

***European Economics***

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**EXPORT PERFORMANCE  
AND INTRA-INDUSTRY TRADE  
OF THE ECONOMIES  
OF THE BLACK SEA REGION**

**Abstract**

In this paper the characteristics of international trade of the Black Sea Region economies and the European Union are examined. By using the relevant trade indices we examine the extroversion, the openness and the competitive advantage of the countries of the region in the international trade. Extroversion and export performance has deteriorated for the majority of the countries of the region. The examination of relevant trade indices (as the Balassa Index), show that the majority of the exporting products of the Black Sea Region refer to the low, and medium-low technology category, where they have the comparative advantage compared to the European Union. The need for a policy that would actively encourage the development of further trade and economic relationships between EU and the other countries of the region is highlighted.

**Key words:**

International Trade, Balassa Index, Black Sea region.

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## 1. Introduction

The Black Sea, an inland sea bounded by Europe, Anatolia and the Caucasus area, has been the crossroad of civilizations from the ancient times. In recent times, and especially after the disintegration of the Soviet Bloc and the dissolution of the Soviet Union, the Black Sea area has undergone tremendous economic change, from severe turmoil to impressive recovery. In the last two decades regionalism in the Black Sea area has been revived through the operation of various organizations, the Black Sea Economic Cooperation (BSEC) established in 1992 being the most important among them (King, 2008). Apart from BSEC, other bilateral, trilateral or multilateral cooperation projects and initiatives in the fields of the environment, transport, energy and soft security issues help at strengthening the region-building efforts in the area (Aydın, 2004).

Because of its geostrategic position, and the continuous conflicts among powerful local and external actors, the Black Sea region has not as yet found its way to stability and economic prosperity. The region is characterized by lack of economic development, lack of social cohesion, of security and of stability, whereas political upheaval and local military conflicts in many areas (Transnistria, Abkhazia, South Ossetia, Nagorno – Karabakh, the Russian-Ukrainian crises over gas and the war between Russia and Georgia in August 2008 just to mention a few) continuously degrading the area's prospects (Aydın and Triantaphyllou, 2008).

In this difficult political and economic situation, external trade seems to be an area of possible improvement of cooperation among the region's states. The present study focuses on the examination of the current situation of the external trade in the Black Sea region economies for the period 2001-2008. It is the first part of a larger scale project that aims, through the use of macroeconomic tools, at extracting critical conclusion and policy recommendations for the enhancement of the competitiveness of the Black Sea region and its long-term integration in the EU.

The rest of the paper is structured as follows. In Section 2 the economic situation of the countries in the Black Sea Region and relations with the EU. In section 3 the main trade indices that will be used in this study are outlined. Section 4 presents the trade indicators and the external trade in the region and finally section 5 concludes the paper.

## 2. Black Sea region and Trade

The countries considered to be part of the Black Sea region are Armenia, Azerbaijan, Bulgaria, Georgia, Moldova, Romania, Russia, Turkey and Ukraine. In addition to these countries, Greece as well as Albania and Serbia are also participating in BSEC. Most countries in the region which were part of the former Soviet Bloc or Soviet Union, still are in a difficult economic situation, as the main characteristic of their transition from a centrally planned system to a market economy has been the sharp deterioration of living standards, accompanied by the collapse of the role of the state, especially when it comes to social networks.

On the other hand, there are countries such as Greece and Turkey, which have long been part of the western economy, with Greece being a member of the EU for almost 30 years. Thus, the level of economic development in the region is extremely unequal and this poses important policy challenges for the countries of the region as well as for the EU, which after the full membership of Bulgaria and Romania has an increased interest in the region.

The main efforts of the EU focus on the stimulation of democratic and economic reforms in order to project stability and support development in the Black Sea region, aiming at convergence on EU norms and standards (European Commission, 2007). Many countries in the Black Sea region are included in the European Neighborhood Policy, receiving financial assistance through the European Neighborhood and Partnership Instrument (European Commission, 2006).

However, the EU receives criticism as there were not set thus far priorities on the parts of the *acquis communautaire*, which would be adopted by the region's states, depending on their economic structures and level of development (Emerson, 2005). Also, until recently, the 'Black Sea dimension' has received limited attention and even less credit from EU officials (Ban, 2006).

The EU recognizing the underdeveloped relationships with the countries of the region launched a cooperation initiative in 2007 (European Commission 2007), called the «Black Sea Synergy: A new regional cooperation initiative». The main goals of this initiative were to develop cooperation both within the countries of the Black Sea region but also between the European Union and the region as a whole. It focused on 13 areas of cooperation including institutional, security and conflict resolving issues, economic development issues such as energy, environment and fisheries, transports, maritime policy and trade, and finally issues related to regional development, and the support of employment and research networks.

Despite the mutual benefits that would arise from a dedicated strategy to further develop relationships with the countries of the region the European Committee found herself constrained, by the guidelines set by three previous policy

documents namely the pre-accession deal with Turkey, the strategic Partnership with Russia, and the European Neighborhood Policy (ENP).

As far as trade is concerned the report recognized the importance of strengthening trade relationships between European Union and the region. However it does not propose any separate action to further develop the established trade relations, others than the one already applied as a part of the ENP, and any other actions leading to higher levels of trade liberalization in the region. However free trade area cannot be formed from the countries of the region as two countries in the region (Bulgaria and Romania), are members of the EU, and Turkey has a customs union scheme.

### 3. Trade indices and indicators

In order to investigate the international trade trends in the region a series of economic indices are used in this paper in line with the relevant literature (Siskos, 2012).

The first index used is the Extroversion of the economy, measuring the exports  $X$  of a country  $j$  ( $X_j$ ), as a percentage of its gross domestic product ( $GDP_j$ ).

$$Extroversion_j = \frac{X_j}{GDP_j}$$

The second index used is the degree of openness of the economy to the international trade. This index is computed as the ratio of the sum of imports,  $M$ , and exports,  $X$ , of a country  $j$ , to the  $GDP$  of this country.

$$Openness_j = \frac{(X + M)_j}{GDP_j}$$

The Import Penetration index for a country  $j$  ( $IP_j$ ) is measured as the ratio of total imports of a country to domestic demand measured as the sum of the  $GDP$  and the trade balance of the country  $j$ . This ratio shows to what degree imports satisfy domestic demand.

$$(\text{Import Penetration})_j = \frac{M_j}{GDP_j + (M - X)_j}$$

By using the extroversion index and the import penetration ( $IP_j$ ) to the economy we calculate an index measuring the degree of exposure of a country to the international trade.

$$(\text{Exposure to Int. Trade})_j = Extroversion_j + (1 - Extroversion_j) \cdot IP_j$$

In order to identify the sectors that have comparative advantage, the Balassa index for the revealed comparative advantage (RCA) compared to the European Union, is used. The RCA index is calculated as the ratio of the share of sector  $i$  in country's  $j$  total exports to the share of its exports to a reference country, which in our case will be the European Union (EU-27).

$$RCA_{ij} = \frac{X_{ij} / \sum_i X_{ij}}{X_{iEU27} / \sum_i X_{iEU27}}$$

Finally the Grubel and Loyd index for intra industry trade is demonstrated for the countries in the Black Sea region. The IIT index is calculated for the sectors  $i$  of a country  $j$ , but only the results for the intra industry trade levels of the whole economy of each country are reported.

$$IIT_{ij} = 1 - \frac{|X_{ij} - M_{ij}|}{X_{ij} + M_{ij}}, \quad IIT_j = 1 - \frac{|X_j - M_j|}{X_j + M_j}$$

#### 4. External trade in the Black Sea region

International trade becomes more important for the countries in the Black Sea region as can be seen in Tables 1 and 2, where the exports and imports respectively are presented for the region's countries (excluding Greece) for the period 2001–2008. In terms of exports, Armenia is the worst performing country and Russia the best performing country due to its high-energy exports. It is notable that the 2001–2008 trends has been increasing for all the Black Sea economies, for both exports and imports, with the mean annual trend well above the respective EU-15 trend. It is also worth noting that Azerbaijan has a tremendous increase in exports by 688.3% in 2008. Russia and Azerbaijan have significant trade surpluses as a result of their high-energy exports (oil, gas) (Astrov and Havlik, 2008)

The trend of exports for the region between 2001 and 2008 is further examined in Tables 3 and 4. Table 3 present exports per destination for the year 2001 and 2008. The main export partners examined are the EU-10, EU-15, the Middle East and the Mediterranean, the Balkans, and the rest of the world. Table 4 presents exports per sector, as a percentage of the total exports for each country. Four main categories of sectors are examined, namely low, medium to low, medium to high and high technology goods for the years 2001 and 2008.

*Table 1*

**Exports of Black Sea Region Countries (in mil. US\$)**

Exports of goods (US\$ mil)	2001	2002	2003	2004	2005	2006	2007	2008	Trend 01-08
Armenia**	336	527	670	723	937	1.004	1.121	1.055	17,8
Azerbaijan	2.314	2.168	2.592	3.615	4.347	6.372	6.058	47.756	54,1
Bulgaria	5.114	5.749	7.540	9.930	11.739	15.101	18.576	22.478	23,6
Georgia	320	346	465	647	865	935	1.232	1.497	24,7
Moldova	568	644	790	985	1.091	1.052	1.342	1.591	15,9
Romania	11.385	13.876	17.618	23.485	27.730	32.336	40.265	49.539	23,4
Russia*	99.868	106.692	133.656	181.600	241.452	301.244	352.266	467.994	24,7
Turkey	31.334	35.762	47.253	63.121	73.476	85.535	107.272	132.002	22,8
Ukraine	16.265	17.927	23.067	32.666	34.228	38.368	49.294	66.952	22,4
<b>Black Sea Region tt</b>	<b>167.504</b>	<b>183.691</b>	<b>233.651</b>	<b>316.773</b>	<b>395.866</b>	<b>481.947</b>	<b>577.427</b>	<b>790.866</b>	<b>24,8</b>
<i>EU-15</i>	3.585.130	3.610.672	3.585.900	3.855.212	4.133.466	4.587.560	4.834.409	4.929.314	4,7

Source: International Trade Center

\*Best performing country

\*\*Worst performing country

*Table 2*

**Imports of Black Sea region countries (in mil. US\$)**

Imports of goods (US\$ mil)	2001	2002	2003	2004	2005	2006	2007	2008	Trend 01-08
Armenia	837	963	1.235	1.350	1.692	2.194	3.053	4.101	25,5
Azerbaijan	1.431	1.666	2.626	3.516	4.211	5.267	5.712	7.162	25,9
Bulgaria	7.278	7.987	10.901	14.465	18.162	23.269	30.086	33.773	24,5
Georgia	679	793	1.141	1.846	2.490	3.674	5.214	6.056	36,7
Moldova	892	1.038	1.402	1.769	2.292	2.693	3.690	4.899	27,5
Romania	15.552	17.862	24.003	32.664	40.463	51.106	69.946	82.965	27,0
Russia	41.865	46.177	57.346	75.569	98.707	137.807	199.726	267.051	30,3
Turkey	41.399	51.270	69.340	97.540	116.774	139.576	170.063	201.961	25,4
Ukraine	15.775	16.976	23.020	28.997	36.122	45.022	60.601	85.448	27,3
<b>Black Sea Region tt</b>	<b>125.709</b>	<b>144.732</b>	<b>191.015</b>	<b>257.714</b>	<b>320.914</b>	<b>410.608</b>	<b>548.090</b>	<b>693.416</b>	<b>27,6</b>
<i>EU-15</i>	3.511.014	3.467.943	3.494.604	3.797.940	4.144.607	4.642.551	4.930.725	5.077.397	4,7

Source: International Trade Center

Table 3

## Exports of the Black Sea Region per destination

% Exports of goods - 2001	Armenia	Azerbaijan	Bulgaria	Georgia	Moldova	Romania	Russia	Turkey	Ukraine	Black Sea Region	EU-15
<b>EU-15</b>	26,1	68,4	51,0	17,9	19,8	65,4	36,0	50,0	19,8	40,0	62,1
<b>EU-10</b>	1,2	0,7	3,2	1,8	3,3	5,8	15,7	2,9	12,1	11,5	4,6
<b>M.East&amp;Medit.</b>	21,5	9,5	3,5	2,2	0,5	5,3	3,6	12,5	10,6	6,2	3,5
<b>Balkans</b>	0,1	1,6	6,9	0,4	6,9	3,4	2,0	2,8	4,2	2,6	1,0
<b>Rest Countries</b>	51,1	19,8	35,5	77,6	69,5	20,2	42,7	31,8	53,3	39,7	28,9

Source: International Trade Center

% Exports of Goods - 2008	Armenia	Azerbaijan	Bulgaria	Georgia	Moldova	Romania	Russia	Turkey	Ukraine	Black Sea Region	EU-15
<b>EU-15</b>	45,1	54,1	40,9	11,4	18,4	51,9	41,2	37,0	14,4	39,6	58,6
<b>EU-10</b>	0,9	0,7	5,5	1,8	5,2	10,5	12,3	4,7	10,0	9,7	8,0
<b>M.East&amp;Medit.</b>	3,4	8,5	4,9	1,7	0,6	4,6	3,0	20,2	13,0	7,2	3,8
<b>Balkans</b>	5,6	1,9	11,9	7,5	18,9	5,8	2,6	5,8	4,0	3,7	2,1
<b>Rest Countries</b>	45,0	34,9	36,8	77,7	56,8	27,2	41,0	32,4	58,6	39,7	27,6

Source: International Trade Center

Table 4

## Exports of Black Sea region per sector

% Exports of goods - 2001	Armenia	Azerbaijan	Bulgaria	Georgia	Moldova	Romania	Russia	Turkey	Ukraine	Black Sea Region	EU-15
<b>low technology</b>	23,0	3,8	47,3	29,2	85,9	51,3	19,0	50,4	22,0	28,3	18,8
<b>medium-low</b>	66,0	92,9	33,0	47,2	4,6	23,8	69,0	23,2	54,5	54,9	22,0
<b>medium-high</b>	8,8	2,9	17,1	10,8	7,7	23,9	10,5	24,1	21,8	15,1	48,9
<b>high technology</b>	2,2	0,4	2,5	12,8	1,7	1,0	1,5	2,3	1,6	1,7	10,3

Source: International Trade Center

% Exports of goods - 2008	Armenia	Azerbaijan	Bulgaria	Georgia	Moldova	Romania	Russia	Turkey	Ukraine	Black Sea Region	EU-15
<b>low technology</b>	23,9	1,3	31,1	20,3	67,4	29,7	11,9	29,6	22,1	16,9	17,0
<b>medium-low</b>	70,1	98,1	45,1	56,2	17,2	29,6	79,8	37,3	54,1	67,3	27,6
<b>medium-high</b>	5,0	0,6	20,6	21,6	12,5	39,1	8,0	32,3	22,9	15,2	45,7
<b>high technology</b>	1,1	0,0	3,1	1,9	2,9	1,6	0,3	0,8	0,9	0,6	9,6

Source: International Trade Center

Evidently the EU-15 is the most important export partner for the Black Sea Region countries but the share in total exports is recording a decreasing trend from 2001 to 2008 (except for Armenia and Russia). The share for EU-10 has also decreased from 2001 to 2008, while for the Middle East and Mediterranean countries and the Balkans, has slightly increased. Russia's role is determinative for the Region's trade, and is the most important trade partner for Armenia, Moldova and Ukraine.

Regarding exports per sector, it seems that the majority of the Black Sea countries export medium-low technology products (67,3% in 2008) in comparison with the EU-15, whereas there is a large gap at high technology products between Black Sea countries (0,6% share) and EU-15 (9,6% share). Overall, the trend for the Region's countries from 2001 to 2008 is from low technology products towards an increasing share of medium-low technology products.

Examining the extroversion and the openness to international transaction indices (Tables 5 and 6 respectively), it seems that the majority of the countries record a decreasing trend in extroversion, which is more prominent in Armenia and Azerbaijan (until 2007). Bulgaria is the only country of the region recording significant increase in the extroversion index, while Georgia and Russia remain stable. Comparing with EU-15, 3 out of 9 countries of the BSEC indicate higher extroversion rates than the EU-15.

Mostly due to high import dependence, 5 out of 9 of the Region record higher openness to international transactions when compared to the EU-15. Armenia and Azerbaijan (until 2007) indicating the largest fall in this index, while Romania, Russia and Turkey report a small decline and Bulgaria, Georgia and Moldova indicate a significant increase.

Import penetration is examined in Table 7. Overall for the Region's countries import penetration has been stable during 2001–2008, and lower than EU-15. For 4 out of 9 economies (Bulgaria, Georgia, Moldova and Russia) there has been an increase in the index from 2001 to 2008.

Black Sea Region countries exposure to international trade (Table 8) records a significant decrease from 2001 to 2008, as 7 out of 10 economies show declining rate. Bulgaria shows a slight increase in the index, and Georgia is the only economy of the Region reporting a major increase of 15.3%. The value of the index for Azerbaijan shows fluctuations, and scores the highest value in 2008, as a result of the high level of energy exports of the country. Overall the exposure to international trade of Black Sea region declined by almost 2% for the period examined. On the contrary, EU-15 indicates a slight increase in that index (4.1%).

The Balassa index shows the Revealed Comparative Advantage (RCA) of the Region's countries (Table 9). Most countries with RCA against EU-15 belong to the low technology and medium-low technology category, with a small proportion fitting in the medium-high technology category. It seems that most countries do get advantage of their superiority in the specific products in exporting activity, except for Azerbaijan (mineral fuels and oils), Russia (mineral fuels and oils), Armenia (ores, slag and ash) and Bulgaria (copper and articles).

Finally the Grubel-Lloyd index (Table 10), for most of the economies of the Region is low, revealing an inter-industry trade, where there is a gap between the type of importing and exporting products (agricultural vs. industrial products).



Table 5

**Extroversion index of the Black Sea region countries**

Extroversion	2001	2002	2003	2004	2005	2006	2007	2008
Armenia ↓	17,7	22,0	23,9	20,1	19,1	15,7	12,2	8,9
Azerbaijan ↓	40,6	35,0	35,5	42,5	32,9	30,3	18,4	97,7
Bulgaria ↑	37,6	36,8	37,7	40,8	43,0	47,6	46,9	44,8
Georgia —	10,0	10,2	11,6	12,7	13,5	12,1	12,1	11,7
Moldova ↓	37,9	37,9	39,5	37,9	37,6	30,9	30,5	26,3
Romania ↓	28,3	30,3	29,6	31,1	28,0	26,4	23,6	24,2
Russia —	32,6	30,9	31,0	30,7	31,6	30,5	27,2	28,2
Turkey ↓	21,5	19,4	19,7	20,9	15,2	16,1	16,6	18,1
Ukraine ↓	42,8	42,3	46,0	50,4	39,8	35,6	34,5	37,1
Black Sea tt ↓	30,1	28,4	28,6	29,4	26,6	26,5	24,6	27,2
EU-15 ↑	28,3	27,5	26,8	27,5	28,5	30,1	30,2	30,7

Source: International Trade Center, Economist Intelligence Unit

Table 6

**Openness to International Trade index of the Black Sea region countries**

Openness to int. transactions	2001	2002	2003	2004	2005	2006	2007	2008
Armenia ↓	61,8	62,1	68,1	57,6	53,6	50,0	45,4	43,3
Azerbaijan ↓	65,7	61,8	71,5	83,9	64,8	55,4	35,7	112,3
Bulgaria ↑	91,1	87,9	92,2	100,2	109,5	121,0	122,9	112,1
Georgia ↑	31,2	33,5	40,2	48,9	52,4	59,9	63,2	59,0
Moldova ↑	97,4	99,0	109,6	105,9	116,7	109,9	114,3	107,3
Romania ↓	67,0	69,3	70,0	74,4	68,7	68,0	64,6	64,9
Russia ↓	46,2	44,3	44,3	43,5	44,5	44,4	42,7	44,3
Turkey ↓	50,0	47,2	48,6	53,2	39,4	42,4	42,9	45,7
Ukraine —	84,3	82,3	92,0	95,2	81,7	77,4	77,0	84,5
Black Sea tt ↓	52,7	50,8	52,0	53,3	48,2	49,0	47,9	51,1
EU-15 ↑	56,0	53,9	53,0	54,7	57,1	60,5	60,9	62,3

Source: International Trade Center, Economist Intelligence Unit

*Table 7*

**Import penetration index of the Black Sea region countries**

Import penetration	2001	2002	2003	2004	2005	2006	2007	2008
Armenia ↓	34,9	34,0	36,7	31,9	29,9	28,9	27,4	27,4
Azerbaijan ↓	29,7	29,2	35,8	41,9	32,2	26,5	17,5	86,2
Bulgaria ↑	46,2	44,7	46,7	50,1	53,9	58,4	58,9	54,9
Georgia ↑	19,1	20,6	24,4	29,3	31,0	35,2	36,8	34,9
Moldova ↑	48,9	49,6	53,7	52,3	55,9	53,3	54,7	52,4
Romania —	35,1	35,9	36,4	38,6	36,1	36,1	34,9	34,9
Russia ↑	16,8	16,2	16,1	15,6	15,9	16,7	17,5	18,3
Turkey —	26,6	25,7	26,5	29,0	22,2	23,9	24,0	25,2
Ukraine —	42,1	41,0	46,0	47,4	41,1	39,3	39,3	43,0
Black Sea tt —	24,4	23,8	24,7	25,3	22,7	23,5	23,6	24,7
EU-15 ↑	27,9	26,7	26,3	27,2	28,6	30,3	30,6	31,3

**Source:** International Trade Center, Economist Intelligence Unit

*Table 8*

**Exposure to International Trade index of the Black Sea region countries**

Exposure to int. trade	2001	2002	2003	2004	2005	2006	2007	2008
Armenia ↓	46,4	48,5	51,9	45,6	43,3	40,1	36,3	33,9
Azerbaijan ↑	58,2	54,0	58,6	66,6	54,6	48,8	32,6	99,7
Bulgaria ↑	66,4	65,1	66,8	70,5	73,7	78,2	78,2	75,1
Georgia ↑	27,2	28,7	33,2	38,3	40,4	43,1	44,4	42,5
Moldova ↓	68,3	68,7	72,0	70,4	72,5	67,7	68,5	64,9
Romania ↓	53,4	55,3	55,3	57,7	54,0	53,0	50,3	50,7
Russia ↓	43,9	42,1	42,1	41,5	42,4	42,1	40,0	41,3
Turkey ↓	42,4	40,1	41,0	43,8	34,0	36,1	36,6	38,8
Ukraine ↓	66,9	65,9	70,9	73,9	64,5	60,9	60,3	64,2
Black Sea tt ↓	47,2	45,4	46,2	47,2	48,9	43,7	42,4	45,2
EU-15 ↑	48,3	46,8	46,1	47,3	48,9	51,3	51,5	52,4

**Source:** International Trade Center, Economist Intelligence Unit

Table 9

**Revealed Comparative Advantage (Balassa index)  
 of the Black Sea region countries**

Country	Product 1	Product 2	Product 3
Armenia	Ores, slag and ash (low tech) 12,1%	Base metals&cermets (medium-low tech) 1,9%	Salt, sulphur, earth, stone (medium-low tech) 3,8%
Azerbaijan	Mineral fuels, oils (medium-low tech) 97,1%	Sugars&sugar conf. (low tech) 0,2%	Edible fruit&nuts (low tech) 0,3%
Bulgaria	Lead and articles (medium-low tech) 0,8%	Copper and articles (medium-low tech) 10,5%	Zinc and articles (medium-low tech) 0,9%
Georgia	Ores, slag and ash (medium-low tech) 8,2%	Fertilizers (medium-high tech) 7%	Salt, sulphur, earth, stone (medium-low tech) 5,4%
Moldova	Furniture, lighting (low tech) 3,1%	Oil seed, oleagic fruits (low tech) 4,3%	Carpets&floor coverings (low tech) 2,1%
Romania	Silk (low tech) 0,2%	Fertilizers (medium-high tech) 1,7%	Oil seed, oleagic fruits (low tech) 1,4%
Russia	Mineral fuels, oils (medium-low tech) 65,7%	Electrical, elect. equipment (medium-high tech) 0,7%	Aluminium and articles (medium-low tech) 1,8%
Turkey	Knitted or crocheted fabric (low tech) 5,9%	Special woven/tufted fabric (low tech) 0,5%	Other textile, worn cloth (low tech) 4%
Ukraine	Ores, slag and ash (medium-low tech) 3,2%	Railway, tramway (medium-high tech) 4%	Cereals (low tech) 5,5%

Source: International Trade Center

Table 10

**Intra-industry Trade of the Black Sea region countries**

Country	2001	2002	2003	2004	2005	2006	2007	2008
Armenia	0,20	0,16	0,16	0,16	0,43	0,37	0,32	0,26
Azerbaijan	0,51	0,54	0,39	0,41	0,43	0,46	0,32	0,31
Bulgaria	0,51	0,51	0,52	0,51	0,50	0,50	0,55	0,61
Georgia	0,27	0,23	0,22	0,21	0,22	0,21	0,23	0,24
Moldova	0,29	0,28	0,28	0,29	0,28	0,28	0,30	0,30
Romania	0,46	0,49	0,48	0,50	0,54	0,56	0,58	0,62
Russia	0,30	0,27	0,27	0,25	0,22	0,17	0,21	0,20
Turkey	0,49	0,47	0,50	0,52	0,52	0,53	0,54	0,56
Ukraine	0,44	0,44	0,50	0,47	0,44	0,42	0,43	0,42

Source: International Trade Center

We should note here that the countries that are closely attached to the European Union score better regarding this index. Bulgaria, Romania, especially after their entry in the EU, and Turkey are the only Black Sea economies that reveal high levels of intra-industry trade with values bigger than 0.50 and a steadily increasing trend during the examined period. The rest countries of the region underperformed, and did not achieved a score of more than 0.40 with the exception of Ukraine in 2008.

## 5. Conclusions

In this paper the level of export performance and international trade of the Black Sea region countries has been examined by the use of data and indices concerning the trade relations of the region with the EU.

Our results show that the vast majority of the exporting products of the Black Sea Region belong to the low technology and medium-low technology category. From 2001 to 2008 the trend is moving from low technology to medium-low technology products. This result is also supported by the values of the Balassa index as they reveal a significant comparative advantage mostly to low technology and medium-low technology exporting products for the countries of the Black Sea Region, when compared to the EU.

In all the international trade indexes, Bulgaria has shown a significant increasing trend, while Armenia and Azerbaijan (until 2007) reported decrease and the rest of the countries record small fluctuations. The G-L index indicates an inter-industry trade for all the Black Sea Region countries, except for Bulgaria, Romania and Turkey where lays evidence for intra-industry trade.

The fact that these countries have free trade schemes with the EU either as members of the EU (Bulgaria, Romania) or customs union agreement (Turkey) demonstrate the need for a policy that would actively encourage the development of further trade and economic relationships between EU and the other countries of the region. The revision of the agenda concerning the trade relationships between EU and the countries of the Black Sea region is even more pressing today due to the economic crisis, as it would enhance significantly the intra-industry trade between the countries, bringing significant benefits for both sides.

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