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CHANGES IN TRADE INTROVERSION OF ASIAN REGIONAL TRADE AGREEMENTS AS A MEASURE OF THEIR OPENNESS TO REGIONAL AND GLOBAL COOPERATION (COMPARATIVE ANALYSIS)¹

Abstract: This paper is aimed at answering the question whether trade of Asian Regional Trade Agreements (RTAs): AFTA, APTA, ECO and GCC (compared to the non-Asian RTAs: EU-27, NAFTA, ANZCERTA, SADC, MERCOSUR) is inward (trade among members of RTA) or outward (trade with the rest of the world) oriented and how trade orientation changed during the period 1995–2012. In order to verify trade orientation we used a Regional Trade Introversion Index (RTII). Two fundamental conclusions stem from our analysis. Firstly, the fastest growing Asian group APTA is also the only one in the analysed sample, which trade is outward oriented. It proves its willingness to win a good position on the world market and not to concentrate only on regional trade. Secondly, economic differences among the leading developed and less developed regional blocs become smaller.

Keywords: regional trade agreements (RTAs), regional trade introversion index (RTII).

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1. Introduction

A wide spectrum of trade intensity indicators is engaged in the assessment of the effects of regional trade agreements (RTAs). One of them is a Regional Trade Introversion Index (RTII) which is used in this paper to assess changes in trade intensity within Asian RTAs: ASEAN Free Trade Area (AFTA), Asia-Pacific Trade Agreement (APTA), Economic Cooperation Organization (ECO)² and Gulf Cooperation Council (GCC). This paper is aimed at answering the question whether

¹ The project was financed by the National Science Centre, decision no. DEC-2013/09/B/HS4/01488.

² We treat ECO as an Asian group having in mind that it includes Turkey, which in some contexts counts to Europe, even if in many others it can be seen as an Asian country.

trade of Asian RTAs (compared to the non-Asian RTAs: European Union (EU-27), North American Free Trade Agreement (NAFTA), Australia-New Zealand Closer Economic Agreement (ANZCERTA), Southern African Development Community (SADC) and Southern Common Market (MERCOSUR)) is inward (trade within one RTA) or outward (trade of the member states of one RTA with the rest of the world) oriented and how trade orientation changed during the period 1995–2012.

We analyse all RTAs with the constant number of members (as it was in 2012). Because of the dominant role of China, we analyse also data for APTA without China. Apart from regional trade introversion, we scrutinize also other features of RTAs such as: economic potential measured by GDP, citizens' wealth (GDP *per capita*) and trade openness. All data we analyse are from the period 1995–2012.

2. Economic potential and wealth

We start the analysis by comparing GDP and GDP *per capita* (GDP *pc*) of the Asian and other countries groups³ (Tables 1 and 2). In 1995 APTA had the biggest economic potential measured with GDP among the Asian blocs. It was almost 2.5 times bigger than GDP of AFTA, 3.8 times bigger than GDP of ECO and almost 6.6 times bigger than the GDP of GCC. It outstripped the then GDP of ANZCERTA, MERCOSUR and SADC. In 2012 APTA remains the biggest among analysed Asian groups, but the difference between its GDP and GDP of the other analyzed blocs from this continent became bigger. In 2012 it is 4.8 times bigger than GDP of AFTA, 5.8 times bigger than GDP of ECO and 7.7 times bigger than GDP of GCC.

The difference between APTA's GDP and GDP of smaller blocs from the other continents is increasing as well. In 1995 ANZCERTA's GDP made up ca. 27% of APTA's GDP and 2012 it was only 15.4%. The analogous comparison for MERCOSUR is 67 and 28.4% and for SADC 11.7 and 6%. Economic potential of APTA measured with DGP locates it among the strongest blocs, similar rather to the EU and NAFTA than to the developing ones. However, one has to be aware of the dominating position of China in this group (in 1995 its GDP made up 45% of APTA's GDP and 2012 it was already 72%).

All Asian blocs, apart from AFTA, appear the fastest growing groups in our sample. In 2012 the leader of this classification was APTA with GDP 6.6 times bigger than in 1995. In 2012 GCC and ECO had GDPs respectively 5.6 times and 4.3 times bigger than their GDPs in 1995. Almost a half of the increase in APTA's GDP resulted from the dynamic growth of China (APTA without China grew during the period 1995–2012 less than 3.4 times, what is the similar result to the one achieved by AFTA).

³ We call regional trade agreements (RTAs) groups or blocs substitutively.

Table 1. Gross Domestic Product of Asian Regional Trade Agreements during the period 1995–2012 (current prices and exchange rates, trillions USD)

Year	APTA	APTA without China	AFTA	ECO	GCC
1995	1.71	0.95	0.69	0.45	0.26
1996	1.91	1.02	0.77	0.48	0.29
1997	2.00	1.01	0.73	0.48	0.31
1998	1.89	0.84	0.50	0.50	0.28
1999	2.08	0.98	0.58	0.48	0.31
2000	2.26	1.07	0.61	0.49	0.38
2001	2.37	1.05	0.59	0.42	0.37
2002	2.60	1.15	0.66	0.50	0.38
2003	2.96	1.31	0.74	0.60	0.44
2004	3.46	1.52	0.83	0.75	0.53
2005	4.05	1.77	0.93	0.91	0.67
2006	4.78	1.99	1.11	1.05	0.79
2007	5.85	2.36	1.33	1.30	0.90
2008	6.88	2.35	1.54	1.49	1.14
2009	7.37	2.30	1.53	1.37	0.91
2010	8.80	2.85	1.90	1.62	1.07
2011	10.39	3.19	2.21	1.86	1.37
2012	11.29	3.19	2.33	1.94	1.46

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

The dynamics of GDP growth of APTA and the other Asian groups is even more impressive if we compare it with the growth of the groups from the other continents. Their GDP growth varies between 3.7 times (ANZCERTA which has been growing faster than AFTA) and 1.8 times (EU-27). The blocs with the biggest economic potential (EU and NAFTA) had experienced the lowest growth rate of their GDPs (respectively: 1.8 times and 2.2 times during the years 1995–2012).

Despite the rapid increase in GDP of the Asian groups their huge population still makes them relatively poor. Because of the relatively low GDP *pc* (Tables 3 and 4) they are similar rather to the blocs containing developing countries (for example SADC) than to any bloc gathering more developed member states. However, also in this respect progress has been made. In 1995 APTA was the poorest group in the whole sample. Its GDP *pc* was ca. 2 times lower than GDP *pc* of ECO and AFTA. The second poorest bloc in the sample was African SADC with the then GDP *pc* by over 40% higher than GDP *pc* of APTA. The richest among the Asian groups was GCC with the GDP *pc* almost 14 times higher than GDP *pc* of APTA. The richest, among all analyzed RTAs, NAFTA had then GDP *pc* almost 30 times higher than APTA.

Table 2. Gross Domestic Product of selected non-Asian Regional Trade Agreements during the period 1995–2012 (current prices and exchange rates, trillions USD)

Year	ANZCERTA	EU-27	MERCOSUR	NAFTA	SADC
1995	0.46	9.19	1.14	8.31	0.20
1996	0.50	9.38	1.22	8.81	0.20
1997	0.51	8.85	1.29	9.41	0.21
1998	0.45	9.15	1.28	9.88	0.20
1999	0.49	9.15	1.01	10.55	0.19
2000	0.46	8.48	1.08	11.33	0.20
2001	0.44	8.58	0.98	11.70	0.18
2002	0.50	9.36	0.73	12.11	0.18
2003	0.64	11.41	0.79	12.73	0.25
2004	0.78	13.17	0.96	13.63	0.31
2005	0.87	13.77	1.25	14.63	0.36
2006	0.93	14.68	1.53	15.63	0.39
2007	1.12	16.99	1.91	16.51	0.45
2008	1.18	18.27	2.36	16.91	0.47
2009	1.13	16.33	2.32	16.21	0.47
2010	1.43	16.28	2.98	17.13	0.57
2011	1.68	17.60	3.33	17.98	0.66
2012	1.74	16.57	3.21	18.65	0.66

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

In 2012 the situation was different as APTA's citizens had become wealthier than the citizens of AFTA. Moreover, the average GDP *pc* of APTA has become only 8 times lower than the GDP *pc* of GCC and less than 10 times lower than NAFTA's GDP *pc*. NAFTA lost its position of the richest group as ANZERTA's GDP *pc* jumped to the level 1.6 times higher than this of NAFTA (in the period 1995–2012 ANZCERTA experienced the increase of GDP *pc* ca. 3 times). All the facts prove the economic progress of APTA which overtook SADC in respect of GDP *pc*. However, APTA without China is in this respect still lying behind SADC.

In 2012 the oil-rich GCC countries also made progress as their GDP *pc* almost achieved the level of the EU-27 (in 1995 it was almost 2 times lower). However, we have to be careful in evaluation of GCC GDP and GDP *pc* as it strongly depends upon the instable oil prices (see e.g. in Table 3 its sharp decrease in the year 2009 because of the then crisis; in this year production of all other blocs but APTA decreased together with the fall of the world trade;⁴ the fall of GCC's GDP was the sharpest in the sample).

⁴ E. Czarny, K. Śledziwska, *Współpraca gospodarcza Polski z zagranicą w warunkach międzynarodowego kryzysu gospodarczego*, PWE, Warszawa 2012, pp. 34–38.

Table 3. Gross Domestic Product *per capita* of Asian Regional Trade Agreements during the period 1995–2012 (current prices and exchange rates, thousands USD)

Year	APTA	APTA without China	AFTA	ECO	GCC
1995	0.73	0.83	1.43	1.39	10.20
1996	0.80	0.87	1.56	1.43	11.16
1997	0.83	0.86	1.46	1.42	11.51
1998	0.77	0.70	0.97	1.43	10.21
1999	0.84	0.80	1.12	1.35	11.16
2000	0.90	0.86	1.17	1.36	13.18
2001	0.94	0.83	1.12	1.16	12.47
2002	1.02	0.89	1.23	1.34	12.66
2003	1.14	1.00	1.37	1.57	14.02
2004	1.32	1.15	1.51	1.94	16.00
2005	1.54	1.32	1.66	2.33	19.39
2006	1.79	1.46	1.97	2.65	21.99
2007	2.18	1.71	2.32	3.23	23.61
2008	2.53	1.68	2.66	3.65	28.40
2009	2.69	1.63	2.62	3.30	21.65
2010	3.18	1.99	3.21	3.84	24.66
2011	3.69	2.20	3.68	4.34	30.53
2012	3.97	2.17	3.85	4.46	31.85

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

Based on the analysis of GDP and GDP *pc* we can divide our sample of RTAs stemming from all continents into four categories. The first one is the groups with large economic potential. In 2012 to this group belonged APTA, EU and NAFTA though in 1995 APTA was not in it (the then members were only EU and NAFTA). The second category includes blocs with a small economic potential. In 2012 there were other than APTA Asian blocs: AFTA, ECO, GCC as well as ANZCERTA, MERCOSUR and SADC. In 1995 with GDP by ca. 50% higher than MERCOSUR APTA belonged to this group as well. The third category are blocs with wealthy citizens. In 1995 as well as in 2012 high GDP *pc* had GCC, EU, NAFTA and ANZCERTA. The only change in this group involves different proportions of GDP *pc* of the blocs from this category. In 1995 GCC was the poorest element of this selection (with GDP *pc* ca. 2 times lower than GDPs *pc* of three other blocs. In 2012 GCC's GDP *pc* was only slightly lower than the one of the EU and GDPs *pc* of ANZCERTA, EU and NAFTA are more different from each other. In this category

Table 4. Gross Domestic Product *per capita* of selected non-Asian Regional Trade Agreements during the period 1995–2012 (current prices and exchange rates, thousands USD)

Year	ANZCERTA	EU-27	MERCOSUR	NAFTA	SADC
1995	20.88	19.17	4.86	21.21	1.05
1996	22.88	19.53	5.12	22.21	1.03
1997	22.68	18.40	5.34	23.42	1.05
1998	19.80	19.01	5.20	24.27	0.94
1999	21.29	18.98	4.05	25.60	0.91
2000	20.05	17.55	4.29	27.17	0.90
2001	18.98	17.70	3.83	27.75	0.82
2002	20.99	19.24	2.80	28.41	0.78
2003	26.72	23.36	3.01	29.57	1.05
2004	32.05	26.86	3.60	31.33	1.30
2005	35.43	27.96	4.62	33.29	1.47
2006	36.95	29.69	5.60	35.21	1.56
2007	43.93	34.20	6.92	36.83	1.74
2008	45.55	36.63	8.48	37.34	1.81
2009	42.77	32.63	8.25	35.46	1.75
2010	53.28	32.40	10.51	37.10	2.09
2011	61.80	34.92	11.62	38.59	2.35
2012	63.11	32.81	11.08	39.63	2.32

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

we have subcategory consisting of the world leaders with respect to their economic potential, namely EU and NAFTA and the other constituted by two small but rich blocs as far as their economic potential is concerned (GCC, ANZCERTA). The fourth category is groups containing poor countries in terms of GDP *pc*: APTA, AFTA, ECO and – relatively richer but still not rich – MERCOSUR. This category has the same list of participants in both years (1995 and 2012). The presence APTA among the blocs with relative low GDP *pc* shows that its huge population still makes it relatively less developed one.

3. Openness and trade introversion

The next difference of the analysed groups concerns intensity of their trade with the outside world as well as with the other member states of the groups they belong to. We measure it as a sum of export and import divided by GDP and treat this measure as a trade openness index.

In the period 1995–2012 we can notice the increase in trade openness of all analysed groups (Tables 5 and 6). Two Asian groups (AFTA and GCC) have even the openness index bigger than 1 what means that their trade turnover is bigger than GDP. In case of AFTA trade outstrips GDP nonstop since 1998. For GCC it held in the last two years and in 2008. Both other Asian groups had openness indexes varying between 0.45 (ECO) and 0.51 (APTA), what means that their relative trade values are considerably bigger than the respective indexes of ANZCERTA, NAFTA and MERCOSUR. EU-27 and SADC achieved higher values of the trade openness indexes: in 2012– 0.7 and 0.64, respectively. The relatively low index of NAFTA (0.22 in 1995 and 0.3 in 2012) is understandable as this group contains two big economies concentrating on supplying their own internal markets.

Table 5. Trade openness index of Asian Regional Trade Agreements during the period 1995–2012

Year	APTA	APTA without China	AFTA	ECO	GCC
1995	0.37	0.37	0.97	0.29	0.66
1996	0.35	0.37	0.93	0.32	0.69
1997	0.35	0.38	1.00	0.32	0.70
1998	0.34	0.39	1.24	0.28	0.64
1999	0.35	0.38	1.15	0.30	0.63
2000	0.41	0.43	1.31	0.36	0.69
2001	0.39	0.39	1.23	0.39	0.68
2002	0.41	0.39	1.16	0.38	0.69
2003	0.47	0.41	1.19	0.41	0.76
2004	0.53	0.45	1.30	0.44	0.83
2005	0.55	0.47	1.35	0.45	0.87
2006	0.57	0.49	1.31	0.47	0.88
2007	0.57	0.48	1.23	0.47	0.94
2008	0.58	0.60	1.25	0.51	1.03
2009	0.46	0.51	1.01	0.41	0.93
2010	0.51	0.54	1.05	0.43	0.94
2011	0.54	0.61	1.09	0.47	1.00
2012	0.51	0.61	1.06	0.45	1.05

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

The lowest in the sample in 2012 (and in many other analyzed years) openness index of MERCOSUR shows this group as the one which is losing its chances in the world economy. In comparison with – especially – Asian groups it proves that

MERCOSUR has been stagnating and staying relatively closed. It visualizes a big difference in economic dynamics of Asian blocs and the most integrated group from the Latin America.

In this part of the study we can follow trade expansion of China. Till 2001 the trade openness indexes of APTA without China were bigger (or at least equal) than the indexes of the whole APTA. During the period 2002–2007 indexes for the whole APTA jumped over these of APTA without China. This represents the trade expansion of China. Interestingly, since 2008 (the starting year of the last economic crisis) the indexes for the other than China members of APTA have again become bigger than for the whole APTA. It proves that the smaller than China members of APTA try to expand their trade in the last years. It does not counterweight the big importance of China for the economic activity and intensity of APTA's international cooperation.

Table 6. Trade openness index of selected non-Asian Regional Trade Agreements during the period 1995–2012

Year	ANZCERTA	EU-27	MERCOSUR	NAFTA	SADC
1995	0.30	0.46	0.16	0.22	0.45
1996	0.30	0.47	0.16	0.23	0.48
1997	0.30	0.50	0.17	0.24	0.48
1998	0.31	0.50	0.17	0.23	0.46
1999	0.30	0.50	0.19	0.24	0.47
2000	0.34	0.57	0.20	0.26	0.49
2001	0.34	0.56	0.22	0.23	0.51
2002	0.33	0.55	0.26	0.22	0.55
2003	0.30	0.54	0.27	0.23	0.52
2004	0.30	0.56	0.30	0.24	0.51
2005	0.31	0.59	0.29	0.26	0.54
2006	0.33	0.64	0.28	0.27	0.59
2007	0.32	0.64	0.27	0.27	0.61
2008	0.38	0.66	0.29	0.29	0.73
2009	0.32	0.56	0.22	0.23	0.58
2010	0.32	0.64	0.22	0.27	0.58
2011	0.34	0.69	0.25	0.30	0.63
2012	0.34	0.70	0.26	0.30	0.64

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

The next tool we use for the analysis of the characteristics of international trade relations of the RTAs is the regional trade introversion index (RTII). This index

allows for measuring the relative intensity of regional trading versus trading with the outsiders. This measure was first proposed by L. Iapadre.⁵ The RTII can range from -1 to 1 and is independent of the size of the region. The index rises (or falls) only if the intensity of intraregional trade grows more (or less) rapidly than that of extraregional trade. If the index is equal to zero, then the region's trade is geographically neutral (it grows similarly in the intraregional as well as in extraregional terms). If the index is a positive number, the region's trade has an intraregional bias. If RTII is less than zero, then the region's trade has an extraregional bias. The formula for the regional trade introversion index is:

$$RTII_i = \frac{HI_i - HE_i}{HI_i + HE_i},$$

$$HI_i = \frac{T_{ii}}{T_i} \quad \text{and} \quad HE_i = \frac{1 - \frac{T_{ii}}{T_i}}{1 - \frac{T_{oi}}{T_o}},$$

where: T_{ii} – exports of region i to region i plus imports of region i from region i ;
 T_i – total exports of region i to the world plus total imports of region i from the world; T_{oi} – exports of region i to outsiders plus imports of region i from outsiders; T_o – total exports of outsiders plus total imports of outsiders.

As expected, the only group with an extraregional trade orientation is APTA (negative RTII in the last 2 years). Interestingly this is not exclusively caused by the China's outward orientation. Table 7 reveals that APTA without China notices this outward bias even longer and its RTII values are more negative than these of the whole APTA. Since 1995 it has permanently negative RTII and this index becomes more negative with time. This seems to prove that the other than China members of APTA try to find their international position not in their regional trade but in the outside world.

At the same time GCC as well becomes more and more outward oriented, but its intraregional trade still overweighs. Its RTII decreased from 0.68 in 1995 to 0.24 in 2012.

AFTA and ECO are strongly inward oriented. Whereas this orientation slightly decreased in time in case of ECO, it increased in comparison with 1995 in AFTA (however its peak – with RTII value of 0.75 – was achieved in 2003 and 2005–2007). AFTA's and ECO's RTII is similar to the values of these indexes achieved by the EU and NAFTA (EU index remained quite stable over time and this of NAFTA was increasing – see Table 8). The relatively less developed blocs (SADC

⁵ L. Iapadre, Regional integration agreements and the geography of world trade: Statistical indicators and empirical evidence, [in:] P. De Lombaerde (ed.), *Assessment and Measurement of Regional Integration*, Routledge, London 2006, pp. 65–85.

and MERCOSUR) have high values of RTII (in 2012: 0.88 and 0.81, respectively), though they are decreasing in time (in 1995: 0.92 and 0.88). It confirms easier possibility to trade with the countries from the same region than to compete on the world market, what is an often scenario in case of developing countries.

Table 7. Regional Trade Introversion Index of Asian Regional Trade Agreements during the period 1995–2012

Year	APTA	APTA without China	AFTA	ECO	GCC
1995	0.11	-0.16	0.64	0.73	0.68
1996	0.16	-0.19	0.65	0.67	0.65
1997	0.19	-0.20	0.65	0.63	0.63
1998	0.19	-0.01	0.69	0.65	0.71
1999	0.16	-0.20	0.69	0.66	0.68
2000	0.18	-0.27	0.69	0.65	0.54
2001	0.20	-0.14	0.69	0.66	0.57
2002	0.21	-0.16	0.70	0.63	0.61
2003	0.22	-0.08	0.75	0.62	0.53
2004	0.22	-0.13	0.74	0.57	0.50
2005	0.22	-0.14	0.75	0.59	0.42
2006	0.19	-0.17	0.75	0.61	0.42
2007	0.17	-0.17	0.75	0.60	0.41
2008	0.14	-0.16	0.74	0.57	0.28
2009	0.08	-0.22	0.73	0.58	0.39
2010	0.03	-0.23	0.71	0.64	0.37
2011	-0.03	-0.26	0.70	0.62	0.32
2012	-0.06	-0.27	0.70	0.65	0.24

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

Table 8. Regional Trade Introversion Index of selected non-Asian Regional Trade Agreements during the period 1995–2012

Year	ANZCERTA	EU-27	MERCOSUR	NAFTA	SADC
1	2	3	4	5	6
1995	0.77	0.70	0.88	0.66	0.92
1996	0.77	0.73	0.89	0.67	0.93
1997	0.77	0.72	0.89	0.66	0.92
1998	0.75	0.72	0.89	0.66	0.93
1999	0.78	0.74	0.89	0.66	0.93
2000	0.75	0.75	0.89	0.65	0.94

Table 8, cont.

1	2	3	4	5	6
2001	0.76	0.73	0.87	0.66	0.93
2002	0.76	0.73	0.86	0.67	0.94
2003	0.78	0.74	0.87	0.69	0.93
2004	0.77	0.74	0.86	0.69	0.93
2005	0.75	0.73	0.85	0.69	0.90
2006	0.72	0.72	0.86	0.68	0.89
2007	0.73	0.73	0.85	0.69	0.90
2008	0.67	0.72	0.83	0.69	0.89
2009	0.64	0.73	0.85	0.69	0.90
2010	0.62	0.73	0.84	0.69	0.90
2011	0.56	0.73	0.82	0.70	0.88
2012	0.54	0.72	0.81	0.70	0.88

Source: own study based on UNCTAD database, <http://unctadstat.unctad.org/>, (retrieved: 30.04.2014).

This analysis supplements earlier conclusions concerning MERCOSUR. This group proves not only relatively closed to trade, but trapped into the regional turnover as well. It can be seen as opposite to the dynamically growing and trade seeking APTA.

4. Conclusions

The fastest growing Asian group APTA is also the only one in the analysed sample, which trade is outward oriented. It proves its willingness to win a good position on the world market and not to concentrate only on regional trade. APTA appears to be a pretender to the position of NAFTA and EU-27 in the world economy as far as its economic potential and magnitude of foreign trade are concerned. This bloc is becoming increasingly competitive on the global markets. Of course, APTA's GDP *pc* is still relatively low, what locates this bloc among rather less developed than industrialized ones. This makes APTA a group of countries having features' mixture of developed as well as developing countries.

This research proves also that the other than China members of APTA are not concentrated on regional exchange of goods but increasingly win position in the world trade. It confirms that not only China, but the whole APTA try to enhance their position in the world economy by expanding trade with the rest of the world instead of intensifying trade relations within its own RTA.

The dynamics of APTA is absolutely opposite to the dynamics of MERCOSUR characterized by slow economic growth, relatively low GDP *pc*, and lack of propensity to trade combined with trapped position in the regional turnover.

Contrary to APTA, trade of NAFTA and EU-27 is inward oriented suggesting that the dominant position of NAFTA and EU-27 in the world economy is based mainly on strong internal (within RTA) market. The crucial question concerning APTA and stemming from the analysis of trade introversion is whether its long-term international position can be built without intensive within RTA trade. Till now the answer seems to be positive.

From this analysis we can see that the economic differences among the leading developed and less developed regional blocs become smaller. All the blocs became more open to trade as well. However, they still differ in respect of their trade intensity and its orientation as well as level of their growth and openness.

References

Czarny E., Śledziewska K., *Współpraca gospodarcza Polski z zagranicą w warunkach międzynarodowego kryzysu gospodarczego*, PWE, Warszawa 2012.

<http://unctadstat.unctad.org/> (retrieved: 30.04.2014).

Iapadre L., Regional integration agreements and the geography of world trade: Statistical indicators and empirical evidence, [in:] P. De Lombaerde (ed.), *Assessment and Measurement of Regional Integration*, Routledge, London 2006, pp. 65–85.

ZMIANY WEWNĘTRZNEJ ORIENTACJI HANDLOWEJ AZJATYCKICH UGRUPOWAŃ INTEGRACYJNYCH JAKO MIARY ICH OTWARCIA NA WSPÓLPRACĘ REGIONALNĄ I GLOBALNĄ (ANALIZA PORÓWNAWCZA)

Streszczenie: Celem artykułu jest odpowiedź na pytanie, czy handel azjatyckich regionalnych ugrupowań: AFTA, APTA, ECO i GCC (w porównaniu z handlem ugrupowań z innych kontynentów: UE 27, NAFTA, ANZCERTA, SADC, MERCOSUR) jest zorientowany wewnętrznie (handel między członkami ugrupowania) czy zewnętrznie (handel z resztą świata) i jak orientacja handlowa uległa zmianie w latach 1995–2012. Narzędziem badawczym jest wskaźnik wewnętrznej orientacji handlu (RTII). Z analizy wynikają dwa kluczowe wnioski. Po pierwsze, najszybciej rozwijające się azjatyckie ugrupowanie, czyli APTA, jako jedyne w analizowanej próbie cechuje się zewnętrzną orientacją handlu. To dowodzi jego chęci zdobycia znaczącej pozycji na rynku światowym, nie zaś koncentrację tylko na regionalnym handlu. Po drugie, zmniejszają się gospodarcze różnice między wiodącymi rozwiniętymi i rozwijającymi się ugrupowaniami.

Słowa kluczowe: regionalne ugrupowania integracyjne (RTAs), wskaźnik wewnętrznej orientacji handlu (RTII).