THE COMPETITIVENESS OF THE INTRA EU TRADE IN PROCESSED ANIMAL PRODUCTS IN SELECTED EU MEMBER STATES

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Abstract

The main aim of paper is determine competitive position intra EU trade in processed animal products new member states of European Union. The method is quantitative analysis of the ex-post competitiveness indicators. The analysis was based on data from Eurostat and ComExt. The new EU member states have shown the least competitive among the processes animal products. The EU-15 countries are competitive in the agri - food. This is result greater technological and mechanization progress in agriculture.

Keywords: International trade, competitiveness, agriculture

Introduction

According to G. Kołodko, economic growth in long run requires five factors which influence simultaneously. These factors are: technological progress, economic growth, production growth, innovation economy and culture, international cooperation and political goodwill[124]. The increase competitive of Polish sector with including knowledge-based economy requires multifaceted activities. These activities are: support for the scientific and technical progress, increase investment in research and new technologies, i.e. biotechnology, electronics, telecommunications[125]. What is more, these activities are crucial for the agri - food sector development also.

The main aim of paper is determine the competitive position intra EU trade in processed animal products in new member states of European Union (EU12). The analysis includes the year 2008 and 2012.

The analysis of intra eu trade in agri – food products

Before accession Poland to the EU, there were fear of open the agricultural market. While in the years 2004 – 2008 Polish export and import of agri – food products increase threefold[126]. Where the share of the agricultural sector in GDP was similar i.e. in 2004 – 4.1% and in 2008 – 4%[127]. The export increased especially in sectors: sugar and cereals by

[124] G. Kolodko, *Wędrujący świat,* Prószczyński i S-ka, Warszawa 2008, s. 262.
[125] W. Kowalczewski, *Wiedza jako czynnik rozwoju gospodarki* [in] B. Poskrobko [ed.] *Gospodarka oparta na wiedzy. Materiały do studiowania,* Wyższa Szkoła Ekonomiczna, Białystok 2011, p. 77.
[126] A. Kowalski, *Polski sektor żywnościowy 5 lat po akcesji,* Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej PIB, Katedra Rozwoju Obszarów Wiejskich, Szkoła Główna Handlowa, Warszawa, kwiecień 2009.
[127] M. Halamska, *5 lat w UE: stare i nowe procesy zmian na polskiej wsi,* Instytut Rozwoju Wsi i Rolnictwa PAN, Warszawa, 28 kwiecień 2009.

90%, tobacco by 850%. Poland was a net exporter in dairy products, meat products, tobacco, processed cereals, fruit, vegetables, poultry and sugar in the years 2004 – 2008[128].

In 2012, Poland remained a net exporter of cereals, wheat flour, sugar, vegetables, fruits, dairy products, beef, poultry, eggs[129]. Table 1 shows the intra EU trade in agri – food sector in 2008 and 2012.

Table 1: Intra EU trade in agri – food products in mld EUR

Kraj	Ex	Im	B	Se	Si	Ex	Im	B	Se	Si
	2008					2012				
Austria	6,8	7,8	-1	2%	3%	7,6	9,4	-1,8	2%	3%
Belgium	25,0	19,7	5,3	9%	7%	28,7	23,0	5,7	9%	7%
Bulgaria	1,1	1,4	-0,3	0%	1%	2,4	2,0	0,4	1%	1%
Cyprus	0,1	0,7	-0,6	0%	0%	0,1	0,8	-0,7	0%	0%
Czech Republic	4,0	4,9	-0,9	1%	2%	5,3	6,3	-1	2%	2%
Denmark	11,1	6,7	4,4	4%	3%	11,8	7,4	4,4	4%	2%
Estonia	0,5	1,0	-0,5	0%	0%	0,82	1,3	-0,48	0%	0%
Finland	0,8	3,0	-2,2	0%	1%	0,9	3,8	-2,9	0%	1%
France	36,0	31,4	4,6	13%	12%	38,8	36,7	2,1	12%	12%
Greece	2,9	5,3	-2,4	1%	2%	3,2	4,6	-1,4	1%	1%
Spanish	22,9	15,8	7,1	8%	6%	27,5	17,4	10,1	9%	6%
Netherlands	54,6	23,7	30,9	20%	9%	60,9	29,3	31,6	19%	9%
Irland	6,6	5,3	1,3	2%	2%	7,1	6,0	1,1	2%	2%
Lithuania	1,5	1,9	-0,4	1%	1%	2,3	2,7	-0,4	1%	1%
Luxemburg	0,8	1,7	-0,9	0%	1%	1,0	1,9	-0,9	0%	1%
Latvia	0,7	1,3	-0,6	0%	0%	1,2	1,8	-0,6	0%	1%
Malta	,04	0,4	-0,36	0%	0%	0,03	0,4	-0,37	0%	0%
German	42,9	49,6	-6,7	16%	19%	49,4	58,7	-9,3	15%	19%
Poland	9,4	8,3	1,1	3%	3%	13,4	10,7	2,7	4%	3%
Portugal	3,1	6,1	-3	1%	2%	3,6	6,8	-3,2	1%	2%
Romania	1,4	3,5	-2,1	1%	1%	2,8	3,8	-1	1%	1%
Slovakia	1,9	2,8	-0,9	1%	1%	3,6	4,1	-0,5	1%	1%
Slovenia	0,7	1,3	-0,6	0%	0%	1,1	1,5	-0,4	0%	0%
Sweden	3,7	6,8	-3,1	1%	3%	4,9	8,3	-3,4	2%	3%
Hungary	4,7	3,5	1,2	2%	1%	6,8	4,1	2,7	2%	1%
Italy	18,8	24,9	-6,1	7%	9%	21,2	27,8	-6,6	7%	9%
Great Britain	12,6	29,0	-16,4	5%	11%	14,6	34,5	-19,9	5%	11%
Eu12	26,2	31,0	-4,8	10%	12%	40,1	39,7	0,4	12%	13%
Eu15	248,6	236,9	11,7	90%	88%	281,1	275,7	5,4	88%	87%
Eu27	274,8	267,9	6,9	100%	100%	321,2	315,3	5,9	100%	100%

Source: own study based on ComExt

Ex – export, Im – import, B – balance, Se – share of export, Si – share of import [%]

In the years 2008 – 2012 the value of intra EU export increased by 17% (about 46,387.2 million Euro). In 2012 the largest share in export reached: Germany (15%), Netherlands (19%), France (12%), Spain (9%), Belgium (9%). In most of the new members EU were the negative balance of trade in agri – food products. In 2012 net exporters of agri –

[128] R. Urban,I. Szczepaniak, R. Mroczek, *Polski sektor żywnościowy w pierwszych latach członkowska (Synteza),* Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej, Państwowy Instytut Badawczy, Warszawa 2010, pp. 62 -64.

[129] J. Seremak – Bulge [ed], *Analizy, tendencje, oceny. Rynek rolny*, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej, Państwowy Instytut Badawczy, Lipiec/Sierpień 2013, Warszawa.

food products in intra EU trade among new member EU were: Poland, Hungary and Bulgaria. Polish intra EU export increased by 42 % in 2012 compared to 2008. But the biggest change in the dynamics of trade in agri – food products was observed in Bulgaria – export increased by 111%. In contrast, Hungary achieved a 44% increase in export. Lithuania recorded an increase in import by 40 % in the years 2008 – 2012. A similar situation was observed in Slovakia – 48%, Slovenia – 12%, Romania – 10%, Malta – 6%, Latvia – 35%, Estonia – 23%, the Czech Republic – 30%, Cyprus – 18%.

Materials and methods

The competitiveness of the intra EU trade in processed animal products in agri – food sector was used the ex post method analysis of quantitative indicators such as: SI (Specialization Indicator), CR_K (Coverage Ratio), XRCA (Relative Revealed Comparative Export Advantage Index), MRCA (Relative Import Penetration Index), RTA (Relative Trade Advantage Index), IIT (Intraindustry Trade, Grubel-Lloyd Index). This analysis based on database from the Eurostat and ComExt. Below the competitiveness indicators was presented.

The Specialization Indicator[130] SI is share of a specific product at all exports of the country to share of this product in intra EU exports. The higher this indicator, the higher is export specialization.

Formula 1: $$\boldsymbol{SI_k} = \frac{\boldsymbol{X_{ik}}}{\boldsymbol{X_k}} \div \frac{\boldsymbol{X_{iw}}}{\boldsymbol{X_w}}$$

where:
SI_k – The Specialization Indicator
X_{ik} – share of the product *i* in export country *k*
X_k – intra EU export of agri – food products in country *k*
X_{iw} – share of the *i* product in intra EU export
X_w –intra EU export of agri – food products

The Coverage Ratio[131] CR_k allows to determine the direction of country specialization. The country specializes in the production of product if the indicator value greater than 100.

Formula 2: $$\boldsymbol{CR_k} = \frac{\boldsymbol{X_k}}{\boldsymbol{M_k}} \times \mathbf{100}\%$$

where:
CR_k – The Coverage Ratio
X_k – *k* country export
M_k –*k* country import

Relative Revealed Comparative Export Advantage Index[132] $XRCA_{ik}$ is the ratio of two quotients. The first of these is the ratio of specific product in country export to intra EU export this product. The second one is the ratio of agri – food products export in country (excluding this product) to intra EU agri – food products export. If the index reaches a value greater than 1, then the country has a comparative advantage in the production of a specific agri – food product.

Formula 3: $$\boldsymbol{XRCA_{ik}} = \frac{\boldsymbol{X_{ik}}}{\boldsymbol{X_{im}}} \div \frac{\sum_{j,j\neq i} \boldsymbol{X_{jk}}}{\sum_{j,j\neq i} \boldsymbol{X_{jm}}}$$

where:
$XRCA_{ik}$ – Relative Revealed Comparative Export Advantage Index
X_{ik} –*i* product export in *k* country
X_{jk} – agri – food products export in *k* country

[130] W. Poczta, *Potencjał i pozycja konkurencyjna polskiego rolnictwa na rynku europejskim,* Komitet Ekonomiki Rolnictwa PAN, 14-15 czerwiec, Zamość 2010.
[131] Ibidem
[132] Ibidem

X_{im} – intra EU export of *i* product
X_{jm} – intra EU export of agri – food products

Relative Import Penetration Index[133] $MRCA_{ik}$ is similar to a Relative Revealed Comparative Export Advantage Index. But his interpretation is the reversed. The indicator values above 1 show a lack of comparative advantage. If the index reaches a value greater than 1, then the country has a comparative advantage in the production of a specific agri – food product.

Formula 4: $$\boldsymbol{MRCA_{ik} = \frac{M_{ik}}{M_{im}} \div \frac{\sum_{j,j\neq i} M_{jk}}{\sum_{j,j\neq i} M_{jm}}}$$

where:
$MRCA_{ik}$ – Relative Import Penetration Index
M_{ik} – *i* product import in *k* country
M_{jk} – agri – food products import in *k* country
M_{im} –intra EU import of *i* product
M_{jm} – intra EU import of agri – food products

Relative Trade Advantage Index [134] RTA_{ik} shows competitive advantage. It is the Relative Revealed Comparative Export Advantage Index minus Relative Import Penetration Index. It expected positive indicator values.

Formula 5: $$\boldsymbol{RTA_{ik} = XRCA_{ik} - MRCA_{ik}}$$

where:
RTA_{ik} – Relative Trade Advantage Index
$XRCA_{ik}$ – Relative Revealed Comparative Export Advantage Index
$MRCA_{ik}$ - Relative Import Penetration Index

Intraindustry Trade, Grubel-Lloyd Index [135] IIT_k allows to specify the nature of the trade between the specific country and the EU. The indicator value close to 100 the show an intra-industry trade. While the indicator value close to 0 the show an inter-industry trade.

Formula 6: $$\boldsymbol{IIT_k = \frac{(X_{ik}+M_{ik})-|X_{ik}-M_{ik}|}{(X_{ik}+M_{ik})} \times 100\%}$$

where:
IIT_k – Grubel-Lloyd Index wskaźnik Grubela-Lloyda
X_{ik} – *i* product export in *k* country
M_{ik} – *i* product import in *k* country

Result

The analysis of competitiveness of the new EU member states in intra EU trade in processed animal products is based on the verification of indicators described by formula 1-6. According to the Combined Nomenclature (CN), this group includes: dairy products, live animals, meat and edible meat offal products, meat products.
In Table 10 was presented the competitiveness indicators of dairy products in 2008 and 2012.

[133] K. Pawlak, M. Kołodziejczak, W. Kołodziejczak, *Konkurencyjność sektora rolno – spożywczego nowych krajów członkowskich UE w handlu wewnątrzwspólnotowym,* [in] M. Adamowicz, A. Kowalski [ed.], *Zagadnienia ekonomiki rolnej,* Organ Komitetu Ekonomiki Rolnictwa PAN, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej PIB i Sekcji Ekonomiki Rolnictwa PTE, 1(322)2010, pp. 127 – 130.
[134] Ibidem
[135] Ibidem

Tabela 2: The competitiveness indicators trade in dairy products in new member state EU

Indicators	SI		CR		XRCA		MRCA		RTA		IIT		Assessment	
Year	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12
Bulgaria	0,72	0,51	83,91	66,28	0,70	0,48	0,68	0,90	0,02	-0,42	91,25	79,72	-/+	-/+
Cyprus	2,05	3,69	48,38	76,65	2,31	5,12	0,82	0,80	1,49	4,32	65,21	86,78	+	+
Czech Republic	1,35	1,12	127,53	104,64	1,40	1,13	0,83	0,87	0,57	0,26	87,90	97,73	+	+
Estonia	2,12	1,63	247,49	203,01	2,41	1,75	0,42	0,48	1,99	1,26	57,55	66,00	+	+
Hungary	0,48	0,41	75,05	86,10	0,45	0,39	0,83	0,76	-0,38	-0,37	85,75	92,53	-/+	-/+
Lithuania	1,66	1,53	210,21	158,85	1,79	1,62	0,57	0,77	1,22	0,85	64,47	77,27	+	+
Latvia	1,71	1,62	139,84	146,04	1,85	1,73	0,61	0,72	1,24	1,01	83,39	81,29	+	+
Malta	0,05	0,00	0,54	0,00	0,05	0,00	0,91	0,93	-0,86	-0,93	1,07	0,00	-/+	-/+
Poland	1,19	0,99	352,83	242,95	1,21	0,99	0,35	0,48	0,86	0,52	44,17	58,32	+	-/+
Romania	0,29	0,43	18,75	44,80	0,27	0,40	0,60	0,66	-0,33	-0,26	31,58	61,88	-/+	-/+
Slovenia	1,45	0,91	91,18	75,41	1,52	0,90	0,80	0,90	0,72	0,00	95,39	85,98	+	-/+
Slovakia	1,58	0,77	132,38	91,74	1,68	0,75	0,78	0,70	0,90	0,05	86,07	95,69	+	-/+
Eu15	0,99	1,02	97,63	97,30	0,99	1,02	1,05	1,05	-0,06	-0,03	98,80	98,63		
Eu27	1,00	1,00	101,02	99,71	1,00	1,00	1,00	1,00	0,00	0,00	99,49	99,85		

Source: own study

(-) – lack of competitiveness
(+) – competitiveness
(-/+) – the analysis are inconclusive/ambiguous

The new member states of EU are not competitive in trade in processed animal products. The most competitive products in this group are: live animals, meat and edible meat offal products and dairy products. The greatest comparative advantage in trade in dairy products show: Cyprus, Czech Republic, Estonia, Lithuania, Latvia, Poland, Slovakia. The competitiveness is reflected in the SI indicator also, which reaches value greater than 1 in most cases. When we take CR into consideration, the greatest trade specialization in dairy product show: Poland, Czech Republic, Estonia, Lithuania, Latvia. Analyzing the IIT indicator conclude that there is an intra-industry trade. The indicator was in the range of 0 to 97%. The inter-industry trade was showed in Malta. It was noted the change in value indicators when was compared the 2008 and 2012 years. For example, Poland, Slovenia and Slovakia were competitive trade in dairy product in 2008, but in 2012 were not. The main reason could be the accession to the EU of Rumania.

Table 3: The competitiveness indicators trade in meat products in EU new member state

Indictarors	SI		CR		XRCA		MRCA		RTA		IIT		Assesment	
Years	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12
Bulgaria	0,18	0,27	40,77	54,10	0,18	0,26	0,39	0,61	-0,22	-0,35	57,93	70,22	-/+	-/+
Cyprus	0,06	0,01	1,32	0,21	0,06	0,01	0,99	1,09	-0,93	-1,08	2,61	0,42	-/+	-
Czech republic	0,77	0,95	68,54	95,92	0,76	0,95	1,00	0,84	-0,24	0,10	81,34	97,92	-	-/+
Estonia	2,19	1,82	81,07	127,32	2,28	1,87	1,59	0,94	0,69	0,93	89,54	87,98	+	+
Hungary	0,73	0,67	102,79	113,35	0,72	0,67	1,05	1,01	-0,33	-0,34	98,62	93,74	-	-
Lithuania	2,33	1,58	225,79	213,44	2,45	1,61	0,86	0,62	1,60	0,99	61,39	63,81	+	+
Latvia	2,12	1,34	141,37	103,19	2,21	1,35	0,86	0,90	1,35	0,46	82,86	98,43	+	+
Malta	0,16	0,03	0,89	0,12	0,16	0,03	1,98	2,17	-1,83	-2,14	1,77	0,23	-	-

Poland	1,54	1,71	406,36	456,18	1,57	1,75	0,46	0,47	1,11	1,28	39,50	35,96	+	+
Romania	0,78	0,86	73,57	100,83	0,77	0,86	0,47	0,63	0,30	0,22	84,77	99,59	-/+	-/+
Slovenia	1,00	0,88	55,01	63,90	1,00	0,88	1,04	1,09	-0,04	-0,21	70,98	77,97	-	-
Slovakia	0,65	0,44	37,67	25,78	0,64	0,43	1,31	1,57	-0,66	-1,13	54,73	41,00	-	-
Eu15	0,98	0,98	110,44	99,67	0,98	0,98	1,02	1,03	-0,04	-0,04	95,04	99,84		
Eu27	1,00	1,00	112,34	103,92	1,00	1,00	1,00	1,00	0,00	0,00	94,19	98,08		

Source: own study

(-) – lack of competitiveness
(+) – competitiveness
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The competitiveness of new member states to trade in meat products is average comparing all countries. The greatest comparative advantage in trade in meat products show: Czech Republic, Estonia, Lithuania, Latvia, Poland, Romania. The competitiveness is reflected in the SI indicator. The best indicator shows: Poland, Lithuania, Latvia, Estonia. When we take CR into consideration, the greatest trade specialization in meat product show: Poland, Estonia, Lithuania, Latvia, Hungary, Romania. Analyzing the IIT indicator conclude that there is an intra-industry trade (especially in: Bulgaria, Estonia, Slovenia, Hungary, Czech Republic, Romania). The indicator was in the range of 0,23 to 99%. The inter-industry trade was showed in Malta and Cyprus.

Table 4: The competitiveness indicators trade in live animal in new member state EU

Idicators	SI		CR		XRCA		MRCA		RTA		IIT		Assessment	
Years	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12
Bulgaria	0,27	0,14	19,59	37,69	1,00	0,14	1,16	0,45	-0,16	-0,31	32,77	54,75	-	-/+
Cyprus	0,10	0,01	25,02	2,44	0,55	0,01	0,08	0,06	0,46	-0,05	40,02	4,77	-/+	-/+
Czech Republic	1,98	1,87	310,18	251,29	0,41	1,91	0,52	0,63	-0,11	1,28	48,76	56,93	-/+	+
Estonia	0,72	1,15	1116,26	960,18	0,19	1,16	0,03	0,08	0,16	1,08	16,44	18,86	-/+	+
Hungary	1,40	1,23	134,63	94,89	1,31	1,23	1,43	2,24	-0,12	-1,01	85,24	97,38	-	-
Lithuania	0,97	1,05	131,17	154,36	0,35	1,05	0,56	0,57	-0,22	0,48	86,52	78,63	-/+	+
Latvia	0,40	0,99	91,03	143,69	0,49	0,99	0,23	0,47	0,26	0,52	95,31	82,07	-/+	-/+
Malta	0,00	0,03	0,00	13,40	0,11	0,03	0,06	0,02	0,05	0,01	#ARG!	23,64	-/+	-/+
Poland	0,77	0,42	100,22	32,06	1,33	0,41	0,88	1,69	0,45	-1,27	99,89	48,56	+	-
Romania	4,21	1,90	136,54	95,43	0,23	1,94	1,30	1,50	-1,07	0,44	84,55	97,66	-	+
Slovenia	2,03	1,57	193,15	224,80	0,19	1,60	0,55	0,54	-0,35	1,06	68,22	61,58	-/+	+
Slovakia	1,90	2,04	143,05	169,67	0,42	2,10	0,91	1,08	-0,50	1,03	82,29	74,16	-/+	+
Eu15	0,96	0,99	100,29	104,10	1,01	0,99	1,02	0,98	-0,01	0,01	99,85	97,99		
Eu27	1,00	1,00	103,96	103,14	1,00	1,00	1,00	1,00	0,00	0,00	98,06	98,45		

Source: own study

(-) – lack of competitiveness
(+) – competitiveness
(-/+) –the analysis are inconclusive/ambiguous

The competitiveness of new member states to trade in live animal is average comparing all countries. The greatest comparative advantage in trade in live animal show:

Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovenia, Slovakia and Malta. When we take CR into consideration, the greatest trade specialization in live animals show: Czech Republic, Estonia, Lithuania, Latvia, Slovenia, Slovakia. Analyzing the IIT indicator conclude that there is an intra-industry trade (especially in: Lithuania, Latvia, Slovakia, Hungary, Romania). The indicator was in the range of 4 to 97%. The inter-industry trade was showed in Cyprus. It was noted the change in value indicators when was compared the 2008 and 2012 years. For example, Poland was competitive trade in live animals in 2008, but in 2012 were not. And the another way, Bulgaria, Czech Republic Estonia, Lithuania, Romania, Slovenia and Slovakia were not competitive in 2008,but in 2012 were. The main reason could be lower production costs in these countries.

Table 5: The competitiveness indicators trade in in meat and edible meat offal products in EU new member state

Indicators	SI		CR		XRCA		MRCA		RTA		IIT		Assessment	
Years	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12	‘08	‘12
Bulgaria	1,04	0,60	37,32	38,09	0,80	0,57	2,08	2,24	-1,28	-1,67	54,36	55,16	-	-
Cyprus	0,63	0,33	31,10	13,70	0,47	0,31	0,30	0,41	0,16	-0,10	47,44	24,09	-/+	-/+
Czech Republic	0,48	0,42	28,60	26,50	0,35	0,39	1,11	1,44	-0,76	-1,05	44,48	41,89	-	-
Estonia	0,78	0,55	44,25	44,82	0,59	0,52	0,73	0,81	-0,15	-0,29	61,36	61,90	-/+	-/+
Hungary	1,41	0,99	190,38	146,11	1,12	0,99	0,79	1,19	0,34	-0,20	68,88	81,26	+	-/+
Lithuania	0,67	0,49	40,85	64,58	0,50	0,46	1,00	0,63	-0,51	-0,17	58,00	78,48	-	-/+
Latvia	0,41	0,45	20,62	42,96	0,30	0,42	0,83	0,71	-0,53	-0,30	34,20	60,10	-/+	-/+
Malta	0,05	0,02	0,40	0,19	0,03	0,02	0,96	0,96	-0,92	-0,94	0,80	0,38	-/+	-/+
Poland	1,94	1,50	147,99	162,43	1,63	1,59	1,23	1,23	0,40	0,37	80,65	76,21	+	+
Romania	0,34	0,82	5,81	52,81	0,24	0,81	2,18	1,22	-1,93	-0,41	10,99	69,12	-	-
Slovenia	0,84	0,34	33,49	23,11	0,63	0,32	1,06	1,20	-0,43	-0,89	50,17	37,54	-	-
Slovakia	0,52	0,43	31,67	40,56	0,38	0,40	0,90	0,96	-0,52	-0,56	48,10	57,71	-/+	-/+
Eu15	1,28	1,01	110,54	109,40	1,00	1,01	0,98	0,98	0,03	0,04	94,99	95,51		
Eu27	1,27	1,00	105,37	105,77	1,00	1,00	1,00	1,00	0,00	0,00	97,39	97,20		

Source Źródło: own study

(-) –lack of competitiveness
(+) –competitiveness
(-/+) –the analysis are inconclusive/ambiguous

The competitiveness of new member states to trade in meat and edible meat offal products is low comparing all countries. The greatest comparative advantage in trade in meat and edible meat offal products show Poland. In all countries SI indicator value is less than 1. Only in Poland, this indicator is greater than 1. When we take CR into consideration, the greatest trade specialization in meat and edible meat offal products show: Poland and Hungary. Analyzing the IIT indicator conclude that there was an intra-industry trade (especially in: Hungary, Lithuania, Poland, Romania). The indicator was in the range of 0,38 to 81%. The inter-industry trade was showed in Malta. It was noted the change in value indicators when was compared the 2008 and 2012 years in Hungary, Lithuania.

Conclusion

It seems necessary to develop technological progress in agri – food sector in the new member states of EU. This due to the fact that the food processing industry is less competitive than in EU-15. But in new member states ofEU have high potential in

agricultural production. In contrast, without advanced mechanization and biotechnology progress the growth of competitiveness is impossible. This is the limiting factor the full potential also.

It was noted that the effect of trade creation in agri – food products occurred in Bulgaria after accession to the EU. The EU-15 countries have remained their share of trade in agri – food products. The intra EU import trade deficit in agri – foods products stayed in the Czech Republic, Cyprus, Estonia, Lithuania, Latvia, Malta, Romania, Slovenia and Slovakia in the years 2008 – 2012.

What is more, the countries of the EU-15 are still the competition in trade in agri – food products comparing 2008 and 2012. This is due to by greater mechanization and technology progress in agriculture.

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