Competitiveness of agrarian trade of EU-15 countries in comparison with new EU member states

Konkurenceschopnost agrárního zahraničního obchodu zemí EU-15 v porovnání s novými členskými státy EU

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Abstract: The paper analyses the commodity structure of agrarian trade of the EU countries. The comparative advantages of particular aggregations are accentuated from the view-point of their use on the EU internal market, and on the world market. The analysis is based on an evaluation of comparative advantages by means of a modified Ballas index. It is viewed on two levels, for the EU internal market and the world market. The results of the analysis are shown in a chart. Subsequently, the authors implement an idea arising from a BCG (Boston Consulting Group) matrix on the results of a graphical representation. The aim is to point out mainly those aggregations (SITC, rev. 3) which are, or have a potential to be, a pillar of agri-business, and vice versa to show the aggregations which are non-prospective in the long term, or problematic. The analysis is performed on two levels to utilise differences in the commodity structure of agrarian trade in both the cases of the old (EU-15) and the new EU member states (EU-12) (the member states which enlarged the EU in 2004 and 2007). From the results of the analysis, the significant changes are apparent if we compare commodity structures of trade of the countries of the EU-15 and EU-12.

Key words: competitiveness, Lafay, Ballasa, index, revealed comparative advantage, agrarian trade, European Union

Abstrakt: Článek analyzuje komoditní strukturu agrárního obchodu zemí EU. Důraz je kladen na komparativní výhody jednotlivých agregací z hlediska jejich uplatnění na vnitřním trhu EU a na trhu světovém. Analýza je založena na hodnocení komparativních výhod prostřednictvím modifikovaného Ballasova indexu. Ten je zpracován ve dvou rovinách a to pro vnitřní trh EU a trh světový. Výsledky analýzy jsou pak znázorněny graficky. Na výsledky grafického zobrazení pak autoři implementují myšlenku vycházející z matice BCG (Boston Consulting Group matrix). Cílem je poukázat, zejména na ty z agregací (SITC, rev.3), které jsou, a nebo mají potenciál být pilířem agroobchodu a naopak poukázat na ty z agregací, které jsou dlouhodobě neperspektivní, či problematické. Analýza je zpracována ve dvou rovinách, a to tak, aby byly postihnuty rozdíly v komoditní struktuře agrárního obchodu jak v případě starých (EU-15), tak i v případě nových členských států EU-12 (členské státy, které rozšířily EU v letech 2004 a 2007). Z výsledků analýzy jsou pak zřetelné i změny, které existují, pokud porovnáme komoditní struktury obchodu zemí EU-15 a EU-12.

Klíčová slova: konkurenceschopnost, Lafay, Ballasa, index, zjevná komparativní výhoda, agrární obchod, Evropská Unie

Trade is historically the oldest and still an important part of the external economic relationships. Its impact on the economic development of individual countries has deepened considerably over the whole period since the WW2; the international trade development belongs among the most dynamic elements of the development of the world economy in recent decades (Jeníček and Krepl 2009).

The impact of international trade on the economic growth and poverty is a central issue in the debate surrounding globalisation. Despite the controversy about the causal link between trade openness and

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economic performance in the literature, the virtues of trade's contributions to faster growth and poverty alleviation are generally recognised (Hassine and Kandil 2009).

Agrarian trade is a significant part of the world economy, even if its share in world trade is continuously decreasing, and is currently at the level of about 5% to 7%. For the EU countries, agrarian trade in both forms of the intra-trade and the extra-trade represents a very important part of the Common Agricultural Policy. Presently, agrarian trade of the EU countries has become a very significant proportion of the word trade with agrarian production. The share of the EU in the world agrarian export and import value is very high (Svatoš 2009).

The majority of consumers around the world can choose from a very diverse range of food products. With thousands of new products being introduced into the market every year, the competitive environment for food businesses has become increasingly fierce (Fischer et al. 2009).

The last few years have seen considerable changes in the world and regional trade. Agrarian trade of the EU countries was influenced by the world trade liberalisation; furthermore, the agrarian trade was affected by the accession negotiations taking place between the EU and the twelve European countries that joined the EU in 2004 and 2007. The shape of trade of Central European countries was significantly influenced by the removal of trade barriers which occurred at the time when all the candidate countries joined the EU. Agrarian trade of these countries was further affected by changes resulting from common policies concerning agriculture and trade in the EU, and their gradual reforms (Svatoš 2008).

The commitment of the Common Agricultural Policy led to unprecedented changes in the economic environment – in agriculture as well as in the processing industry. New members lost the opportunity to regulate the original price level of agricultural products supported by the national border protection and export subsidies (Tomšík and Rosochatecká 2007).

On the other hand, technical regulations and standards have gained a great importance in the international agri-food trade. Governments, particularly of high-income countries, have increasingly implemented tighter and mandatory standards for agri-food products and also the demand that agri-food imports comply with them (Rau and Van Tongeren 2009).

This paper analyses the structure of agrarian and food exports of the EU-15 and EU-12 countries from the viewpoint of competitiveness of the commodity structure of agrarian exports both in the internal and the world market, then additionally from the viewpoint of the growth rate of the trade value in particular aggregated export items, and finally from the viewpoint of the particular analysed groups of countries. On the basis of this information, a modified BCG (Boston consulting group) matrix was constructed, which divides the particular aggregations of agrarian and food export into four groups, according to what contribution they represent for the structure of agrarian export of the EU-15 and EU-12 countries.

An understanding of the structure of agrarian exports of the individual countries, and also the world trade structure, is necessary for the use of the comparative advantage analysis (Krugman and Obstfeld 2006). There are still considerable differences among the old and new EU member states, enabling one to take advantage of the processes of diversification and specialisation in agrarian production and trade (European Commission 2010). The differences between the new and old EU member states dribble out. Structural changes in the EU-12 are larger than in the old member states. Because of that, the EU-12 catches up with the EU-15, although they remain behind regarding the farm income, GDP per capita and the agrarian trade value and volume (Eururalis (2010).

Strengthening of the competitive position of the new EU member states is a fundamental point of the strategy of furthering trade-economic interests of the newly joined countries in the EU. Among the basic challenges of increasing competitiveness of these countries, there are, for example, the pressure on decreasing the import price, an easier approach to markets of third countries (non-member states of the EU), the support of the WTO agrarian reform (also in the EU), liberalisation of the world trade by services, the protection of intellectual property, and exerting the pressure on a fair settlement of international trade among all participants (Businessinfo.cz 2010).

If we look at the development of agrarian trade in the member states of the present European Union, we can see that in 2004–2009 the value of agrarian exports of the EU-27 countries increased very significantly (especially if we analyse the agrarian trade value on the U.S. dollar base). Several factors account for this growth. Firstly, the USD value in comparison with other world currencies (especially with EURO) significantly decreased (WTO 2009). Secondly, in the period 2007 to the first half of 2008, there was a considerable rise in the prices of agrarian products in the world market. In some world regions, prices of some specific commodities even increased by more

than 100%, and though, owing to the economic crisis and other factors, the prices of agrarian and food products dropped again in the period from the second half of 2008 to the present, their real prices are still about 30% higher than at the turn of 2006/2007 (UN FAO 2009). Third factor influencing the price growth was the decrease of global reserves of some commodities below the long-term averages (rice, wheat, corn). Another significant factor affecting the rise in prices and also the volume of actual business conducted is the growing demand for agrarian products from the sectors which are not connected with the food industry. This is mainly the demand for agrarian products from the fuel-energy industry and also from building industries. A further factor which has influences the growth of world trade volume in the long term, and also the trade of EU countries, is the population growth – especially in developing countries (where the population grows by about 70 million people yearly). Yet another factor affecting the world trade value growth is the production volatility – mainly of crops – particularly in the case of some important producers such as Australia and South America, etc. (weather influence).

In the case of the EU member states, the growing rate of liberalisation, now happening, has contributed to the increase of the agrarian export value. The liberalisation affected mainly the volume of agrarian trade in the internal market of the EU countries. The EU was enlarged by 12 new members in 2004 and 2007, which means an increase of the internal market of the EU countries by more than 100 million consumers. Generally, the current market of the EU countries represents about 500 million consumers, and owing to the liberalisation of the internal market leading to certain structural changes in agrarian production and trade, there is still an increasing growth rate of the volume, and mainly of the value of agrarian trade among the EU countries.

The paper results from the authors' long-term research activities in the development of agrarian trade of the EU countries, and especially of the Central-European countries. The article continues on the theme of some previously published outputs of the authors, and develops them further. The paper itself analyses the export structure of agrarian trade of the EU-12 and EU-15 countries with the aim of identifying the differences existing among these groups of countries, and further to identify those aggregations which are the most important for the given group of countries and the most prospective from the viewpoint of comparative advantage and the orientation of their agrarian trade.

METHODOLOGY

This paper is devoted to the analysis of the commodity structure of the agrarian and food-industries trade of the EU countries. The present European Union is a group of 27 countries, though it should be remembered that this group is, in fact, divided on the basis of historical conventions into two mutually heterogeneous groups. For this reason, this analysis is carried out in two parts. The first represents the analysis of agrarian trade of countries which

Table 1. The list of the individual agrarian trade items analyzed in paper

S3-001	LIVE ANIMALS	**S3-043**	BARLEY, UNMILLED	**S3-073**	CHOCOLATE, OTH. COCOA PREP
S3-011	BOVINE MEAT	**S3-044**	MAIZE UNMILLED	**S3-074**	TEA AND MATE
S3-012	OTHER MEAT, MEAT OFFAL	**S3-045**	OTHER CEREALS, UNMILLED	**S3-075**	SPICES
S3-016	MEAT, ED. OFFL, DRY, SLT, SMK	**S3-046**	MEAL, FLOUR OF WHEAT	**S3-081**	ANIMAL FEED STUFF
S3-017	MEAT, OFFL. PRPD, PRSVD, NES	**S3-047**	OTHER CEREAL MEAL,FLOUR	**S3-091**	MARGARINE, SHORTENING
S3-022	MILK AND CREAM	**S3-048**	CEREAL PREPARATIONS	**S3-098**	EDIBLE PROD. PREPRTNS,NES
S3-023	BUTTER, OTHER FAT OF MILK	**S3-054**	VEGETABLES	**S3-111**	NON-ALCOHOL. BEVERAGE
S3-024	CHEESE AND CURD	**S3-056**	VEGTABLES, PRPD, PRSVD, NES	**S3-112**	ALCOHOLIC BEVERAGES
S3-025	EGGS, BIRDS, YOLKS, ALBUMIN	**S3-057**	FRUIT, NUTS EXCL. OIL NUTS	**S3-121**	TOBACCO, UNMANUFACT.
S3-034	FISH, FRESH, CHILLED, FROZN	**S3-058**	FRUIT, PRESERVED, PREPARED	**S3-122**	TOBACCO, MANUFACTURED
S3-035	FISH, DRIED, SALTED, SMOKED	**S3-059**	FRUIT, VEGETABLE JUICES	**S3-411**	ANIMAL OILS AND FATS
S3-036	CRUSTACEANS, MOLLUSCS	**S3-061**	SUGARS, MOLASSES, HONEY	**S3-421**	FIXED VEG. FAT,OILS, SOFT
S3-037	FISH ETC. PREPD, PRSVD. NES	**S3-062**	SUGAR CONFECTIONERY	**S3-422**	FIXED VEG. FAT,OILS, OTHER
S3-041	WHEAT, MESLIN, UNMILLED	**S3-071**	COFFEE, COFFEE SUBSTITUTE	**S3-431**	ANIMAL, VEG. FATS, OILS, NES
S3-042	RICE	**S3-072**	COCOA		

Source: UN Comtrade, own elaboration

have been EU members for a relatively long time – i.e. the countries of the EU-15. The second part then constitutes the same analysis for the former Eastern bloc countries which, together with Malta and Cyprus, joined the EU in 2004 or 2007 – the "EU-12" countries.

The agrarian trade analysis is based on the evaluation of the data on the development of agrarian trade during 2004–2009. The data resource is the UN Comtrade database from the United Nations Organisation. The nomenclature used is the SITC rev. 3 nom. from 2002, which expresses the agrarian trade of the particular countries in 44 basic aggregations (Table 1). The values of trade flows for the analysis are monitored in USD (in current prices without the use of a deflator). For the data analysis, the following basic statistical-mathematical tools were used: basic index, chain index, arithmetic average, geometrical average, and the absolute difference of values.

The point of this analysis is to determine the position of the particular aggregations representing the agrarian trade of the EU-12 and the EU-15 countries in the internal market of the European Union (EU-27), and in the world. The analysis is performed on the basis of the calculation of the apparent comparative advantage index (RCA1) which is worked out for the analysis needs at two levels. At the first level, the competitiveness of agrarian exports of the EU-12 or EU-15 countries only regarding the internal trade of the EU-27 is elaborated; at the second level, the same calculations are carried out evaluating the competitiveness of agrarian exports (exports outside the EU) of the EU-12 or the EU-15 countries from the viewpoint of the world market (for the purpose of this analysis, the world trade does not include the value of internal trade of the countries EU-27). The mathematical description of the RCA1 index is as follows (Utkulu and Seymen (2004):

The Revealed comparative advantage index

$$RCA1 = (Xij/Xnj)/(Xit/Xnt)$$

Where:

X = represents exports

i = represents analysed group of countries (EU-15 or EU-12)

j = represents the analysed group of products

n = represents EU-27 or the world

t = represents the sum of all groups of products

The RCA1 measures the groups of countries' exports of agrarian commodities relative to their total agricultural exports and to the corresponding exports of the set of the EU-27, e.g. the world. A comparative advantage is "revealed", if the RCA > 1. If the RCA is less than "one", the group of countries is said to have a comparative disadvantage in the analysed group of products or commodities.

The results of this analysis of the RCA1 index are subsequently set out in a graph where the x axis represents values of the RCA1 index for the world market and the y axis represents the value of the RCA1 index for the internal market of the EU-27 countries. The graph is drawn separately for the EU-12 countries and the EU-15 countries. On the basis of the calculated values, the particular aggregations of agrarian trade are distributed in 4 quadrants. If the aggregations have an apparent competitive advantage only in the world market, they are situated in the right bottom quadrant (quadrant III). Aggregations with an apparent competitive advantage only in the market of the EU-27 countries are placed in the left upper quadrant (quadrant I). If an aggregation has no comparative advantage, it is located in the left bottom quadrant (quadrant II). Finally, the most fundamental group of aggregations with an apparent competitive advantage both in the market of EU-27 and the world market is placed in the right upper quadrant (quadrant IV).

In the second stage, the particular aggregations are evaluated on the basis of their share in the total agrarian trade of the EU-12 or the EU-15, and further on the basis of the average growth rate of the export value of the particular aggregations in 2004–2009. The obtained results are subsequently set out in a graph which represents an analogy of the BCG (Boston Consulting Group) matrix (Kotler 2007) – i.e. the particular quadrants represent "cash cows" (a high share in the total agrarian export and a low growth rate of the export value), "stars" (a high share in the total agrarian export and a high growth rate of export value), "dogs" (a low share in the total agrarian export and a low growth rate of the export value), and "problem children" (a low share in the total agrarian export and a high growth rate of the export value). The description is, of course, adapted to the characteristics of the researched problems.

From the results of both above mentioned analyses, on the basis of the comparison of the results, it is possible to identify those aggregations which are the most prospective not only in the light of a competitive advantage, but also from the viewpoint of their share in the market and the average growth rate, when considered from the viewpoint of the particular analysed groups of countries. Vice versa, the results identify those aggregations which are non-prospective, unsustainable or unsuitable in other ways for

agrarian trade of the examined groups of countries in the long term. Identifications of differences among the groups of countries concerning the space distribution of the resulting values of the RCA1 indexes, and also the resulting values arising from the modified BCG matrix, are evaluated and described on the basis of the graphical analysis and the subsequent synthesis of the knowledge obtained.

The above mentioned competitiveness analysis of agrarian exports of the EU-12 and EU-15 countries is completed with the competitiveness analysis of the mutual agrarian trade at the bilateral level in the internal EU market among the EU-15 countries on one side and the EU-12 on the other. The comparative advantage of the particular items of agrarian export of one group of countries towards the second group is analysed by the means of the Lafay index.

By taking imports into account, the Lafay index (LFI) allows the intra industry trade and re-export flows to be controlled; in this sense, it is superior to the traditional Revealed Comparative Advantages Index (Balassa 1965).

Moreover, the Lafay index (Lafay 1992) also controls the distortions induced by macroeconomic fluctuations (Fidrmuc et al. 1999). Since comparative advantages are structural, by definition, it is crucial to eliminate the influence of cyclical factors which can affect the magnitude of trade flows in the short term. The Lafay index takes into account these effects by the consideration of the difference between each item's normalised trade balance and the overall normalised trade balance. Finally, the Lafay index weights each product's contribution according to the respective importance in trade (Zaghini 2003). For the given country, i, and for any given product, j, the Lafay index is defined as:

$$LFI^i_j = 100 \times [((X^i_j - M^i_j)/(X^i_j + M^i_j)) - (\Sigma^N_{j=1}(X^i_j - M^i_j)/ \Sigma^N_{j=1}(X^i_j + M^i_j))] \times ((X^i_j + M^i_j)/ \Sigma^N_{j=1}(X^i_j + M^i_j))$$

where X^i_j and M^i_j are exports and imports of product j of country i, towards and from the rest of the world, respectively, and N is the number of items. According to the index, the comparative advantage of the country i in the production of item j is thus measured by the deviation of product j normalised trade balance from the overall normalised trade balance, multiplied by the share of trade (imports plus exports) of product j in the total trade.

Positive values of the Lafay index, indicate the existence of comparative advantages in the given item; the larger the value, the higher the degree of specialisation. On the other hand, negative values point to de-specialisation (Zaghini 2003).

RESULTS AND DISCUSSION

In 2004–2009, the value of the EU agrarian exports (without differentiation of whether it is extrastat or intrastat) increased from about 220 billion USD to about 360 billion USD. This means that in the nominal dollar expression, the value of agrarian export grew by about 64% which represents a value increment of about 10.4% yearly. Nevertheless, if we analyse the export structure of the EU countries in more detail, we have to point out that there is a prevailing influence of the EU-15 countries over the EU-12 countries. The cumulated value of agrarian exports of the EU-15 countries is approximately 90% of the total agrarian export from all countries of the EU-27 without differentiation of whether it is extrastate or intrastate. While in the case of the EU-15 countries, the export value increased from about 206 billion USD to about 323 billion USD in the monitored period (i.e. by 57%, which means an average year-on-year export growth value of about 9.5%); in the countries of the EU-12, the export value increased from about 15 billion USD to about 38 billion USD (i.e. by 156%, which means an average year-on-year export growth value of about 21%).

On the basis of this analysis, it is obvious that the trade liberalisation occurring at present is much more beneficial for the new member states (EU-12) than for the old EU members (EU-15). The year-on-year growth of the actual exports is more than double in the case of the EU-12 countries in comparison to the EU-15 countries, and at the same time, there are also changes in the export structure, where it is quite clearly seen that in the case of most new EU members, the items with a higher rate of added value start to get to the forefront, which positively influences not only the resulting agri-business balance but also the agri-complex structure of these particular countries. However, it must be emphasised that most agrarian trade, both in the case of the EU-12 countries and the EU-15 countries, is carried out within the internal market of the EU-27. The share of the exports value within the internal market in 2004 – 2009 increased in the case of the EU-12 countries from 72% to almost 80% (from about 10.7 billion USD to about 30 billion USD – i.e. by 173%), in the case of the EU-15 countries the share of exports within the market of the EU-27 remains steadily at the level of about 80% (nevertheless, the value of intra exports increased from about 166 billion USD to about 260 billion USD – i.e. by 56%). Concerning exports outside the internal market of the EU countries, the following can be seen. In the case of the EU-15 countries, the export value (extrastate)

increased from about 55 billion USD to about 102 billion USD (i.e. by 87%). In the case of the EU-12 countries, there was an export increase (extrastate) from about 4.1 billion USD to about 8.8 billion USD (i.e. by more than 110%). From these results, it can be seen that in the monitored period, a more dynamic growth was recorded in export - especially in the case of the new member states, both in the case of exports within the internal trade and in the case of exports outside the EU market.

In the following part of the analysis, we will discuss the agrarian export structure of the EU-15 and EU-12 countries in order to compare the differences in the composition of agrarian export, both from the viewpoint of shares of the particular aggregations in the total export, and the viewpoint of the growth dynamics of the exports value of the particular aggregations. If we look in detail at the structure of the agri-food export of the particular analysed groups of countries, we will find the following.

In the case of the EU-15 countries, the main pillars of the agrarian and food export from the viewpoint of the share in the resulting value are the following aggregations: S3-012, S3-057, S3-048, S3-054, S3-022, S3-024, S3-081, S3-056, S3-034, S3-073, S3-011, S3-122, S3-421, S3-017 and S3-041. These fifteen aggregations shared in the agrarian export value of the EU-15 countries in 2004 – 2009 in average about 75% (though it must be emphasised that the share of the first five aggregations in the value of the agrarian export was about 26%). The share of the other more than 20 aggregations in the value of the resulting export was only about 25%.

From the viewpoint of the growth rate development of the particular items of agrarian export, the most dynamically growing items of agrarian export of the EU-15 countries are the following: S3-041, S3-422, S3-071, S3-043, S3-091, S3-411, S3-421, S3-431, S3-059 a S3-042, S3-047, S3-081, S3-017, S3-025 and S3-074. Although the value of these fifteen items of agrarian export grew throughout the period 2004–2009 in average by 11–20% yearly, the share of these items in the total agrarian export value of the EU-15 countries was only about 23%.

In the case of the EU-12 countries, the main pillars of the agrarian and food export from the viewpoint of the share in the resulting value are the following aggregations: S3-012, S3-022, S3-048, S3-054, S3-081, S3-041, S3-122, S3-024, S3-061, S3-057, S3-073, S3-044, S3-058, S3-056 and S3-017. These fifteen aggregations shared in the agrarian export value of the EU-12 countries in 2004–2009 in average about 73% (thought it must be emphasised that the share of the first five aggregations in the value of the agrarian export was about 34%). The share of other more than 20 aggregations in the value of agrarian export was only about 27%.

From the viewpoint of the growth rate development of the particular items of agrarian export, the most dynamically growing items of agrarian export of the EU-12 countries are the following: S3-041, S3-016, S3-422, S3-042, S3-043, S3-122, S3-046, S3-011, S3-025, S3-044, S3-045, S3-421, S3-091, S3-071 and S3-022. Although the value of these fifteen items of agrarian export grew throughout the period 2004–2009 in average by 20–48% yearly, the share of these items in the total value of agrarian export of the EU-15 was only about 32%. If we compare the results of the commodity structure of agrarian exports of the EU-15 and EU-12 countries, we will see following differences (Figure 1).

The value of agrarian trade grows much faster in the EU-12 countries than in the EU-15. In the case of the EU-12 countries, the growth rate of agrar-

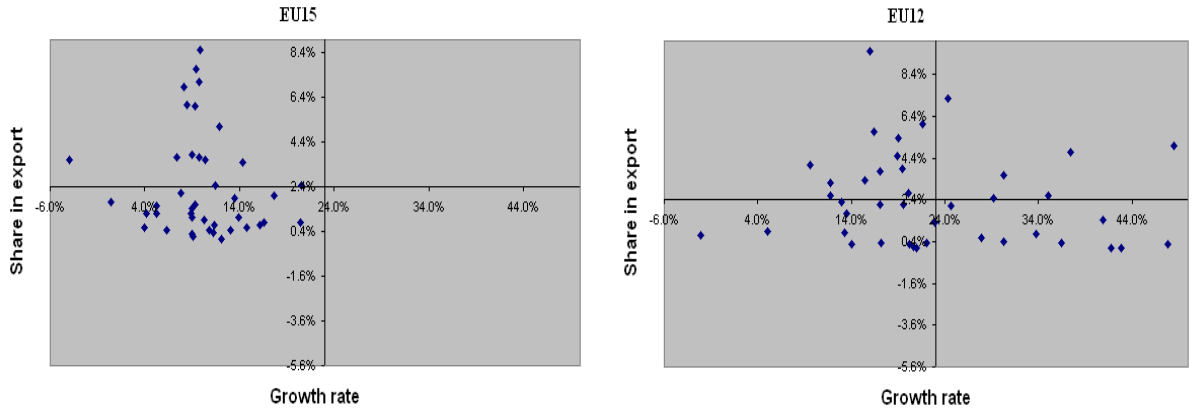

Figure 1. Comparison of the selected characteristics of the agrarian export structure of the EU-15 and the EU-12 countries (2004–2009)

Source: UN Comtrade; own elaboration

ian export value is more than double the growth rate of the EU-15 countries (about 23% yearly, and about 10% yearly, respectively). In the case of the fifteen most important commodity aggregations, the growth rate of the export value is two and a half times higher in the EU-12 countries compared to the EU-15. Another significant difference from the viewpoint of the commodity structure development is in the agrarian export concentration. While in the case of the EU-15 countries, it is obvious that in all 44 analysed aggregations, the growth rate ranges around an interval of –4% to +20%, in the case of the EU-12 countries, it is –2% to +48%. Concerning the shares of the particular aggregations in the agrarian export, the differences among the EU-12 and EU-15 countries are not so noticeable.

The pillars of agrarian export of both groups of countries are the following groups of agrarian products (in the case of the EU-15 countries, the share of 13 aggregations in export is about 47%, and in the case of the EU-12 about 44%): S3-024, S3-054, S3-091, S3-056, S3-048, S3-075, S3-074, S3-073, S3-047, S3-071, S3-081, S3-017 and S3-012.

There are differences in the case of the aggregations S3-036, S3-422, S3-042, S3-016, S3-431, S3-057, S3-411, S3-072, S3-034, S3-046, S3-421, S3-011 and S3-023. In the case of these commodities, a prevalence of the share of the EU-15 countries over the EU-12 countries is seen concerning the position of these aggregations in the export structure. While in the case of the EU-15 countries, the share of this aggregation in the total export value is about 27%, in some cases of the EU-12 countries, it is only 14.6%. So, the EU-15 countries have an apparent prevalence in the case of the position of some processed (beef meat, plant and animal oils and fats, processed meat, or flour) or non-competitive items (subtropical fruit, rice, cocoa, fish etc.) in its export structure in comparison with the EU-12 countries. A better position of these aggregations in their own export structure is given mainly by two factors. The EU-15 countries have been members of the EU much longer than the EU-12 countries, and their agrarian trade structure is influenced by the existence of the unified market as well as the Common Agricultural Policy of the EU countries. In the case of non-competitive products, the better position of the EU-15 countries is given especially as most countries of EU-12 have no access to large harbours through which these goods would flow, so these countries cannot share as significantly in the re-export activities of these aggregations.

In the case of the aggregations like S3-025, 23-022, S3-059, S3-098, S3-122, S3-121, S3-062, S3-037, S3-043, S3-061, S3-045, S3-058, S3-041, S3-035 and S3-044, it is obvious that in the export commodity structure, there is a difference in the position of these aggregations in the countries EU-12 and EU-15. While in the case of the EU-12 countries, their share in frame of the export structure is about 41%, in the case of the EU-15, it is only 25%.

BCG analysis

If a methodology resulting from the BCG matrix draft is applied (Figure 2) on the above mentioned results of the analysis, it can be stated that on the basis of the share of the particular aggregations of the overall agrarian export, and on the basis of growth rate of the given aggregations in 2004–2009, the pillars of agrarian export (i.e. "cash cows" – the growth rate 4–10% and the share in export 2.5–9%) are in the case of the EU-15 countries the following aggregations: S3-012, S3-057, S3-48, S3-054, **S3-022**, S3-024, S3-073, S3-056, S3-034. The "stars" (the share in export 2.5–9% and the growth rate more than 10%) are: **S3-081**, S3-011, S3-421, **S3-017** and S3-041.

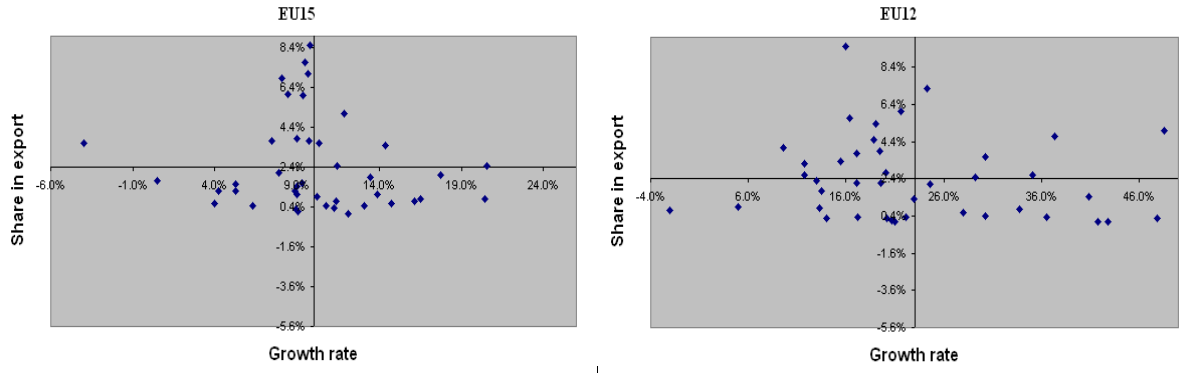

Figure 2. BCG matrix analysing the agrarian export composition of the EU-15 and the EU-12 (2004–2009)

Source: UN Comtrade; own elaboration

The "problem children" (the share in export is below 2.4% and the growth rate above 10%) are the aggregations: **S3-059**, S3-071, S3-422, S3-043, S3-091, **S3-411**, **S3-431**, S3-042, **S3-047**, **S3-074**, S3-025, S3-046 and **S3-044**. The remaining aggregations, distinguished by a low or negative growth rate and a low share in export, can be marked as the "dogs". Here, there are the relatively non-prospective export aggregations such as: S3-098, S3-023, S3-121, **S3-122**, S3-036, S3-062, S3-035, **S3-061**, **S3-058**, S3-037, S3-072, **S3-016**, S3-075 and **S3-045** (in this case, it deals with re-exports or relatively problematic items which face structural problems from the viewpoint of the own market of the EU-15 countries, e.g. butter).

Concerning the EU-12 countries, if the same methodology as in the case of the EU-15 countries is applied, we will find the following. In 2004–2009, the pillars of agrarian export (the "cows" – the growth rate 6–23% and the share in export 2.5–9%) were the aggregations: S3-012, S3-057, S3-48, S3-054, **S3-081**, S3-057, **S3-058, S3-061, S3-017**, S3-024, S3-073, S3-056, S3-034. The "stars" (the share in export 2.5–9% and the growth rate more than 23%) are then: **S3-022, S3-044, S3-122**, S3-011, S3-421 and S3-041. The "problem children" (the share of export is below 2.4% and the growth rate above 23%) are the aggregations: S3-071, S3-422, S3-043, S3-091, **S3-045, S3-016**, S3-042, S3-025 and S3-046. The remaining aggregations, characteristic by a low growth rate and a low share in export, can be marked as the "dogs". Here, there are the relatively non-prospective export aggregations like: **S3-059, S3-431, S3-411, S3-047, S3-074**, S3-098, S3-023, S3-121, S3-036, S3-062, S3-035, S3-037, S3-072 and S3-075 (in this case, it deals with either re-exports or relatively problematic items which face structural problems from the viewpoint of the own market of the EU-15 countries, e.g. butter).

From the above analysis, it results that from the viewpoint of significance of the particular aggregations among the EU-12 and EU-15 countries, there are only a few differences. Those of items which with the classification fitting into the "cash cow" group are usually cash cows for both the EU-12 and EU-15, the same can be stated about the "stars", the "problem children" and the "dogs".

From the more than forty analysed aggregations, it can be stated that only 14 aggregations are not mutually identical, taken from the viewpoint of the classification for our analysed groups. Differences exist in those aggregations, which are highlighted in the above mentioned paragraphs.

From the viewpoint of the classification of the particular aggregations in the BCG matrix, there are only four significant differences among the analysed groups of countries, and they concern the aggregations S3-058, S3-061, S3-044 and S3-122.

From this analysis, it results that there are only small differences among the analysed groups of countries from the viewpoint of the position of the particular aggregations in the commodity structure of agrarian export, and it is obvious that the export structure of the new EU member states very significantly approaches the export structure of the old member states. Of course, there are certain differences regarding mainly the share of the processed and non-processed products in the agrarian exports structure, and also concerning the price level.

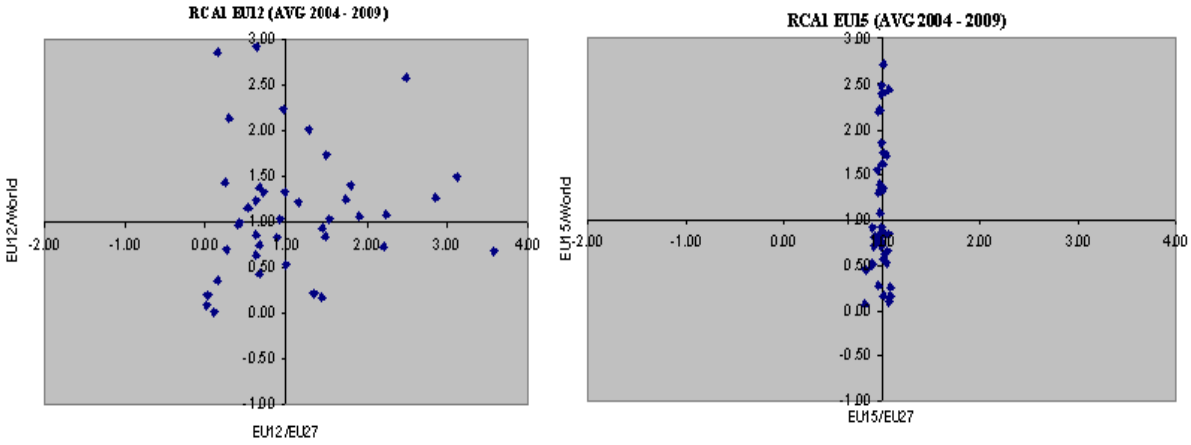

Figure 3. Analysis of the agrarian export competitiveness of the EU-12 and the EU-15 countries in the market of the EU-27 countries and in the world market

Source: UN Comtrade; own calculation

RCA1 analysis

The following part of the article analyses the differences in the competitiveness of the agrarian export commodity structure of the EU-12 and EU-15 countries from both viewpoints, the comparative advantage of the exported aggregations in the internal market of the EU-27 countries and in the world market.

Table 2, together with the Figure 3, demonstrates the results of the comparative advantage analysis (RCA1 from the viewpoint of the world market and RCA1 from the viewpoint of the internal EU market) for the group of the EU-12 countries. In 2004–2009, the competitive advantage was at the disposal of those aggregations whose RCA1 index value was higher than 1. An optimal combination is the achievement of the competitive advantage on both the internal market of the EU-27 and the world market. This situation is shown in the quadrant IV (Figure 3). Generally, it regards the following 11 aggregations: S3-012, S3-017, S3-022, S3-025, S3-041, S3-043, S3-058, S3-062, S3-073, S3-098 and S3-122. Their total share in the agrarian export value amounts to 42.4%.

Quadrant II includes such aggregations which reach the competitive advantage neither in the internal market of the EU-27 nor in the world market. It regards the following 12 aggregations: S3-011, S3-034, S3-036, S3-042, S3-046, S3-054, S3-057, S3-075, S3-411, S3-421, S3-422 and S3-431. Their share in the agrarian export value is only 18.7%. The remaining 18 aggregations reach the competitive advantage only in the internal market of the EU-27 or in the world market. In the internal market of the EU-27, this advantage is reached by the following 12 aggregations in total: S3-035, S3-037, S3-044, S3-045, S3-047, S3-059, S3-061, S3-071, S3-074, S3-081, S3-091 and S3-121. Their share in the agrarian export value of the EU-12 represents 23.1%. Generally, the 6 following aggregations show the competitive advantage only in the world market: S3-016, S3-023, S3-024, S3-048, S3-056 and S3-072. Their share amounts to 15.6%.

The competitive advantage on the internal market of the EU-27 countries (regardless of the competitive advantage in the world market) is shown by 23 aggregations with the share in the total export of 65.5%. In the world market, in the same case it regards 17 aggregations with the share in the total export of 58%.

The total export competitiveness has deteriorated throughout the monitored period. During 2004–2009, the RCA1 index value has decreased generally in 24 aggregations in relation to the internal market of the EU-27, and 27 aggregations in relation to the world market. A positive characteristic of this trend is that the decrease concerns mostly such aggregations which are distinguished by a low rate of the added value, or it regards the non-competitive products. Contrary to the EU-15, in the case of the EU-12 countries, a much wider dispersion of the RCA1 index values is obvious, mainly in the internal market of the EU-27. The RCA1 index value reaches dispersion between 0.02 and 2.91 in the internal market of the EU-27, and in exports in the world market, the dispersion is even higher (0.01 to 3.58). It means that for the EU-12 countries, the new EU members, the consequences of applying the Common Agricultural Policy of the

Table 2. Average value of the RCA1 indexes over the period 2004–2009 in the EU-12

EU-12	RCA1 AVG 2004–09		EU-12	RCA1 AVG 2004–09		EU-12	RCA1 AVG 2004–09		EU-12	RCA1 AVG 2004–09		EU-12	RCA1 AVG 2004–09	
	to EU-27	to World		to EU-27	to World		to EU-27	to World		to EU-27	to World		to EU-27	to World
S3-011	0.70	0.26	S3-035	2.86	0.14	S3-047	1.23	0.62	S3-071	1.15	0.53	S3-122	1.26	2.85
S3-012	1.22	1.16	S3-036	0.02	0.11	S3-048	0.93	1.46	S3-072	0.17	1.44	S3-411	0.53	1.00
S3-016	0.22	1.35	S3-037	1.38	0.68	S3-054	0.83	0.89	S3-073	1.07	2.25	S3-421	0.75	0.68
S3-017	1.04	1.53	S3-041	1.73	1.51	S3-056	0.73	2.21	S3-074	1.44	0.25	S3-422	0.09	0.01
S3-022	1.26	1.74	S3-042	0.21	0.03	S3-057	0.43	0.66	S3-075	0.87	0.62	S3-431	0.36	0.15
S3-023	0.84	1.48	S3-043	1.50	3.12	S3-058	2.01	1.28	S3-081	1.03	0.92			
S3-024	0.69	3.58	S3-044	2.91	0.64	S3-059	1.33	0.71	S3-091	1.00	0.42			
S3-025	1.06	1.91	S3-045	2.13	0.29	S3-061	2.23	0.97	S3-098	2.58	2.49			
S3-034	0.64	0.63	S3-046	0.97	0.40	S3-062	1.41	1.80	S3-121	1.34	0.98			

Source: UN Comtrade, own calculation

Table 3. Average value of RCA1 indexes over period 2004–2009 in EU-15

EU-15	RCA1 AVG 2004–09		EU-15	RCA1 AVG 2004–09		EU-15	RCA1 AVG 2004–09		EU-15	RCA1 AVG 2004–09		EU-15	RCA1 AVG 2004–09	
	to EU-27	to World		to EU-27	to World		to EU-27	to World		to EU-27	to World		to EU-27	to World
S3-011	1.03	0.17	S3-035	0.84	0.44	S3-047	0.98	1.08	S3-071	0.99	0.72	S3-122	0.96	2.19
S3-012	0.98	1.39	S3-036	1.09	0.25	S3-048	1.01	2.41	S3-072	1.08	0.85	S3-411	1.04	1.71
S3-016	1.07	2.43	S3-037	0.97	0.27	S3-054	1.02	0.87	S3-073	1.00	2.48	S3-421	1.02	1.35
S3-017	1.00	0.92	S3-041	0.93	0.81	S3-056	1.03	1.74	S3-074	0.96	0.76	S3-422	1.08	0.16
S3-022	0.97	2.21	S3-042	1.07	0.10	S3-057	1.05	0.53	S3-075	1.01	0.58	S3-431	1.06	0.66
S3-023	1.02	2.71	S3-043	0.95	1.55	S3-058	0.91	0.72	S3-081	1.00	0.76			
S3-024	1.03	3.34	S3-044	0.82	0.07	S3-059	0.97	0.80	S3-091	1.00	1.62			
S3-025	0.99	2.38	S3-045	0.90	0.50	S3-061	0.90	0.93	S3-098	0.86	3.91			
S3-034	1.03	0.63	S3-046	1.00	1.84	S3-062	0.97	1.30	S3-121	0.97	0.83			

Source: UN Comtrade. own calculation

EU have not shown yet in the way as it is evident in the results of the EU-15 countries (see Figure 3).

From Table 3 and the previously-mentioned Figure 3, calculations are obvious for the group of the countries EU-15. In the quadrant IV (bilateral competitive advantage), 8 aggregations are situated with the general share in the market of 24.1%. It regards the following aggregations: S3-016, S3-023, S3-024, S3-048, S3-056, S3-091, S3-411 and S3-421.

In the quadrant II, the aggregations are located, which do not achieve any competitive advantage. Here, it regards generally 13 aggregations, however, their market share amounts only to 21.7%. In this group, the following aggregations are ranked: S3-017, S3-035, S3-037, S3-041, S3-044, S3-045, S3-058, S3-059, S3-061, S3-071, S3-074, S3-081 and S3-121.

The remaining 20 aggregations reach the competitive advantage only in the internal market of the EU-27 (10 aggregations with the market share 27.3%) or in the world market (10 aggregations, the share 26.9%). In the EU internal market, it regards the 10 following aggregations: S3-011, S3-034, S3-036, S3-042, S3-054, S3-057, S3-072, S3-075, S3-422 and S3-431. In the world market, then 10 aggregations: S3-012, S3-022, S3-025, S3-043, S3-046, S3-047, S3-062, S3-073, S3-098 and S3-122.

The competitive advantage in the internal market of the EU-27 (regardless of an advantage in the world market) is shown generally by 18 aggregations with the market share 51.4%, and in the world market it regards in total 18 aggregations with the market share of 51%.

If we compare the results of the competitiveness analysis of the EU-15 and EU-12 countries, it can be stated that the total export competitiveness has not changed too significantly. Throughout the monitored period 2004–2009, the RCA1 index value has decreased in 17 aggregations in the internal market of EU-27, and 22 aggregations in the case of the world market.

In contrast to the EU-12 countries, the differences are significantly lower, especially in the case of exports in the markets of the EU-27. As regards the world trade, changes in the RCA1 indexes value are also lower in the EU-15 countries against the EU-12 (however, the differences are not as significant as in the foregoing case). In the EU-15 countries, a generally smaller dispersion of the RCA1 index values is also obvious, especially in relation to the internal market of the EU-27. While in the EU-12, it reaches the minimum and maximum values of the RCA1 index of 0.02–2.91, in the EU-15, the dispersion is much lower (0.82–1.19). In the case of the world market, the dispersion of the RCA1 index values is in the case of both analysed groups of countries in absolute values similar.

From the analysis, it is apparent that from the viewpoint of comparative advantage, there are very substantial differences between the EU-12 and the EU-15 countries. In the case of the EU-15, predominantly the processed products, which are subject to interventions resulting from the existence of the Common Agricultural Policy influencing these countries for tens of years, have the comparative advantage. In the case of the EU-12 countries, it regards the group of seemingly heterogeneous products, in which the products with a low rate of added value prevail; further re-exports and some specific processed products (e.g.

Table 4. Analysis of competitiveness of the mutual agrarian trade of the EU-15 and EU-12 countries (Lafay index, 2008)

Mutual trade		Commodity	LFI index	Mutual trade		Commodity	LFI index	Mutual trade		Commodity	LFI index
ES12	ES15	S3-001	0.68	ES12	ES15	S3-043	0.211	ES12	ES15	S3-073	–0.515
ES12	ES15	S3-011	1.707	ES12	ES15	S3-044	1.381	ES12	ES15	S3-074	–0.039
ES12	ES15	S3-012	–2.369	ES12	ES15	S3-045	0.231	ES12	ES15	S3-075	–0.101
ES12	ES15	S3-016	0.022	ES12	ES15	S3-046	–0.068	ES12	ES15	S3-081	–1.278
ES12	ES15	S3-017	0.575	ES12	ES15	S3-047	–0.038	ES12	ES15	S3-091	–0.422
ES12	ES15	S3-022	2.965	ES12	ES15	S3-048	0.088	ES12	ES15	S3-098	–1.689
ES12	ES15	S3-023	0.111	ES12	ES15	S3-054	0.182	ES12	ES15	S3-111	–0.414
ES12	ES15	S3-024	0.605	ES12	ES15	S3-056	–0.042	ES12	ES15	S3-112	–2.084
ES12	ES15	S3-025	0.274	ES12	ES15	S3-057	–4.402	ES12	ES15	S3-121	0.002
ES12	ES15	S3-034	–0.579	ES12	ES15	S3-058	1.272	ES12	ES15	S3-122	2.348
ES12	ES15	S3-035	1.086	ES12	ES15	S3-059	1.087	ES12	ES15	S3-411	–0.176
ES12	ES15	S3-036	–0.135	ES12	ES15	S3-061	0.62	ES12	ES15	S3-421	–0.21
ES12	ES15	S3-037	0.713	ES12	ES15	S3-062	0.175	ES12	ES15	S3-422	–0.608
ES12	ES15	S3-041	1.683	ES12	ES15	S3-071	–1.392	ES12	ES15	S3-431	–0.448
ES12	ES15	S3-042	–0.39	ES12	ES15	S3-072	–0.619				

Source: UN Comtrade, own calculation

tobacco and confectioneries). It is necessary to state here, that the comparative advantage in these items is given mainly by the fact that large supranational concerns shifted their production and manufacturing capacities into these countries. From that, it results that the comparative advantage is not natural, but it is given by the influence of concurrence of many internal and external factors.

Analysis of competitiveness of the mutual trade of the EU-15 and the EU-12 countries

The Table 4 analyses the distribution of comparative advantage of the mutual trade between the EU-15 and the EU-12 countries. After the enlargement of the unified EU market by twelve new members in 2004 and 2007, the internal EU market became even more competitive than at any time before. The EU market enlarged very significantly and at a short notice by more than 100 million consumers (growth of demand) and at the same time, many agricultural and food-industry operations from the new member states (especially from Poland, Hungary, Romania, Bulgaria and the CR) started to operate on their own EU internal market. The competitiveness on the internal market even sharpened after the accession of the new countries.

If we are interested in the distribution of comparative advantages of the mutual trade of the EU-12 and the EU-15, which goes on in the common internal market of the EU countries, we will find that in relation to the old member states – i.e. the EU-15 countries, the new members (the EU-12) maintain a comparative advantage in the case of 22 aggregations of the SITC nomenclature which divides agrarian trade into 44 basic aggregations. In these 22 aggregations (S3-001, S3-011, S3-016, S3-017, S3-022, S3-023, S3-024, S3-025, S3-035, S3-037, S3-041, S3-043, S3-044, S3-045, S3-048, S3-054, S3-058, S3-059, S3-061, S3-062, S3-121 and S3-122), the EU-12 achieves approximately 37% of value and 65% of volume of their agrarian exports into the EU-15 countries. Similarly, the EU-15 countries in relation to the EU-12 also maintain a comparative advantage in trade in the case of 22 aggregations (of these commodity aggregations, the EU-15 countries achieve about 70% of value and 76% of volume of their agrarian exports into the EU-12 countries).

At first sight, it would seem that there are no bigger differences between the new and old member states and that the cooperation between them is at the optimal level, because each group of countries specializes in a production of different agrarian and food products. Nevertheless, if we compare the mutual trade flows between the EU-12 and the

EU-15 countries, we will find certain differences. The processed products with a higher added value prevail in the commodity structure of exports going into the EU-12 from the EU-15; in the case of the reverse flow of goods from the EU-12 countries into the EU-15, it is exactly vice versa. Also the comparisons of the average kilogram prices of agrarian export of the EU-12 and EU-15 countries correspond to the above trends. While in 2008, the EU-12 exported in average for 1.06 USD/kg in the EU-15 markets, in the case of the exports from the EU-15 into the EU-12 countries, the kilogram price of the transactions was in average about 1.26 USD/kg. This points out that the commodity structure of the EU-12 countries is still not as advanced as in the case of the EU-15 countries. However, it must be emphasised that the differences between the commodity structure of the EU-15 and the EU-12 are gradually levelling out. It is confirmed by the fact that although there is a considerable difference in the value of the mutual trade flows between both groups of countries (in 2008, the EU-15 exported into the EU-12 agrarian products in the value of about 25.3 billion USD, while the value of import coming from the EU-12 was at about 19.3 billion USD), from the viewpoint of volume (an amount) of the mutual exchange, the difference is not as drastic as it were at the beginning of 1990s, for example (currently – 2008 – the export volume from the EU-15 into the EU-12 countries was at the level of about 20 million tones of products, and in the opposite direction from the EU-12 to the EU-15 approximately 18.2 million tones of agrarian and food products).

CONCLUSIONS

From the above analyses, it appears that there was a very significant increase in the value of agrarian exports both in the EU-12 and the EU-15 countries throughout the period 2004–2009. Whereas it is apparent that in the case of the EU-12 countries, much more significant changes happened in comparison with the countries EU-15 (where the changes are not so significant and the situation is steadier from the long-term point of view). The EU-12 countries recorded an intensive increment both of the volume and the value of agrarian export. Further, there were very important changes from the viewpoint of forming the agri-business commodity structure, especially from the viewpoint of the growth of the share of export aggregations with a higher rate of added value. The new member states have adapted to the conditions of internal trade throughout the monitored period, which was showed in several ways. The role of the EU internal market has become much more dominant during the recent years; agri-business has been restructured; reducing trade barriers lead to the beginning of the process of price convergence, etc.

From the viewpoint of competitiveness of agrarian products in both the world market and the EU internal market itself; there were also very significant changes. In the case of the EU-15, the analysis points out that these countries, owing to a long-term working of the Common Agricultural Policy of the EU, have a stabilised export structure. The main centre of sale of their agrarian production is the EU internal market which, from the viewpoint of these countries, runs on almost perfect competition, which is proved by a very low dispersion of the RCA1 index value for the particular aggregations. From the viewpoint of the internal market, the RCA1 index in the case of the EU-15 countries varies in all monitored aggregations in the range 0.8–1.2. In the light of the participation of the EU-15 countries in the world market, to which these states export approximately one fifth of their agrarian exports, the situation is not so unambiguous. In this case, the dispersion of the RCA1 indexes is 0 to 4. An explanation of this can also be found in the working of the Common Agricultural Policy, which causes market deformations. In their consequences, we can see the paradoxical situations when some of the item creates the pillar of the agrarian export, whereas its world competitiveness is almost negligible. However, in the conditions of the EU internal market, the competitiveness is relatively satisfactory (e.g. S3-041 wheat, S3-011 beef meat, S3-034 fish frozen and cooled). Further, the analysis confirmed that the most significant aggregations create a natural pillar of agrarian export of the EU-15 (the world competitiveness and a high share in the export value), for example in S3-012 meat, S3-022 milk, S3-073 chocolate, S3-048 cereals preparations, S3-024 cheeses, S3-056 vegetable preparations and S3-421 plant oils and fats. These aggregations represent generally about 40% of the value of the EU-15 agrarian export.

In the case of the EU-12, the analysis points out that these countries have been influenced by the Common Agricultural Policy of the EU for a relatively short term, nevertheless, the changes in the export commodity structure are already visible. The export structure is not so significantly stabilised, corresponding to the findings of graph 1. The main centre of sale of their agrarian production is also the EU market. However, after the accession to the

EU, these new member states were under a strong competitive pressure from the present EU members. It was reflected logically in the changes of their export structure. The fact that the export structure of the new member states is in the adaptation process to new conditions can be documented by a more significantly wider dispersion of the RCA1 index values of the particular aggregations.

From the viewpoint of the internal market, the RCA1 index of the EU-12 varies in the monitored aggregations in the range 0 to 3. From the viewpoint of the participation of the EU-12 countries in the world trade, where these countries export approximately one fifth to one quarter of their agrarian exports, the situation is relatively similar to that within the EU-15 countries.

The dispersion of the RCA1 indexes is also 0 to 3.5 in this case. From the analysis, it results that the most important aggregations creating a natural pillar of agrarian export of the EU-12 countries (the world competitiveness and a high share in the export value) are for example S3-012 meat, S3-058 processed fruits, S3-061 sugar, S3-017 selected meat products, S3-022 milk, S3-073 chocolate, S3-048 cereals preparation, S3-024 cheeses, S3-056 vegetable preparations, S3-122 tobacco products and S3-041 wheat. These aggregations represent generally about 55% of the value of the EU-12 agrarian export. From this it results that from a global viewpoint, the competitiveness of agrarian export of the EU-12 countries is economically much healthier than in the case of the EU-15. Nevertheless, even here, it is possible to find out such aggregations which have a significant position in the export structure, however, their competitiveness is doubtful (e.g. S3-034 fish, S3-054 vegetable and S3-057 fruit).

If we focus on the comparison of competitiveness of agrarian trade from the viewpoint of the mutual trade exchange of the EU-15 and the EU-12 countries, it can be seen that both groups maintain a comparative advantage in 50% of the traded aggregations, with the EU-15 countries achieving a comparative advantage in comparison with the EU-12 countries mainly in the case of products with a higher rate of processing and higher kilogram prices, and vice versa, the EU-12 countries maintain a comparative advantage over the EU-15 countries in trade with products with a low processing rate and lower kilogram prices. There is still a very significant difference between the EU-15 and the EU-12 countries in kilogram prices of the actual exports when export kilogram prices of the EU-12 are in average by 40% lower in comparison with kilogram prices of agrarian exports of the EU-15 countries.

Nevertheless, it can be expected that in the future, the differences existing between the EU-12 and the EU-15 countries will slowly disappear and the territorial, commodity and mainly the volume and value structure of agrarian exports of the EU-12 countries will approximate to the levels of the EU-15. This expected development is documented by the long-term trend of the EU-15 countries when there were also significant differences between these countries in recent years which, however, owing to the influence of the common policies and the existence of the unified market, started to disappear. Countries of the EU-12 have been members of the EU for only a short time, so, of course, their markets have not yet managed to adapt to the situation in the market of the EU-15 countries, which create the main pillar of agrarian trade in the entire EU. Nevertheless, the current trend started immediately after the accession of these countries to the EU shows that the new member states have a tendency to copy the typical development for most countries which enlarged the member base of the European Communities in 1973, 1981, 1986 and 1995.

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