CHEESE MARKET IN THE DANUBE REGION COUNTRIES[1]

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Abstract

The subject and the goal of the research are to recognize trends in production, export and import of cheese in the countries of the Danube region. Data sources are the FAO and the International Trade Centre (ITC) database in the time period 2005-2012. The average cheese production in the region amounts 2.7 million tons, with moderate growth tendency. The biggest producer is Germany, with share of over 70%. The average export of cheese of this group of countries amounts 1.2 million tons with modest growth tendency. The biggest exporter is Germany. The export price amounts 4.2 USD/kg. Import of the group amounts 800 thousand tons. The biggest importer is also Germany. The Danube region countries realize a positive balance of foreign trade exchange of cheese in amount of 380 thousand tons. Besides the saturated international market, the cheese market in these group countries is very stable.

Key words: *Cheese, production, export, import, the Danube region.*

Introduction

Cheese is one of the oldest food products. Nowadays, the production of cheese is modified and improved from the earliest primitive milk processing to application of the newest industrial technologies, which had resulted with numerous types of this food. There are different criteria according to which cheeses can divide into different groups – according to milk category they are made of, according to milk fat content in a dry matter, consistency, texture, according to production technology, etc. In

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accordance to the milk fat, the cheese can divide into: extra fat (with more than 60% of milk fat), full-fat (45–50% of milk fat), single-cream (25–45% of milk fat), low-fat (10–25% of milk fat) and fatless cheese, which contain less than 10% of milk fat. According to ripeness, they can divide on fresh cheeses (4-6 weeks of ripeness) and ripe cheeses (over three months of ripeness). Regarding the consistency and dough structure and amount of water they contain, the cheeses can be: extra hard cheese (with very little water), hard, semi-hard, soft cheese and cheese spread. A special group makes the autochthonous cheeses, which represent characteristics of the specific nations, countries and regions. The names of the autochthonous cheeses are strictly connected to their origin, i.e. a climate where they produce. The traditional production of the autochthonous cheeses not only that maintain, but it achieves a significant revival by increasing demand of organic food and high-quality food, with protected geographical indication, which competitiveness and price, in comparison with the conventional products, significantly increase (Savić Mirjana, Arsić Slavica, Kljajić Nataša, 2011). The Danube region countries have great conditions for milk and cheese production (tradition, processing capacities, etc.). In the cheese production realizes also value added of milk production, develops milk processing industry, employs working population. If include the additional branches of this sector, a number of totally employed persons in the cheese production is larger.

The region countries have significant, but still insufficiently used potential to grow up into serious producers of various high-quality and autochthonous cheeses, in order to be recognizable on the international market. The subject of the research is volume, dynamics and trends in production, export, import and foreign trade exchange of cheese in the Danube region countries, aiming to perceive export-import potentials of some countries (*Germany, Bulgaria, Romania, Moldova, Hungary, Croatia, Slovakia, Austria, Ukraine and the Republic of Serbia*). A special accent was put on the state and the possibilities of intensifying the production and export of cheese from the Republic of Serbia.

Data sources and methodology

The basic sources were taken over from the statistical database of the United Nations Organization for Food and Agriculture – FAO (*Food and Agriculture Organization*) and International Trade Centre (ITC), in the time period from 2005 to 2012. The research bases on, so called, »*desk research*«, which represents processing of available data, together with apply of standard statistical-mathematical methods. The foreign trade balance was calculated as a difference between export and import. Changes trends intensity was quantified by calculation of rate changes by application of functions with the most adjustable trend lines to the original data. Stability of phenomenon was calculated by appliance of variation coefficient. Also were used the results of the previous researches of this problem. Specific occurrences were shown in the tables and graphs.

Research results

Production of cheese in the Danube region countries

In the researched time period, the average cheese production in the Danube region countries was amounted 2.7 million tons (*table 1*), with a tendency of insignificant growth, by the rate of 0.90% annually. This group provides 28.3% of European and 14.8% of the world production. The production is pretty stable, to which points out the calculated variation coefficient (1.28%). The cheese production in the European Union is at the level of 8.5 million tons.

Table 1. *Production of cheese in the Danube region countries (2005-2012)*

Country	Average amount (000 t)	Participation (%)	Rate of change (%)	CV (%)
Germany	1.993	73,5	0,98	2,59
Ukraine	218	8,1	-5,87	16,13
Austria	185	6,8	0,91	2,86
Hungary	91	3,4	-1,36	5,15
Bulgaria	63	2,3	-1,13	5,89
Romania	57	2,1	6,38	18,98
Slovakia	55	2,0	-9,96	26,19
Croatia	28	1,0	5,12	14,58
Serbia	20	0,8	4,62	12,07
Moldavia	2	0,1	-2,25	19,59
Danube region	***2.713***	***100,0***	***0,90***	***2,31***
Source: *Calculation based on FAO Trade Yearbook*				

Far the most important cheese producer is ***Germany***, with the average production of 1.993 thousand tons (26 kg per capita), which is almost three-quarters of the total production of the Danube region countries. It represents the second biggest world (after USA), i.e. the first European cheese producer (www.statisticbrain.com/cheese-statistics/). In the researched period was present a slight increase production trend by the rate of 0.98% annually. Three-quarters of German cheeses (more than 400 different kinds) produce in Bavaria or in the region Allgau (Alpine region of southern Germany). The other important regions for cheese production are *Mecklenburg-Vorpommern* and *Sakson-Anhalt.* The variety of cheeses available in Germany is enormous, over 600 different kinds. It is caused also by a fact that many people, being settled in Germany, had brought their original production recipes. Some examples of this international impact are the cheese *Tilsiter* (originating in the Netherlands), *Limburger* (originating in Belgium) and *Ementaler* (originating from Switzerland). The newest trend in German production is the cheese production in small, organic dairies. The cheese have high quality, and many of them characteristically strong taste and aroma (www.germanfoodguide.com/ch-eese-search.cfm). The most famous types of German cheese are: *Allgau Emmental* – originating in the Swiss canton Bern. It has a protected designation of origin from the region Allgau with milk from the local dairies. *Bruder Basi*l – is the most famous brand of smoked cheese in Germany, well-known also as Rauchkase. It is a creamy semi-soft cheese, produced originally by the monks in monasteries. It produces according to the traditional standards which exist since 1902. It smells like beech wood and it gives it a unique taste. *Limburger* – is the traditional aromatic cheese, which origins from the Belgium monks. Limburger first started to produce in the region of south Bavaria. *Butterkase* ("butter and cheese") is creamy and mild cheese. German original, Butterkase is also known as Damenkase, due to its delicatessen aroma. *Cambozola* – is a soft blue cheese developed in 1970 in the Kasseri Champignon Company in Bavaria. This is very popular German cheese with the characteristic blue noble mould and white bark. *Tilsit* – was originally made by the Dutch immigrants, who settled in the town of Tilsit in East Prussia, the German Tilsit is semi-hard cheese, mildly spiced (www.igourmet.com/german-cheese.asp). The level of further production will depend, first of all, of domestic demand and the state on the international market.

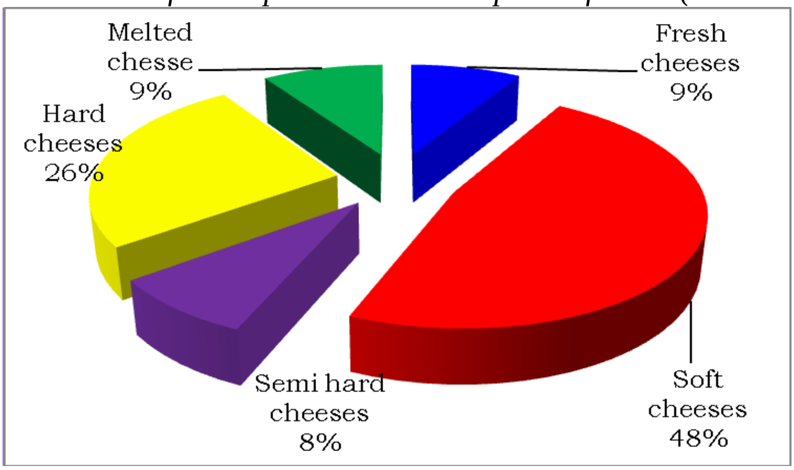
In the second place is ***Ukraine***, with the average production of 218 thousand tons (4.7 kg per capita). In structure of the regional production participates with 8.1%. In the analyzed period was evident a trend of significant decrease of production by the rate of 5.87%. Five the biggest companies in Ukraine give 23% of the total cheese production, the rest 77% goes to 80 small producers. The most popular brand in Ukraine is hard cheese *Šostka* (www.euromonitor.com/cheese-in-ukraine/report). The most important types of cheese are: *Bilozhar, Bukovinskyi, Bryndza, Dobrodar, Smetankowyi, Vurda and Ukrainskyi.*

In the third place is ***Austria***, with the average production of 185 thousand tons (24 kg per capita). In the regional production structure it participates with 6.8%. In the analyzed period was evident a slight increase of production by the rate of 0.91%. The production in Austria has a long tradition. The most famous types of the Austrian cheeses are the following. *Vorarlberger Bergkase* – hard cheese, it represents the regional specialty due to its high standards. Its aromatic taste develops during ripening at least of six months. *Tiroler Graukase* – it considers as one of the oldest cheeses in Austria. It is made of low milk fat content, without any chemical additives or rennet. *Vorarlberger Alpkase* – hard goat's milk cheese which ripens at least for three months, it has a great taste and aroma. *Tiroler Almkase* – produces only during summer months on selected Tyrol pastures. After its ripening period is available solely from October to March. It is a traditional Tyrol specialty, it is characterized by a strong aromatic and piquant taste, time of ripening is minimum four months. *Tiroler Bergkase* – semi-hard cheese is characterized by a strong, completely aromatic taste. *Gailtaler Almkase* – hard cheese, produced on Alpine pastures, above the village in the valley of Gail. It produces from fresh Alpine milk from pastures and has a long tradition. The ripening period is for seven weeks (http://tasteofaustria.org/index.php/eat/cheese-culture).

Then follows ***Hungary,*** with the average production of 91 thousand tons (11 kg per capita). In the regional production structure it participates with 3.4%. In the analyzed period was evident a slight decrease of production by the rate of 1.36%. The company Pannontej Zrt is the biggest cheese producer in Hungary, with 27% of share on the market. Leading brands are: *Medveđa, Tihani and Bakoni camembert, Panoniji and Karavan cheese* of hard cheese type, which have a long production tradition in Hungary (www.euromonitor.com/cheese-in-hungary/report). The most famous types of cheese are: *Liptauer, Oazis, Orda, Pálpusztai, Trappista* etc. Trappista is far the most popular cheese in Hungary.

The Republic of Serbia, with the average production of 20 thousand tons (2.7 kg per capita) is on penultimate place among the analyzed region countries. In the research period, the production has a significant growth trend, by the rate of 4.62% annually. The cheeses produce in big industrial capacities for milk processing and producers' husbandries. The biggest industrial milk producers are the following capacities: *Imlek* Beograd, *Mlekara* Šabac, *Somboled* Sombor and *Mlekoprodukt* Zrenjanin. According to the production structure, the group of big dairies is oriented primarily to the production of fermented dairy products, UHT and pasteurized milk, while middle capacity dairies and mini-dairies are more directed to the production of various cheese types, then fermented dairy products and pasteurized milk (Popović, 2009). Unable to sell milk by the favourable prices, more and more rural households opt for independent milk processing in various cheese types. In that way is done finalization of milk production and there comes to better financial results, which reflects favourably to the total economic effect of husbandries. In the production structure dominate fresh cheeses, while the lowest is the share of semi-hard cheeses (*picture 1*).

Picture 1. *Structure of cheese production in the Republic of Serbia (2005-2012), %*



Source: *Author's calculation.*

In Serbia are preserved the traditional procedures of the autochthonous cheeses production in relatively isolated mountainous areas. They emerged in a specific climate, as a result of long-time development of the traditional production. The preservation of the autochthonous cheeses is very important, because, thereby stays preserved the ethnographic wealth of the country and, at the same time, there recognizes a gastronomic and tourist supply and placement on the foreign market. The production of autochthonous cheeses is present in rural households. In order for the autochthonous cheeses to be sold on the foreign market, it is necessary to apply the traditional, but also standardized technology, along with assurance of equable quality and safety of these products, in order to be adjusted to the EU market requirements. Thanks to geographical, climatic and vegetation diversity in Serbian regions, in the past was developed the production of autochthonous cheeses. It is extremely important the preservation of autochthonous technologies for the cheeses production in rural areas, as: Zlatar, Zlatibor, Golija, Kopaonik, Stara planina, Šar planina etc. They are a base for approach to the organized production of autochthonous cheeses after the international standards. In the rural area Stari Vlah produces the top-quality cheeses in souse, like: Zlatar, Sjenica, Javor, Golija cheese, etc. They are well-known by their stable quality and distribution of production. Originally, these cheeses have been produced of sheep milk, but recently use more cows' milk and mixed-sheep/cow's milk. Recently revivals again use of goat's milk in making the autochthonous cheeses (Ostojić and Topisirović, 2006). The most famous traditional cheeses in Serbia are: *Homoljski, Pirotski, Staroplaninski and Svrljiški kačkavalj (kashkaval), Sjenički, Zlatarski, Golijski, Somborski, Šarski cheese* etc. (Vučić Tanja and associates 2008). In order to improve the cheese production, there are necessary significant investments for purchase of top-quality lactating animals, equipment for cheese production, marketing etc. A chance is in small production plants, which should specialize for some production structure. In the Republic of Serbia is still present a low level of cheese consumption per capita, as well as low level of consumption culture, so there is needed also permanent education of both producers and consumers.

The growth of cheese production is present in Germany, Austria, Romania, Croatia and the Republic of Serbia. The other countries of the Danube region have a trend of production decrease. The same is caused by acting, first of all, of economic factors, which reflect in the life standard decrease, saturated international market, etc. In the following period can be expected a slight reduction of cheese production. In the foreground will be quality, by which differentiation will strive to satisfy the requirements of the choosiest buyers in, first of all, the European Union countries.

Export of cheese of the Danube region countries

The average cheese export of the regional group was amounted 1.2 million tons and in the analyzed period was registered by the rate of 4.11% annually. A realized rate of export growth is a resultant of series of factors acting, primarily, of specific increase of production volume, size of demand on the international market, high competition by the countries, which are traditionally significant producers and exporters: France, Italy, Switzerland, etc. Of the total production exports 44% which indicates to a fact that production of cheese, of the mentioned group-countries, has been significantly export-oriented. The value of export amounts 4.9 milliards US dollars. The average export price amounts 4.2 USD/kg and depends on type and quality of cheese (soft, hard, semi-hard etc.). It is evident that all countries of the Danube region do not have the same significance in cheese export.

Far the most significant exporter of cheese within the region is ***Germany***, which represents also the important producer in the mentioned group. Its average export amounts 942 thousand tons, which make 79.7 % of the total export of the Danube region countries (*table 2*). In the observed period was present a trend of pretty important increase of export by the rate of 5.15% annually. Of the total production exports 47% which indicates to high export orientation of the mentioned country sector. In valuable sense expressed, the export amounts 3.8 milliards USD. It is far above the other countries in the region. The average export price is 4.1 USD per kg, which is slightly lower than the average export price in the region. The most significant export is realized in Italy (22.7%), then the Netherlands (12%), Russian Federation (6.7%), France (6.4%) and Spain (6.3%). Those countries have absorbed something more than half of the total cheese export from this country (54.1%). It is evident that the highest export is directed to the European Union countries. The most important German export cheeses are: 1) hard cheeses: *Allgauer Emmentaler, Bavarian Bergkase, Beemster Very Old, Klosterkaese*; 2) semi-hard: *Beemster Old, Danish Feta, Edelpilz;* 3) semi-soft: *Beemster 2% Milk, Bierkase, Bruder Basil, Butterkase, Limburger*; 4) soft: *Doppelrhamstufel, Weichkaese etc.* There is expected the export growth in the following period.

In the second place is ***Austria,*** with the amounts of 94 thousand tons. It participates with 8% in the total cheese export of the region countries. Of the total production, it exports almost half of cheese. The export has a slight increasing trend (rate 3.43%). Valuably expressed, the export is 493 million USD. The average export price is 5.4 USD per kg and is significantly higher than the average export price of the region. The most important export cheeses are: *Golden Smoked Rebel, Mondseer, Schloss, Bergkäse, Gelundener Käse, Montafoner Sauerkäse, Steirerkäse, Kugelkase, Tiroler Graukäse*. The biggest export is realized in Germany (47.1%) which represents a traditionally important buyer of the Austrian cheeses, then Italy (12.8%), Greece (3.3%), Denmark (2.9%) and Libya (2.8%). Those countries had absorbed something more than two-third of the total export (68.9%). It is evident that the greatest part of export is directed to the European Union countries.

Table 2. *Export of cheese from the countries of the Danube region (2005-2012)*

Country	Average amount (000 t)	Participation (%)	Rate of change (%)	Average value (mil. $)
Germany	942	79,7	5,15	3.827
Austria	94	8,0	3,43	493
Ukraine	76	6,4	-0,72	334
Slovakia	27	2,3	-9,33	110
Bulgaria	20	1,7	7,85	73
Hungary	13	1,1	0,37	54
Serbia	4	0,3	21,98	16
Romania	3	0,3	10,09	14
Croatia	2	0,2	10,80	9
Moldova	0.3	0,0	24,41	2
Danube region	**1.182**	**100,0**	**4,11**	**4.930**
Source: *Calculation based on the data of the International Trade Centre*				

In the third place is ***Ukraine*** with 76 thousand tons. This country participates with 6.4% in the total cheese export of the region countries. Of the total production is exported one third of cheese. The export has a slight decreasing trend (rate 0.72%). The export decrease is a resultant of domestic production decrease and complex relations on the international market. Valuably expressed, the export amounts 334 million USD. The average export price amounts 4.4 USD/kg which is slightly more than the average export price in the region. The highest export realizes in the Russian Federation (83.6%), Kazakhstan (12.2%), Moldova (3.2%), Azerbaijan (0.5%) and USA (0.2%). These countries had absorbed almost all of cheese export from Ukraine. It is evident that the most of export is directed to the surrounding countries. During the first half of the year 2012, Ukraine had founded itself entangled in, so called, “cheese war” with the Russian Federation. The cheese of seven the biggest Ukrainian companies is forbidden for sale in Russia, while it consists vegetable fats, not allowed anymore in cheese on the Russian market. As a resultant of that, has come to the cheese surplus in Ukraine, which has affected the cheese consumption. Shostkinski Miskmolkombinat VAT is the biggest Ukrainian company for cheese production. According to the Ukrainian Dairies Union, in the following years, the export in Russia will be approximately at the same level. The Russian market stays attractive, primarily, due to a fact that the cheese price in Russia is still significantly higher than in Ukraine, which makes sale profitable, in spite of relatively high price of raw milk (www.thedairysite.com/reports/?id=2960).

Then follows ***Slovakia*** with the export of 27 thousand tons which participates with 2.3% in the total export of cheese of the region countries. Of the total production exports 49% of cheese. The export has a significant decrease trend (rate 9.33%). The same is caused by extreme decrease of domestic cheese production. Valuably expressed, the export amounts 110 million USD. The average export price amounts 4.0 USD/kg, which is lower than the average export price of cheese in the region. The most important types of cheese in export are: *Bryndza, Liptauer, Tvaroh, Parenica, Urda, Oszczypek and Podhalanski*. The highest export realizes in Czech Republic (31.3%), then Belgium (18.6%), Hungary (13.1%), Great Britain (8.9%) and Germany (8.2%). These countries had absorbed more than three-quarters of the total cheese export (80.1%). It is evident that the most of export was directed to the surrounding countries.

In the fifth place is ***Bulgaria***, with the amounts of 20 thousand tons. In the region's export participates with 1.7%. Of the total production, in this country is exported 45% of cheese. The export has a significant growth trend (rate 7.85%). Valuably expressed, the export amounts 73 million USD. The average export price amounts 3.65 USD/kg, which is significantly lower than the average prices of the region's cheeses. The most important types of cheese are: *Sirene, Cherni Vit and Kashkaval*. The highest export realizes in Greece (33.8%), Romania (18.1%), USA (12.7%), Germany (8.2%) and Lebanon (7.1%). These countries had absorbed more than three-quarters of the total cheese export (79.9%). The most of cheese exports in the European Union countries. In the following period expects a trend of slight increase of export (www.euromonitor.com/cheese-in-bulgaria/report).

The cheese export from the ***Republic of Serbia*** amounts, on the average, 4.063 tons, which valuably makes 16 million USD. It is positive that the export registers a tendency of significant growth by the rate 21.98% annually. The export is a resultant of domestic production increase, but also a relative stagnation of domestic consumption. The average export price amounts 3.93 USD/kg and is lower for around 10% than the average export price of cheeses in the region.

By increase of export of the top-quality types of cheeses (hard and semi-hard), there can significantly increase a value and profitability of export. The most important foreign trade partner is the Russian Federation, where realizes 41.7% of the total cheese export. The first steps forward toward this market had made the dairy Sabac with feta cheese and cheese spreads, the dairy Selekt Milk (Indjija) with hard goat's milk cheeses and the dairy Kuc Company (Kragujevac), with hard cheeses. There expects that other companies with license for export in Russia make export businesses (Novaković, 2012). Then follows Montenegro with 26.6%. Slightly smaller importers are Bosnia and Herzegovina with 11.2% and the Republic of Macedonia with 10.3%. These countries had absorbed almost 90% of cheese export.

The most of export was directed to the CEFTA region countries, which points out that this market is very important in foreign trade exchange. Non-tariff barriers represent an obstacle in realization of available potentials in free trade of CEFTA countries. They comprise technical barriers – technical, sanitary standards and certification and administrative barriers – licensing, time and documentation necessary for import and export, availability of customs regulations, etc. (Vlahović et al., 2014).

There expects the cheese to be put under the free trade treatment within the Common Agreement on Free Trade, which Serbia has with the Russian Federation. That will influence to a higher export in the following period. There is poor perspective of export in high developed countries, which are big producers and exporters of top-quality types of cheeses (Popović-Vranješ, Anka et al., 2003). The cheese producers in Serbia still have a problem to offer a cheese of satisfying quality, made of top-quality milk, on the choosey market, a cheese with acceptable price, good marketing and to be available to a buyer. Those are basic conditions for realization of favourable position on the market. Good marketing activities and complete approach on the market are extremely important from the aspect of positioning on the foreign market. The experiences speaks that, without adequate marketing, there is no success and survival on the international market. A chance in export should not search in quantity, while Serbia is relatively small producer of cheese, but in top quality and the autochthonous types of cheese according to the selected market segments. There should go to the specialization of production, to the smaller series with top-quality and a unique trade mark „*Cheese from Serbia*“.

The autochthonous cheeses are the export potential, but they are faced with a threat of disappearing and loosing in mass industrial production. The basic limiting factors are: production is still at relatively primitive level, hygiene level is low, control and education of producer is not satisfying, sale and purchase are still unconnected making often insecurity of sale for the producers. In technology are many loose ends, the origin and name of cheeses has not been done (Sarić, Bijeljac, Sonja, 2003). In the countries in the region, this kind of protection is not still satisfying.

In order to increase Serbian export competitiveness, the one that is important is, first of all, adjusting the quality system of products with the norms of ISO9000-2000 standard and with technical regulations. It is also important to respect the international regulations and quality certification of products which export on the foreign markets. Regarding the export of products meant for the European Union market, there is necessary to respect and to satisfy the criteria of milk quality after their system and quality criterion (EU Directive, no. 92/46). Besides the valid standards, the state should regulate also the terms of which stipulated rules begin to apply, which leaves time to the agricultural producers, i.e. farmers, to adjust to the new regulations. In that way, the state would stimulate introduction of the quality standards and would motivate the farmers to economically justified production (Kljajić Nataša et al., 2011). Lately, on the international market are more and more required the cheeses from the organic production, which represents a chance of the Republic of Serbia in the following period.

Except Ukraine and Slovakia, all other countries in the region increase the cheese export. The most intensive increase of export was realized by Moldova (rate 24.41%), primarily due to low starting point. All region countries, if they want to increase their export, should pay more attention to making and strengthening of the autochthonous cheeses trade marks (brands). It represents one of the strongest and the most significant factors in competitive struggle for the market.

Import of cheese of the Danube region countries

The average import of cheese of the analyzed Danube region countries amounted 800 thousand tons and it registers, in the research period, a slight increase by the rate of 4.46% annually. The export value amounts 4.3 milliards USD. The average import price of cheese amounts 5.4 USD/kg. It is higher in regard to the import cheese price in the region.

The most important cheese importer is ***Germany***. The average import amounts 601 thousand tons, with a slight increasing tendency, by the rate of 3.28% (*table 3*). In the total regional import, Germany participates with three-quarters. It practically determinates import of all countries in the region and it represents the most important world importer of cheese. The average import value was amounted 3.5 milliards USD. The import is a resultant of domestic production stagnation, high purchasing power and significant consumption of 23 kg per capita, as well as of increased assortment with various top-quality types of cheese. The average European consumption of cheese is 15 kg. The most of import comes from the EU countries – here dominates the Netherlands with the share of 34.8%, France with 18.4%, Denmark with 12.1%, Austria with 7.6% and Italy with 5.5%. The above mentioned countries represent the main suppliers of the German market with the share of 78.4%. In the following period expects prolongation of a slight increase tendency of cheese import.

Table 3. *Import of cheese in the countries of the Danube region (2005-2012)*

Country	**Average amount (t)**	**Participation (%)**	**Rate of change (%)**	**Average value (mil. $)**
Germany	601.516	75,1	3,28	3.462
Austria	83.917	10,5	3,44	417
Hungary	34.279	4,3	5,70	138
Slovakia	25.268	3,2	11,19	105
Romania	22.714	2,8	37,79	89
Croatia	11.101	1,4	2,98	50
Ukraine	11.048	1,4	11,63	47
Bulgaria	7.030	0,9	22,25	29
Moldova	2.526	0,3	6,20	9
Serbia	1.398	0,2	28,99	7
Danube region	**800.797**	**100,0**	**4,46**	**4.353**
Source: *Calculation based on the data of the International Trade Centre*				

Second important regional importer of cheese is ***Austria***. The average import amounts 83 thousand tons, with increasing tendency by the rate of 3.44%. In the total import it participates with 10.5%. The average import value was amounted 417 million USD. The import is a resultant of high supply and demand of 20 kg per capita, per annum. The import resultant, among other things, is the assortment supplement on domestic market, first of all, of top-quality cheeses. The most of import anticipates from the European Union countries. There dominates Germany with almost two-third of import (59.5%), Italy with 10.7%, France with 7.7%, the Netherlands with 5.5% and Denmark with 4.4%. These mentioned countries are the main suppliers of the Austrian market, with the share of 87.8%.

Very important regional importer of cheese is ***Hungary***. The average import amounts 34 thousand tons with a significant increasing tendency, by the rate of 5.7%. The import is a resultant of decreasing domestic production and increasing cheese consumption in the consumers' nutrition. The increase of import and expansion of the assortment had caused a certain increase of cheese consumption in Hungary (Konig, Major Anita, 2006). In the total regional import it participates with 4.3%. The average value of cheese import was amounted 138 million USD. The consumption expressed per capita annually amounts 11 kg, which is less than the European Union average. The most of import is from the European Union countries – there dominates Germany with 54.5%, Poland with 15.6%, the Netherlands with 8.4%, Austria with 7.9% and Slovakia with 3.6%. The above mentioned countries provide more than three-quarters of the total cheese import (90%). In the following period is expected a slight increase of consumption and import of cheese (www.euromonitor.com/cheese-in-hungary/report).

In the fourth place regarding the cheese import is ***Slovakia***. The average import amounts 25 thousand tons with increasing growth tendency, by the rate of 11.19% annually. In the total regional import, it participates with 3.2%. The average value of import was amounted 106 million USD. The consumption of cheese is very low, it amounts only 8 kg per capita (www.euromonitor.com/cheese-in-slovakia/report). The most of import comes from the European Union countries - there dominates Poland with 41.4%, Czech Republic with 24.2%, Germany with 23.1%, Italy with 1.9% and Hungary with 1.6%. The above mentioned countries provide more than three-quarters of the total cheese import (92.2%). In the following period is expected continuation in cheese import, but with middling tempo.

In the fifth place regarding the average cheese import is ***Romania***. The average import amounts 23 thousand tons with a pronounced growth tendency, by the rate of 37.79% annually. In the total regional import, it participates with 2.8%. The average value of cheese import was amounted 89 million USD. The import is a resultant of a slight increase of demand on the market, although it is very low (only 6 kg per capita). In the following period is expected the economic recovery of the country, which will represent an incentive for the consumers to increase food consumption, which would include also the cheese consumption (www.euromonitor.com/cheese-in-romania/report). The most of the imported cheese originates from the European Union countries: Germany 38.6%, Poland 20%, Hungary 8.9%, Bulgaria 5% and Austria 4.3%. The above mentioned countries provide more than three-quarters of the total Romanian import of cheese (76.8%). In the following period will continue increasing trend of cheese import, first of all, from the European Union.

The import of cheese in the ***Republic of Serbia*** amounts 1.398 tons, which is 0.2% of the average regional import of the Danube region countries. The import is a resultant of relatively modest assortment of domestic production and low income level, i.e. the life standard of the consumers. In the research period, it was significantly increased import by the rate of 28.99% per annum. The import trend is of more significant intensity than the export. Valuably expressed, the import amounts seven million US dollars. The average import price of cheeses amounts 5 USD/kg and is higher in regard to the export price. The most of import origins from Germany (32.8%), and dominates semi-hard and hard cheeses. Then follows the Republic of Macedonia with 29.9% (white soft cheeses), Croatia with 14.2% (semi-hard and cheese fondue), Italy with 5.8% (hard cheeses) and Austria with 4.7% (semi-hard and hard cheeses). Those countries have the significant share, i.e. 87.4% of the total import. By putting into effect the Stabilization and Association Agreement, there were expanded the fields of cooperation in regard to the Interim Trade Agreement, which had been into effect since 2009. Then has started a trade liberalization process and decrease of customs duties for industrial and agricultural products from the EU, which had developed in the previous years by phases, in order domestic production to be prepared adjust to the European standards. Since January 2014, the customs to the most of food products from the EU were decreased and cancelled. That is to say, in that time was put into effect a decree of the Interim Trade Agreement, after which Serbia has to decrease or totally cancel the customs duties for the products from the EU. In that way, the customs duties for a feta cheese and kashkaval was decreased from 15 to 10.5%, while the customs duties for milk are cancelled. This will especially hurt small producers of cheese in Serbia which have relatively high price. This measure can affect the significant import increase of different types of cheeses in the following period.

The Danube region countries realize a positive balance of foreign trade exchange of cheese, in amount of 380 thousand tons. In the total research period, it is evident that there is a positive balance of foreign trade exchange of the region. The positive exchange balance realizes the following countries: Germany (340 thousand tons), Austria (10 thousand tons), Ukraine (65 thousand tons), Slovakia (1.3 thousand tons), Bulgaria (12 thousand tons) and Serbia (2.6 thousand tons). The other region countries make a negative balance of foreign trade exchange of cheese. The highest negative balance has Hungary (20 thousand tons), Romania (19 thousand tons), Croatia (9 thousand tons) and Moldova (2.2 thousand tons).

Conclusion

In the researched period (2005-2012), the average production of cheese in the Danube region countries, was amounted 2.7 million tons, with a slight increase tendency by the rate of 0.22% annually. The mentioned group provides 28.3% of European and 14.8% of the world production. Far the most important cheese producer of the mentioned group is Germany, with the average production of 1.993 thousand tons, which is a quarter of the total production of the Danube region countries.

The average export of cheese of the regional group was amounted 1.2 million tons and in the analyzed period it was increased by the rate of 4.11% annually. The realized rate of export growth is a resultant of many factors action, first of all, of specific growth of production volume, size of demand on the international market and high competition on the international market. The export value amounts 4.9 milliards. Far the most important exporter within the region is Germany. Its average export is 942 thousand tons, or 79.8% of the total export of the Danube region countries.

The average cheese import of the analyzed Danube region countries was amounted 800 thousand tons and, in the same researched period, it was registered a slight increase by the rate of 4.46% annually. The import value is 4.3 milliards USD. The most significant importer of cheese is Germany. The average import amounts 601 thousand tons. In the total regional import, Germany participates with three-quarters. The average import value was amounted 3.4 milliards USD.

The Danube region countries realize a positive balance of foreign trade exchange of cheese in amounts of 380 thousand tons. Besides the saturated international market, the cheese market in this group countries is very stable and without greater oscillations. The Republic of Serbia is not a significant regional exporter and importer of cheese. It realizes a positive balance of foreign trade exchange. The export of cheese is limited by volume and structure of production, cheese quality and lack of marketing concept implementation in production and export of cheese on the international market.

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