groups not to be found in the Macedonian exports, but also those which might have a great importance in exports (e.g. heating and cooling equipment, mechanical handling equipment and telecommunications equipment). Hence, despite these product groups being uncompetitive and generate the highest percentage of trade deficit, the larger inflows of foreign direct investment (FDI) in this segment are supposed to create conditions for restructuring and changing the nature of competitiveness.

Table 2 Number of product groups at different segments according to SITC sectors

Sector	1998				2002				2005				2007				2011			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Food and live animals	2	6	18	10	3	4	14	15	3	8	16	9	3	5	14	14	1	12	12	11
Beverages and tobacco	3	1	0	0	3	1	0	0	3	1	0	1	3	3	0	0	1	2	1	0
Crude materials, inedible, except fuels	8	3	9	14	5	4	8	16	5	8	6	11	4	6	10	12	5	5	8	13
Mineral fuels, lubricants and related materials	0	0	2	7	0	0	5	5	0	2	2	6	0	1	4	5	0	0	4	6
Animal and vegetable oils and fats	0	0	3	1	0	0	1	3	0	0	3	1	0	0	3	1	0	0	3	1
Chemicals	1	1	17	13	1	6	12	14	0	3	13	17	1	3	12	17	1	3	13	16
Manufactured goods classified chiefly by material	10	9	17	14	6	11	18	17	2	12	14	24	2	11	17	22	2	9	15	26
Machinery and transport equipment	2	4	18	26	1	3	20	26	1	3	15	31	1	3	13	33	0	4	20	26
Miscellaneous manufactured articles	7	1	14	6	6	2	11	12	5	2	10	14	5	3	10	13	5	2	10	13
Commodities and transactions not classified in SITC	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	1	0	1	0

Source: UN Comtrade and own estimates

The above analysis points toward a number of disadvantages which negatively affect the Macedonian exports, such as: the high level of rivalry in international markets mostly by the less developed countries; the inferior negotiating position either with suppliers or the buyers; the substitutes continually created by the new technology, etc. Hence, the only way to achieve a better

structure of the Macedonian foreign trade and higher levels of competitiveness is the possibility to create an adequate environment so as to shift a part of product groups from the fourth segment (especially those generating higher value added) into the first and second segment for them to significantly contribute to dynamics of total exports.

Conclusions

The empirical research indicates that the Macedonian economy features low export unit values owing to the country specialization in those industries to be found at lower levels of “quality ladder”. The imports have also recorded relatively low unit values, which specify the inability of the Macedonian economy to effectively absorb the technology intensive products.

The analysis made for the product groups subdivided into different segments point towards the poor competitive performance. Namely, the number of product groups from the first and second segment is much lower than that of the non-competitive segments. It of particular concern hereby that the number of product groups indicating successful qualitative competitiveness has been halved in 2011 with regard to 1998 together with the decreasing share in total exports. The rising trade deficit along with the general increase in the number of product groups in the segment where the Macedonian exports are not competitive, despite the low export prices, point towards the quality of products as the main reason for the negative results obtained.

The estimates about the changes of the product groups’ number according to SITC sectors in different segments points toward somewhat divergent results. Particularly disturbing is the rise of product groups’ number within the segment with structural problems, especially in the fifth, sixth and the eighth sector in 2011 compared to 1998. In other words, a huge loss in competitiveness has been noted in sectors which are the most important in achieving the competitive performance with dynamic potentials, mostly followed by the impact of non-price factors.

According to variable structure of the product groups at different sectors, one may note that product groups within the first segment exhibit a kind of “fictional” qualitative competitiveness. Those are the products difficult to sell in domestic market owing to low purchasing power of domestic demand or largely dependent upon the imports of products for further processing. Some of the product groups revealing the price competitiveness may possibly be sold as cheaper products in locations nearby owing to the high unit costs of transport. The segment with deficit in price competitiveness contains several product groups with potentials to improve their performance and possibly shift to other segment. Finally, the fourth segment exhibits large variations. There are product groups either not to be found in the Macedonian exports or those should have greater importance in exports. Despite these product groups being uncompetitive and generate the highest percentage of trade deficit, the larger FDI inflows are supposed to create good conditions for restructuring and changing the nature of competitiveness.

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