

COMPARATIVE ADVANTAGES OF BULGARIAN PRODUCTION AND EXPORTS

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Abstract: *The present study focuses on the analysis of the competitiveness and the comparative advantages of Bulgarian production and exports. It is structured in two parts. The first part summarizes the positions of Bulgaria in the index of global competitiveness and the more important criteria related to foreign trade. In the second part some theoretical concepts for comparative competitive advantages are systematized. Out of them the indices of B. Belasa and M. Amir have been chosen and calculated and on this basis the conclusions about the comparative advantages and disadvantages of the Bulgarian production and export of certain commodities and commodity groups, manifested in 2012-2016, are drawn. Stepping on these conclusions the possibilities for expanding or restricting the export of specific commodity groups and for increasing the competitiveness of the Bulgarian economy are systematized. In this research mathematical and statistical methods are applied, mostly the index method, along with methods of analysis and synthesis.*

Keywords: *comparative advantages, exports and foreign trade, competitiveness*

JEL Classifications F10 · F14

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INTRODUCTION

In recent years, the Bulgarian economy has been recovering and gradually overcoming the effects of the externally induced crisis of 2009. Production in a number of industries has been increasing and stabilizing, domestic and foreign demand for Bulgarian goods has been revitalizing. During some years when there has been a more significant increase in exports than imports, foreign trade has been a real source of economic growth. Under these conditions it is obvious that there is a need for a more convincing export performance of products with higher added value, better absorption of opportunities for greater export of products from areas with proven competitive advantages.

The main objective of the present study is to analyze the comparative advantages of Bulgarian production and exports and to outline directions for increasing the competitiveness of the Bulgarian economy. To achieve this main goal: 1.) Bulgaria's positions on the Global Competitiveness Index and the more important criteria related to foreign trade are summarized; 2.) Some theoretical concepts about the comparative competitive advantages are systematized and the indices of B. Balassa and M. Amir are analyzed. On their basis, conclusions are drawn about the comparative advantages of the Bulgarian production and export of specific commodities and commodity groups and the possibilities for expanding or limiting the export of some commodity groups and from there for increasing the competitiveness of the Bulgarian economy.

1. FOREIGN TRADE AS A COMPETITIVENESS CRITERION

The assessment of the competitiveness of the economy can be built on different sets of criteria and sub-criteria. The most important of them and in a sufficiently wide range are being researched annually since 1989 (for Bulgaria since 2006) for many countries in the world and published in the International Competitiveness Yearbook of the Institute for Management Development - IMD, Switzerland.

The IMD Competitiveness Criteria are summarized in an Annex to the Country Profile Yearbook in four main categories, which refer to economic efficiency, government policies, business environment and infrastructure. Each of these four categories covers five sub-criteria. Within the first category of economic efficiency, a sub-criterion on external trade is also included (World Competitiveness Ranking, 2017).

The IMD Yearbook provides much more detailed information and data because the Global Competitiveness Index is subdivided into twelve pillars with detailed multiple sub-criteria for each pillar. In terms of foreign trade, the 6th pillar - which accounts for imports as a percentage of GDP and the 10th pillar - in which exports are included as a percentage of GDP, are of direct relevance.

In recent years, the positions taken by Bulgaria on IMD's core criteria and IMD's external trade sub-criteria are improving.

In the IMD report for 2017-2018, Bulgaria ranked 49th in global competitiveness while in 2012-2013 it was 62nd. According to the size of the foreign market, the country is in 55th place, but we have better positions in exports and imports of goods taken as a percentage of GDP - which are respectively 20th and 26th in 2017 (The Global Competitiveness Report 2017-2018). Improvement is also reflected in the overall assessment of international trade – there Bulgaria is climbing from 20th to 17th place (World Competitiveness Ranking, 2017). The ranking of Bulgaria considering the categories of economic indicators and efficiency is improving more obviously - from 49th place in 2013 we move to 37th place in 2017. This trend is backed strongly by the increasing price competitiveness of Bulgarian production and exports, in which area we have risen

for the last year from 11th to 5th place. Bulgaria occupies the 13th position according to the rate of growth of GDP.

The criteria and sub-criteria researched by the IMD are perceived as representative because they cover a broad set of data, provide a basis for international comparisons and reflect different aspects of the main competitiveness factors revealed in many theoretical concepts. A large number of them take into account, as the leading factors of competitiveness, labor costs, interest rates, exchange rates, economies of scale. In addition, account is taken of the effects of competition on the processes of technical and technological renewal, integration and globalization, which are more intensive in modern times. In this connection, for example, M. Porter stresses, "One country's competitiveness depends on the capacity of its industry to implement and modernize. Companies benefit from the best competitors in the world due to pressure and challenge. They benefit from strong domestic competitors, aggressive local suppliers and demanding local customers." (Porter, 1990) Along with the domestic, there is a growing emphasis on the growing role of external factors, given the accelerating flows of foreign trade and foreign direct investment. In a number of studies, there is a positive correlation between the openness of the economy and the position of the country ranked by competitiveness (Cabolis, 2017). Against this background, the conclusion that "the path to long-term economic growth includes focusing on exports, industry development, energy diversification and the creation of competitive small and medium-sized enterprises" is enhanced (Georgieva et al, 2014).

The effects of the expansion of foreign trade flows are simultaneously projected on competitiveness and economic growth rates, largely depending on the sectoral and commodity structure of exports. However, the different industries have a different level of competitiveness, so there is a need to identify and better absorb the export opportunities of production not of all but mainly in areas with competitive comparative advantages.

2. COMPARATIVE COMPETITIVE ADVANTAGES OF BULGARIAN EXPORTS

To evaluate the competitiveness of with regard to commodities and commodity groups, different theoretical and econometric methods and models can be applied.

The development of the theoretical concepts of foreign trade has been linked in the past to the ideas of Adam Smith and David Ricardo, who, as early as the 18th-19th century, gave rise to classical notions of absolute and relative advantages (Smith, 2010; Ricardo, 2015). The Heckscher-Olin model, which binds the competitiveness of the production and export of certain products more closely with the good availability of certain resources in the country, is particularly important. (Rauch, 1990). Many modern models have a theoretical-empirical character and complement various factors of competitiveness (Velinova, 2006). More prominent among them is the model of B. Balassa (1965, 1979), according to which the comparative advantages depend on the presence of physical and human capital and can change in the process of their accumulation in the given country. The index compiled by B. Balassa finds wide use in empirical research with a different geographic range, but shows some shortcomings for which it is criticized. In an attempt to overcome them and considering that they are due to its multiplication form, Alex Hoen and Jean Oostervahen suggest that the Balassa index be presented in an additive form (Hoen, Oosterhaven, 2006). At a later stage, the role of technologies for different degrees of specialization is emphasized since they are perceived as a potential source of comparative advantages (Dollar, 1993). A number of studies focus on the rejection (Falvey, Rodney, 1981) or confirmation (Rauch, 1990; Deadorff, 1980)] of the prognostic opportunities in present day of the theories of comparative advantages of D. Ricardo and Heckscher-Olin. Certain contributions to the development of approaches to measuring and examining comparative advantages have also been made by T. Vollrath (1991) and

Hadzhiev (2014). Many empirical studies are devoted to the comparative advantages of trade between individual or groups of countries as well as between the countries of the European Union (Mora, 2001; Tullio, 2016; Zhelev, 2009). All of these studies have contributed to the development of methods to measure specific comparative advantages to help highlight sectors where a country has the potential to develop trade more sustainably and achieve economic growth.

In this study the B. Balassa index (1965, 1979) and the M. Amir index (2000) will be applied. They complement each other and make it possible to determine the decisive ("strong") sectors of a country by analyzing data lines for export flows over a given time period. By means of B. Balassa's approach the quantity of "Revealed Comparative Advantages" (RCA) is measured. The manifest shortcomings of the Balassa Index are overcome by the improvement made by M. Amir, who presents the index in a different way.

To determine the specialization of the Bulgarian production, Bulgarian exports will be compared to certain commodity groups and the world exports of the same commodity groups. ITC (International Trade Center, Geneva) statistical information is used for the evaluation of Bulgaria's and world's exports in millions of dollars (see Annex 1). The commodity structure of exports is according to the Harmonized Nomenclature, the data being annual and covering the period 2012-2016.

To determine the relative advantages of Bulgaria's export to world exports, split by commodity groups, the following formula will be applied for calculating the Balassa index (Yarliyska, Dimitrova, 2012):

$$RCA_B^{BG} = \frac{Exp_i^{BG}}{Exp^{BG}} \div \frac{Exp_i^W}{Exp^W}, \quad (1)$$

where:

- RCA_B^{BG} is the Balassa index for Bulgaria,
- Exp_i^{BG} - the value of exports of commodity i from Bulgaria,
- Exp^{BG} - the value of the total exports from Bulgaria,
- Exp_i^W - the value of exports of commodity i in the world,
- Exp^W - the value of the total exports in the world.

The results from the application of formula (1) show that in the case of a competitive advantage, a specific Bulgarian product may be preferred and imported by any country in the world. A competitive advantage is present when the value of the index is greater than one. In such a case there are reasons to stimulate and increase the volume of the exported goods, thus increasing the competitiveness of all exports and the economy of Bulgaria as a whole. When the index is less than one there will be a loss in selling the product. In this case, the export of this commodity/commodity group should be limited, avoided or replaced by exports of other more competitive goods.

The value of the Balassa index is influenced by the relative share of the commodity in the country's total exports as well as by its share in world exports. This index may be too high when the share of the commodity in the country's exports is significant while at the same time it occupies less of the world's exports.

To ignore this shortcoming M. Amir proposes another version of the index (Amir, 2000). The Amir index reflects the change in market shares over the different periods in connection with which it is calculated by another formula (Yarliyska, Dimitrova, 2012). For Bulgaria, the Amir index is as follows:

$$RCA_A^{BG} = \frac{Exp_{it}^{BG}}{Exp_{it}^W} \div \frac{Exp_{it-1}^{BG}}{Exp_{it-1}^W}, \quad (2)$$

where:

RCA_A^{BG} is Amir's index for Bulgaria,

Exp_{it}^{BG} – the value of exports of commodity i from Bulgaria in the current period t,

Exp_{it-1}^{BG} – the value of exports of commodity i from Bulgaria in the previous period t-1,

Exp_{it}^W – the value of exports of commodity i in the world, in the current period t,

Exp_{it-1}^W – the value of exports of commodity i in the world, in the previous period t-1.

When interpreting the results of the Amir model both the RCA index values and the trends in their change are taken into account. When the index is bigger than one, but its value increases, the country's competitiveness in the production and export of certain goods is good and growing. With an RCA lower than one and has declined over the years, the market share shrinks, the country's competitive position in the export of certain goods is not good and worsens.

Based on the values of B. Balasa's indices stronger comparative competitive advantages for Bulgaria are seen in 2016, for example in the production and export of: lead and products made of lead; copper and copper products; wheat; zinc and articles thereof; wool; raw unprocessed leather; tobacco and tobacco products; oilseeds and plants; other seeds and plants for industrial and medical purposes; glass and glassware; fertilizers; garments and accessories for garments not knitted or knitted, etc. (see Annex 2) Despite their relatively lower added value, the export of these commodity groups can be expanded which will lead to increasing the competitiveness of the Bulgarian economy.

In some commodity groups there is a partial manifestation of the deficiency of the Balassa's index - its values for 2016 are high and do not fluctuate around one. This applies, for example, to: lead and articles thereof - with index of 13,4; copper and copper products - with index of 8,6; wheat and cereals - with index of 7,2; zinc and zinc articles etc. For these commodity groups the Balassa Index's conclusions should be accepted with some reservations mainly in order to take into account the results of the Amir index.

According to the values of the Ballasa Index there are also individual export examples in which there are comparative disadvantages. The Balassa index is less than one and underlines the need to limit the export of five commodity groups - iron and steel; cellulose from wood or other fibrous cellulose material like scrap paper; clothing and textiles; mineral fuels, mineral oils and products from their distillation, bituminous substances; pharmaceutical products. If, instead of them, other goods are exported, the contribution to competitiveness and economic growth will be more substantial. However, the Ballasa index for these several commodity groups is lower, but close to one. It is therefore possible to make efforts and achieve comparative advantages in the production and export of these goods.

The values of M. Amir's indices highlight Bulgaria's comparative competitive advantages in other commodities and commodity groups. According to these indices there are reasons to increase the production and export for example of: wheat; oilseeds and plants; other seeds and plants for industrial and medical purposes; clothing and accessories thereof, knitted or crocheted; essential oils, perfumery, cosmetics and toilet preparations; wool, felt and non-woven fabrics; ropes, cables and articles thereof, special yarns; articles of base metal, iron and steel; chemical products etc. (see Annex 2) For these commodity groups the Amir index values are higher and with the most pronounced and one-way upward trend.

It should be emphasized that the different commodity groups, which have been highlighted by the Balassa Index, show, in most cases, another dynamic of the Amir index - towards reduction or fluctuations. This confirms once again the inadequately convincing competitive advantage in these commodity groups. Our declining advantages, according to Amir's index, refer, for example, to lead and its products; copper and copper products; tobacco and manufactured substitutes for tobacco; products from the milling industry, malt, starch etc.

The need to limit exports also applies for goods with a uniquely downward trend in the value of the Amir index over the whole period under review. These include, for example, tobacco and substitutes for tobacco products; garments and clothing accessories not knitted or crocheted; other ready-made clothing and textiles; aircraft, spacecraft and parts for them. Although they are relatively small, these commodity groups are represented in Bulgarian exports and sometimes even in substantial volumes.

The aggregated commodity groups, according to the analysis of the values of the Balassa index or the Amir index, indicate a lagging behind in Bulgaria's production and exports in terms of sustainability and the emergence of higher-ranking advantages. There are still comparative advantages of a lower order, which are attributed to the availability of cheap and skilled labor, the production and use of relatively cheap electricity, the availability of primary raw materials and a favorable tax regime. They are the basis for achieving price competitiveness in which we rise from 11th to 5th place in the IMD rating. However, such advantages are unsustainable, have limited effects, are sensitive to changes in the international environment and are influenced by fluctuations in commodity prices on international markets. As a rule, they are important in creating and exporting products with relatively lower added value, focusing on resource extraction, labor-intensive production, assembly of products. Such advantages diminish their importance in the current conditions of changed competitive environment, especially under the influence of trade liberalization processes and market globalization.

The emerging tendency of broader inclusion in Bulgaria's exports of products with higher added value requires the achievement of more durable advantages of a higher rank. They are associated with the ability to develop high-tech production, to create and export goods with more processing stages and with higher intellectual content. Precisely these need to become priority directions for domestic and foreign investments and for state support in the future. Establishing appropriate prerequisites and implementing an innovative and export-oriented type of economic growth requires more public and private investment in science and research tailored to business needs and practically oriented education, support for start-ups and new high-tech businesses. This is also underlined in the Programme for Enhancing the Competitiveness of the National Economy of Bulgaria for the period 2014-2018.

CONCLUSION

In recent years there have been positive changes in foreign trade flows, which are a sign of a gradual increase in competitiveness and export efficiency. The results of the research of the Balassa Index and the Amir index for Bulgarian exports are not unequivocal, but allow the grouping of commodity groups with distinct competitive advantages as well as competitive disadvantages. They show that despite the emerging and still uneven transition to exports of products with higher added value, the export of low-value, resource-intensive types of products has not been completely overcome. In the context of the opportunities for increasing the competitiveness of the Bulgarian economy it is necessary to stimulate and expand the production and export of high-tech products and the reinvestment of received foreign exchange income and profits.

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Annex 1: Export of Bulgaria and World, commodity groups, 2012-2016*

Unit : US Dollar
thousand

Bulgaria

World

Code	Product label	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016
TOTAL	All products	26698780	29510574	29386540	25778746	26087706	18459708910	18960159283	18970339459	16522585105	15862044431
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...	1852029	2323551	2491128	2509752	2531512	2195126794	2335905031	2403875743	2341918208	2332358812
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...	4319617	4348054	3705473	2737981	2406162	3393026283	3290844969	3045703878	1832063298	1525707478
84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	1848493	2135344	2296710	2043119	2082623	2082248229	2102020648	2160470707	1939245366	1892407158
74	Copper and articles thereof	2787053	3001757	2717826	2289684	1682092	173549530	166088633	156259279	130222858	119025151
10	Cereals	1061191	1579626	1231611	973495	1112363	120311259	123172743	119543275	105118803	93407663
99	Commodities not elsewhere specified	316201	323136	530215	655892	969906	302978922	325416992	369778988	403952483	266198997
62	Articles of apparel and clothing accessories, not knitted or crocheted	949452	1021449	1056250	904332	947272	193387078	208629455	234257478	220625936	221478157
30	Pharmaceutical products	743554	888283	1023735	898226	823557	469677940	490813200	516553337	502746009	505632740
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	557715	694451	743943	711843	780328	1308767389	1355209293	1396237144	1325193827	1345616893
39	Plastics and articles thereof	599831	733895	793728	743146	741403	570361184	603608080	622338322	553761334	546550067
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal ...	728109	1009698	796141	611088	734460	93729964	100967623	100522627	87617941	88984342
61	Articles of apparel and clothing accessories, knitted or crocheted	711828	813329	843061	679282	733713	211725222	231619273	240427392	221728939	220645836
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; ...	468626	530179	634421	594759	646013	210776271	228816421	243774595	238847058	235326924
26	Ores, slag and ash	738818	741613	632145	534048	563410	237423365	249293800	233903965	158831203	158803414
73	Articles of iron or steel	454475	482191	513354	473951	530329	306488411	312230592	319412217	280946420	260001185
72	Iron and steel	922933	819160	728191	455483	442401	427777933	397838484	413529639	327575249	301120127
70	Glass and glassware	328433	340682	397942	391251	423829	71734209	74850209	74336688	69533364	69094426
38	Miscellaneous chemical products	69453	76814	99983	121692	350193	177994975	184777300	192318074	170280547	172158131

76	Aluminium and articles thereof	315929	357569	393738	364934	346724	161200664	165881589	176011843	165592321	158774822
24	Tobacco and manufactured tobacco substitutes	447296	507942	477062	373748	345684	43816441	45656761	45728055	40451309	41179877
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...	342603	287772	307457	285189	318750	554588009	564133374	575095532	543869609	536587572
44	Wood and articles of wood; wood charcoal	352795	364403	420476	352820	315128	119090107	132880599	141572756	126246464	128462011
40	Rubber and articles thereof	175765	233501	268309	261161	292162	221584576	208200370	193835699	167998707	162775777
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	196634	221305	247195	250517	281680	105414920	113436461	118140237	111475061	115638075
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ...	203901	273892	305635	273947	279217	106597550	99226445	96989562	86209014	87204330
95	Toys, games and sports requisites; parts and accessories thereof	149865	181285	218924	231936	270477	91923029	90581865	95356708	95597018	97683707
28	Inorganic chemicals, organic or inorganic compounds of precious metals, of rare-earth metals, ...	302683	278248	298595	283159	262062	129659430	126119710	121642216	110923462	99763006
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	189105	236570	261546	241960	254955	167608136	172851166	174640988	157042655	154350570
31	Fertilisers	260406	226063	241410	263557	243314	74911199	66999808	65081516	64254991	49904314
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	194967	225888	241489	237342	237049	57987076	64727263	68159251	63264203	65560636
64	Footwear, gaiters and the like; parts of such articles	244949	262176	283426	236096	224640	117820675	129196468	142105686	134258404	135070716
23	Residues and waste from the food industries; prepared animal fodder	193937	254712	276256	233445	210570	73035475	81607877	82909078	71779635	68563029
02	Meat and edible meat offal	216055	187408	200993	167460	199195	117630751	124635571	131689693	109617492	113418302
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere ...	186802	231678	244671	207662	186443	81626334	93536885	97658045	75009013	72505318
69	Ceramic products	193880	190320	201260	174298	176275	47394719	51574478	56033434	57046900	50385688
18	Cocoa and cocoa preparations	74538	106270	135594	167877	172469	43954524	43961513	49851422	47680972	49545272
79	Zinc and articles thereof	166870	153934	187726	161009	163001	14980095	14031487	15752674	14802073	14419545
78	Lead and articles thereof	139458	171117	191081	159930	154807	6875395	7513019	7576719	6643689	7023905
20	Preparations of vegetables, fruit, nuts or other parts of plants	123399	132385	140023	133749	137554	57252982	61227268	61694658	62851740	58748363
22	Beverages, spirits and vinegar	165738	166752	147662	134275	136187	107945103	113676609	113438252	104699069	106141318
83	Miscellaneous articles of base metal	79454	84665	101254	107085	128200	58821441	62706486	67013129	64239841	62788763

'55	Man-made staple fibres	115083	129175	136822	120098	124472	39886235	41087320	42333892	39092190	36512990
'51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	107593	122976	129893	125295	117937	14552331	14516498	14347952	13260683	12551266
'25	Salt; sulphur; earths and stone; plastering materials, lime and cement	102843	105892	110037	110323	114774	46226048	45746955	46875951	42123248	38106987
'08	Edible fruit and nuts, peel of citrus fruit or melons	95265	116604	113394	112455	112019	90745108	99578053	105365162	103815656	107233198
'09	Coffee, tea, maté and spices	83406	78140	100415	96196	105063	48407674	45185670	49945858	48016409	47300137
'68	Articles of stone, plaster, cement, asbestos, mica or similar materials	73221	73536	77429	79380	96804	45221587	49665843	52612145	50494306	49081198
'07	Edible vegetables and certain roots and tubers	73281	77535	90566	78658	94824	58646583	66397955	67170263	61345189	69251988
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	106433	111632	108998	89524	94762	56681613	62444385	66432108	61266206	60087849
'17	Sugars and sugar confectionery	146738	130717	103878	89013	94504	52950833	51893883	46894414	40240643	42851900
'21	Miscellaneous edible preparations	61191	71385	82620	83687	90783	56861913	63095996	66566931	62362286	64809884
'86	Railway or tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures ...	100099	98366	95808	87603	79795	44351554	40294501	43356197	38324080	32183071
'34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial ...	57379	78144	79646	69589	76454	56077563	58329673	60056592	53679858	54162205
'29	Organic chemicals	107442	94102	93042	92251	75694	446629207	452114818	434907214	370637883	350800123
'16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	31398	45884	65102	57061	75506	47445802	50037023	49946639	44324289	44639733
'71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...	219906	120505	101334	65544	75089	777547712	863857693	719694330	635642378	637581441
'55	Albuminoidal substances; modified starches; glues; enzymes	64566	80414	86273	81260	73945	26566670	28529468	29909081	26989428	26473008
'47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or ...	58388	74710	72898	63930	65279	45477016	46465871	46358156	44143158	43087110
'42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles ...	54189	56027	65808	64108	64712	69218316	75075898	76631969	74998666	73749129
'54	Man-made filaments; strip and the like of man-made textile materials	45157	46182	46003	43854	63627	48116333	50358793	51264591	47034659	44617907
'56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	24464	32986	35698	40815	49044	22408428	23879860	25420803	23970435	23465892
'11	Products of the milling industry; malt; starches; inulin; wheat gluten	83159	85401	95419	51741	47111	18456192	19407493	19689985	18192968	17019204

96	Miscellaneous manufactured articles	36489	56286	56690	48798	45929	43648325	47426162	50193253	48269152	48911492
101	Live animals	33349	24861	18919	26199	43991	22261263	23310349	24512600	19226935	20367860
52	Cotton	30774	38438	41586	39520	41670	67758062	72036985	64078701	56354331	51183868
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, ...	27031	29258	33563	40866	38878	43619311	45993654	46127858	38581388	36268262
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	39568	41041	43117	38657	38026	62923588	65035467	68129281	62202017	60324632
60	Knitted or crocheted fabrics	28390	31317	34346	32135	31070	30302333	32845395	34086135	33677694	32337159
103	Fish and crustaceans, molluscs and other aquatic invertebrates	28379	31169	26745	27925	30697	95867197	104826130	112889371	97394141	109921485
52	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring ...	27575	32598	32746	32790	26567	79646926	82057921	83892226	73893685	73943426
41	Raw hides and skins (other than furskins) and leather	36151	30855	26707	29413	24435	31944871	35692322	36402535	30163436	26342115
89	Ships, boats and floating structures	53642	5036	15785	8491	16999	158413279	146612793	138798883	133241520	123637347
16	Clocks and watches and parts thereof	15324	18735	14018	17207	16634	52824048	55408912	57550594	55326989	49947040
57	Carpets and other textile floor coverings	12136	16305	20291	18783	16520	14834147	15915818	16407043	14770721	14673576
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	5553	8575	11420	10894	12003	12708084	13394112	13639767	12628177	12121569
106	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	8342	9357	8748	7508	11008	20858874	22152782	22484695	19318596	19846441
81	Other base metals; cermet; articles thereof	14859	11764	12556	10425	10302	18519124	17764610	18753586	16835225	15619472
105	Products of animal origin, not elsewhere specified or included	3851	6702	9278	6755	7339	9500890	10448149	10741767	8636471	8540887
65	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable ...	3446	4148	6089	6596	6801	24581973	25498411	26299293	24033104	23915631
88	Aircraft, spacecraft, and parts thereof	55817	35323	16006	9415	6750	287301601	313657254	322087459	331954984	328657803
65	Headgear and parts thereof	3317	4529	5678	4088	4541	7648146	8465489	9135945	8885990	9163539
92	Musical instruments; parts and accessories of such articles	3023	2693	3939	3508	3701	6643367	6538383	6658552	6320981	6182091
96	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	6109	6132	5000	4310	3474	4395087	4647848	6535704	4460129	4176609
43	Fur skins and artificial fur; manufactures thereof	1070	2775	1638	1181	3120	12231489	14873309	12565476	11116066	8215224
96	Umbrellas, sun umbrellas, walking sticks, seat-sticks, whips, riding-crops and parts thereof	3342	4047	3636	3210	3087	3561440	3756255	4019199	3868794	3536314

'13	Lac; gums, resins and other vegetable saps and extracts	1352	1634	2492	2978	2484	12722531	9312264	8703323	7092869	7026654
'50	Silk	2561	2388	2444	1965	2222	3136902	3112103	2865962	2457651	2139408
'53	Other vegetable textile fibres, paper yarn and woven fabrics of paper yarn	2640	2897	2507	2761	1951	4004404	4282180	4718070	4675223	4139813
'57	Photographic or cinematographic goods	20817	3770	3278	1647	1765	17935116	17263190	16486031	14647533	14536761
'97	Works of art, collectors' pieces and antiques	901	1617	3323	2041	1745	23524488	24773812	27703010	29207824	28383064
'67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles ...	2566	2714	2553	1320	1709	7174940	7908811	8652090	8867710	7337399
'45	Cork and articles of cork	421	639	675	571	775	1700561	1761244	1822703	1596275	1642808
'14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	872	702	702	967	646	803514	818029	899200	904494	905445
'46	Manufactures of straw, of esparto or of other plaiting materials; basket ware and wickerwork	185	344	391	360	229	2520211	2440519	2451225	2367703	2253668
'75	Nickel and articles thereof	2351	12180	395	615	171	28671896	29128241	31751921	26272486	19326367
'80	Tin and articles thereof	537	365	557	282	155	8331101	8045403	7855204	5406786	5147798
'95	Arms and ammunition; parts and accessories thereof	1	0	2	2	2	15910717	18524488	13438935	16209664	14790498

* Source: International Trade Centre data.

Annex 2: Balassa Index and Amir Index for Bulgaria, 2012-2016*

Commodity Groups		Balassa index Bulgaria / World										Amir index Bulgaria / World							
Code	Product label	Balassa 2012		Balassa 2013		Balassa 2014		Balassa 2015		Balassa 2016		Amir 2013		Amir 2014		Amir 2015		Amir 2016	
'78	Lead and articles thereof	14.024	n/a	14.633	↑	16.280	↑	15.429	↓	13.401	↓	15.568	n/a	16.410	↑	15.533	↓	14.758	↓
'74	Copper and articles thereof	11.103	n/a	11.612	↑	11.228	↓	11.269	↑	8.593	↓	10.819	n/a	10.558	↓	10.783	↑	8.181	↓
'10	Cereals	6.098	n/a	8.240	↑	6.651	↓	5.936	↓	7.241	↑	8.213	n/a	6.451	↓	5.993	↓	6.702	↑
'79	Zinc and articles thereof	7.702	n/a	7.048	↓	7.693	↑	6.972	↓	6.873	↓	6.428	n/a	8.632	↑	7.522	↓	6.974	↓
'51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5.112	n/a	5.443	↑	5.844	↑	6.056	↑	5.713	↓	5.286	n/a	5.773	↑	6.426	↑	5.633	↓
'24	Tobacco and manufactured tobacco substitutes	7.058	n/a	7.148	↑	6.735	↓	5.922	↓	5.104	↓	7.251	n/a	6.742	↓	6.015	↓	5.412	↓
'12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal ...	5.371	n/a	6.425	↑	5.113	↓	4.470	↓	5.019	↑	6.738	n/a	5.087	↓	4.474	↓	5.309	↑
'70	Glass and glassware	3.166	n/a	2.924	↓	3.456	↑	3.606	↑	3.730	↑	2.971	n/a	3.430	↑	3.873	↑	3.860	↓
'31	Fertilisers	2.403	n/a	2.168	↓	2.395	↑	2.629	↑	2.965	↑	1.888	n/a	2.325	↑	2.980	↑	2.398	↓
'62	Articles of apparel and clothing accessories, not knitted or crocheted	3.395	n/a	3.146	↓	2.911	↓	2.627	↓	2.601	↓	3.304	n/a	3.267	↓	2.841	↓	2.719	↓
'99	Commodities not elsewhere specified	0.722	n/a	0.638	↓	0.926	↑	1.041	↑	2.215	↑	0.667	n/a	1.051	↑	1.305	↑	1.521	↑
'19	Preparations of cereals, flour, starch or milk; pastrycooks' products	2.325	n/a	2.242	↓	2.287	↑	2.405	↑	2.198	↓	2.437	n/a	2.407	↓	2.562	↑	2.373	↓
'26	Ores, slag and ash	2.152	n/a	1.911	↓	1.745	↓	2.155	↑	2.157	↑	1.954	n/a	1.636	↓	1.680	↑	2.247	↑
'69	Ceramic products	2.828	n/a	2.371	↓	2.319	↓	1.958	↓	2.127	↑	2.512	n/a	2.518	↑	2.289	↓	1.957	↓
'18	Cocoa and cocoa preparations	1.172	n/a	1.553	↑	1.756	↑	2.257	↑	2.117	↓	1.512	n/a	1.990	↑	2.478	↑	2.291	↓
'55	Man-made staple fibres	1.995	n/a	2.020	↑	2.086	↑	1.969	↓	2.073	↑	2.026	n/a	2.149	↑	2.088	↓	2.017	↓
'61	Articles of apparel and clothing accessories, knitted or crocheted	2.325	n/a	2.256	↓	2.264	↑	1.964	↓	2.022	↑	2.403	n/a	2.348	↓	2.079	↓	2.096	↑
'15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ...	1.323	n/a	1.773	↑	2.034	↑	2.037	↑	1.947	↓	1.607	n/a	1.987	↑	2.079	↑	2.051	↓
'23	Residues and waste from the food industries; prepared animal fodder	1.836	n/a	2.005	↑	2.151	↑	2.084	↓	1.867	↓	2.182	n/a	2.184	↑	2.072	↓	1.858	↓
'25	Salt; sulphur; earths and stone; plastering	1.538	n/a	1.487	↓	1.515	↑	1.679	↑	1.831	↑	1.433	n/a	1.552	↑	1.732	↑	1.726	↓

	materials, lime and cement																		
'35	Albuminoidal substances; modified starches; glues; enzymes	1.680	n/a	1.811	↑	1.862	↑	1.930	↑	1.698	↓	1.893	n/a	1.951	↑	1.999	↑	1.735	↓
'95	Toys, games and sports requisites; parts and accessories thereof	1.127	n/a	1.286	↑	1.482	↑	1.555	↑	1.684	↑	1.234	n/a	1.559	↑	1.790	↑	1.792	↑
'11	Products of the milling industry; malt; starches; inulin; wheat gluten	3.115	n/a	2.827	↓	3.128	↑	1.823	↓	1.683	↓	2.894	n/a	3.172	↑	1.934	↓	1.640	↓
'94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; ...	1.537	n/a	1.489	↓	1.680	↑	1.596	↓	1.669	↑	1.573	n/a	1.789	↑	1.795	↑	1.713	↓
'28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, ...	1.614	n/a	1.417	↓	1.585	↑	1.636	↑	1.597	↓	1.342	n/a	1.528	↑	1.713	↑	1.496	↓
'04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere ...	1.582	n/a	1.591	↑	1.617	↑	1.774	↑	1.564	↓	1.775	n/a	1.688	↓	1.565	↓	1.574	↑
'86	Railway or tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures ...	1.560	n/a	1.568	↑	1.427	↓	1.465	↑	1.508	↑	1.387	n/a	1.534	↑	1.487	↓	1.319	↓
'44	Wood and articles of wood; wood charcoal	2.048	n/a	1.762	↓	1.917	↑	1.791	↓	1.492	↓	1.914	n/a	2.042	↑	1.834	↓	1.581	↓
'33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	1.290	n/a	1.253	↓	1.351	↑	1.440	↑	1.481	↑	1.313	n/a	1.406	↑	1.560	↑	1.600	↑
'20	Preparations of vegetables, fruit, nuts or other parts of plants	1.490	n/a	1.389	↓	1.465	↑	1.364	↓	1.424	↑	1.446	n/a	1.476	↑	1.595	↑	1.386	↓
'09	Coffee, tea, maté and spices	1.191	n/a	1.111	↓	1.298	↑	1.284	↓	1.351	↑	1.010	n/a	1.434	↑	1.417	↓	1.386	↓
'17	Sugars and sugar confectionery	1.916	n/a	1.618	↓	1.430	↓	1.418	↓	1.341	↓	1.544	n/a	1.292	↓	1.397	↑	1.487	↑
'76	Aluminium and articles thereof	1.355	n/a	1.385	↑	1.444	↑	1.413	↓	1.328	↓	1.388	n/a	1.531	↑	1.526	↓	1.326	↓
'01	Live animals	1.036	n/a	0.685	↓	0.498	↓	0.873	↑	1.313	↑	0.699	n/a	0.524	↓	0.787	↑	1.449	↑
'56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	0.755	n/a	0.887	↑	0.907	↑	1.091	↑	1.271	↑	0.921	n/a	0.965	↑	1.182	↑	1.296	↑
'83	Miscellaneous articles of base metal	0.934	n/a	0.867	↓	0.975	↑	1.068	↑	1.241	↑	0.900	n/a	1.042	↑	1.176	↑	1.264	↑
'73	Articles of iron or steel	1.025	n/a	0.992	↓	1.038	↑	1.081	↑	1.240	↑	0.984	n/a	1.061	↑	1.092	↑	1.196	↑
'38	Miscellaneous chemical products	0.270	n/a	0.267	↓	0.336	↑	0.458	↑	1.237	↑	0.270	n/a	0.349	↑	0.466	↑	1.303	↑
'68	Articles of stone, plaster, cement, asbestos, mica or similar materials	1.119	n/a	0.951	↓	0.950	↓	1.008	↑	1.199	↑	1.017	n/a	1.006	↓	1.110	↑	1.214	↑

'40	Rubber and articles thereof	0.548	n/a	0.721	↑	0.894	↑	0.996	↑	1.091	↑	0.659	n/a	0.831	↑	0.991	↑	1.101	↑
'02	Meat and edible meat offal	1.270	n/a	0.966	↓	0.985	↑	0.979	↓	1.068	↑	0.997	n/a	1.040	↑	0.936	↓	1.151	↑
'16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	0.458	n/a	0.589	↑	0.841	↑	0.825	↓	1.028	↑	0.605	n/a	0.839	↑	0.841	↑	1.079	↑
'64	Footwear, gaiters and the like; parts of such articles	1.437	n/a	1.304	↓	1.288	↓	1.127	↓	1.011	↓	1.392	n/a	1.415	↑	1.223	↓	1.060	↓
'48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	0.780	n/a	0.879	↑	0.967	↑	0.988	↑	1.004	↑	0.883	n/a	0.976	↑	1.020	↑	1.028	↑
'30	Pharmaceutical products	1.095	n/a	1.163	↑	1.279	↑	1.145	↓	0.990	↓	1.183	n/a	1.346	↑	1.280	↓	1.037	↓
'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...	0.880	n/a	0.849	↓	0.785	↓	0.958	↑	0.959	↑	0.802	n/a	0.726	↓	0.662	↓	0.832	↑
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	1.298	n/a	1.149	↓	1.059	↓	0.937	↓	0.959	↑	1.232	n/a	1.126	↓	0.992	↓	0.980	↓
'47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or ...	0.888	n/a	1.033	↑	1.015	↓	0.928	↓	0.921	↓	1.028	n/a	1.012	↓	1.015	↑	0.937	↓
'72	Iron and steel	1.492	n/a	1.323	↓	1.137	↓	0.891	↓	0.893	↑	1.198	n/a	1.181	↓	0.811	↓	0.855	↑
'54	Man-made filaments; strip and the like of man-made textile materials	0.649	n/a	0.589	↓	0.579	↓	0.598	↑	0.867	↑	0.600	n/a	0.589	↓	0.630	↑	0.857	↑
'34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial ...	0.707	n/a	0.861	↑	0.856	↓	0.831	↓	0.858	↑	0.872	n/a	0.881	↑	0.853	↓	0.902	↑
'21	Miscellaneous edible preparations	0.744	n/a	0.727	↓	0.801	↑	0.860	↑	0.852	↓	0.785	n/a	0.845	↑	0.925	↑	0.922	↓
'07	Edible vegetables and certain roots and tubers	0.864	n/a	0.750	↓	0.870	↑	0.822	↓	0.833	↑	0.827	n/a	0.880	↑	0.862	↓	0.979	↑
'39	Plastics and articles thereof	0.727	n/a	0.781	↑	0.823	↑	0.860	↑	0.825	↓	0.805	n/a	0.848	↑	0.879	↑	0.848	↓
'22	Beverages, spirits and vinegar	1.062	n/a	0.942	↓	0.840	↓	0.822	↓	0.780	↓	0.966	n/a	0.838	↓	0.871	↑	0.824	↓
'57	Carpets and other textile floor coverings	0.566	n/a	0.658	↑	0.798	↑	0.815	↑	0.685	↓	0.688	n/a	0.823	↑	0.842	↑	0.708	↓
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	0.614	n/a	0.653	↑	0.686	↑	0.675	↓	0.669	↓	0.641	n/a	0.705	↑	0.696	↓	0.680	↓
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...	0.583	n/a	0.639	↑	0.669	↑	0.687	↑	0.660	↓	0.662	n/a	0.688	↑	0.768	↑	0.685	↓
'49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, ...	0.428	n/a	0.409	↓	0.470	↑	0.679	↑	0.652	↓	0.420	n/a	0.471	↑	0.652	↑	0.638	↓

'08	Edible fruit and nuts; peel of citrus fruit or melons	0.726	n/a	0.752	↑	0.695	↓	0.694	↓	0.635	↓	0.804	n/a	0.735	↓	0.785	↑	0.683	↓
'50	Silk	0.564	n/a	0.493	↓	0.551	↑	0.512	↓	0.632	↑	0.476	n/a	0.507	↑	0.505	↓	0.573	↑
'58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	0.302	n/a	0.411	↑	0.540	↑	0.553	↑	0.602	↑	0.422	n/a	0.550	↑	0.588	↑	0.602	↑
'60	Knitted or crocheted fabrics	0.648	n/a	0.613	↓	0.650	↑	0.612	↓	0.584	↓	0.646	n/a	0.675	↑	0.694	↑	0.584	↓
'96	Miscellaneous manufactured articles	0.578	n/a	0.763	↑	0.729	↓	0.648	↓	0.571	↓	0.807	n/a	0.771	↓	0.715	↓	0.603	↓
'41	Raw hides and skins (other than furskins) and leather	0.782	n/a	0.555	↓	0.474	↓	0.625	↑	0.564	↓	0.604	n/a	0.483	↓	0.595	↑	0.513	↓
'42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles ...	0.541	n/a	0.479	↓	0.554	↑	0.548	↓	0.534	↓	0.506	n/a	0.566	↑	0.616	↑	0.546	↓
'66	Umbrellas, sun umbrellas, walking sticks, seat-sticks, whips, riding-crops and parts thereof	0.649	n/a	0.692	↑	0.584	↓	0.532	↓	0.531	↓	0.711	n/a	0.625	↓	0.588	↓	0.505	↓
'05	Products of animal origin, not elsewhere specified or included	0.280	n/a	0.412	↑	0.558	↑	0.501	↓	0.522	↑	0.441	n/a	0.573	↑	0.463	↓	0.538	↑
'36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	0.961	n/a	0.848	↓	0.494	↓	0.619	↑	0.506	↓	0.873	n/a	0.694	↓	0.485	↓	0.493	↑
'52	Cotton	0.314	n/a	0.343	↑	0.419	↑	0.449	↑	0.495	↑	0.355	n/a	0.372	↑	0.454	↑	0.468	↑
'14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	0.750	n/a	0.551	↓	0.504	↓	0.685	↑	0.434	↓	0.547	n/a	0.554	↑	0.791	↑	0.452	↓
'81	Other base metals; cermets; articles thereof	0.555	n/a	0.425	↓	0.432	↑	0.397	↓	0.401	↑	0.397	n/a	0.456	↑	0.409	↓	0.388	↓
'82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	0.435	n/a	0.405	↓	0.409	↑	0.398	↓	0.383	↓	0.408	n/a	0.428	↑	0.418	↓	0.387	↓
'92	Musical instruments; parts and accessories of such articles	0.315	n/a	0.265	↓	0.382	↑	0.356	↓	0.364	↑	0.254	n/a	0.389	↑	0.388	↓	0.371	↓
'90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...	0.427	n/a	1.831	↑	0.345	↓	0.336	↓	0.361	↑	0.325	n/a	1.965	↑	0.365	↓	0.371	↑
'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.295	n/a	0.329	↑	0.344	↑	0.344	↑	0.353	↑	0.332	n/a	0.354	↑	0.375	↑	0.373	↓
'06	Live trees and other plants; bulbs, roots and	0.277	n/a	0.271	↓	0.251	↓	0.249	↓	0.337	↑	0.281	n/a	0.255	↓	0.246	↓	0.361	↑

	the like; cut flowers and ornamental foliage																		
'65	Headgear and parts thereof	0.300	n/a	0.344	↑	0.401	↑	0.295	↓	0.301	↑	0.370	n/a	0.433	↑	0.329	↓	0.324	↓
'45	Cork and articles of cork	0.171	n/a	0.233	↑	0.239	↑	0.229	↓	0.287	↑	0.235	n/a	0.247	↑	0.231	↓	0.307	↑
'53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	0.456	n/a	0.435	↓	0.343	↓	0.379	↑	0.287	↓	0.453	n/a	0.378	↓	0.431	↑	0.264	↓
'43	Furskins and artificial fur; manufactures thereof	0.060	n/a	0.120	↑	0.084	↓	0.068	↓	0.231	↑	0.142	n/a	0.071	↓	0.069	↓	0.178	↑
'32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring ...	0.239	n/a	0.255	↑	0.252	↓	0.284	↑	0.218	↓	0.256	n/a	0.257	↑	0.288	↑	0.228	↓
'13	Lac; gums, resins and other vegetable saps and extracts	0.073	n/a	0.113	↑	0.185	↑	0.269	↑	0.215	↓	0.080	n/a	0.173	↑	0.252	↑	0.222	↓
'91	Clocks and watches and parts thereof	0.201	n/a	0.217	↑	0.157	↓	0.199	↑	0.202	↑	0.222	n/a	0.163	↓	0.220	↑	0.190	↓
'59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable ...	0.097	n/a	0.105	↑	0.149	↑	0.176	↑	0.173	↓	0.106	n/a	0.154	↑	0.185	↑	0.179	↓
'03	Fish and crustaceans, molluscs and other aquatic invertebrates	0.205	n/a	0.191	↓	0.153	↓	0.184	↑	0.170	↓	0.203	n/a	0.165	↓	0.182	↑	0.200	↑
'67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles ...	0.247	n/a	0.220	↓	0.190	↓	0.095	↓	0.142	↑	0.237	n/a	0.208	↓	0.112	↓	0.122	↑
'29	Organic chemicals	0.166	n/a	0.134	↓	0.138	↑	0.160	↑	0.131	↓	0.132	n/a	0.133	↑	0.156	↑	0.129	↓
'89	Ships, boats and floating structures	0.234	n/a	0.022	↓	0.073	↑	0.041	↓	0.084	↑	0.020	n/a	0.069	↑	0.045	↓	0.081	↑
'37	Photographic or cinematographic goods	0.803	n/a	0.140	↓	0.128	↓	0.072	↓	0.074	↑	0.131	n/a	0.123	↓	0.074	↓	0.076	↑
'71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...	0.196	n/a	0.090	↓	0.091	↑	0.066	↓	0.072	↑	0.097	n/a	0.076	↓	0.067	↓	0.075	↑
'46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	0.051	n/a	0.091	↑	0.103	↑	0.097	↓	0.062	↓	0.085	n/a	0.103	↑	0.108	↑	0.061	↓
'97	Works of art, collectors' pieces and antiques	0.026	n/a	0.042	↑	0.077	↑	0.045	↓	0.037	↓	0.043	n/a	0.087	↑	0.054	↓	0.038	↓
'80	Tin and articles thereof	0.045	n/a	0.029	↓	0.046	↑	0.033	↓	0.018	↓	0.027	n/a	0.045	↑	0.026	↓	0.018	↓
'88	Aircraft, spacecraft, and parts thereof	0.134	n/a	0.072	↓	0.032	↓	0.018	↓	0.012	↓	0.077	n/a	0.033	↓	0.022	↓	0.013	↓
'75	Nickel and articles thereof	0.057	n/a	0.269	↑	0.008	↓	0.015	↑	0.005	↓	0.266	n/a	0.009	↓	0.014	↑	0.004	↓
'93	Arms and ammunition; parts and accessories thereof	0.000	n/a	0.000	↓	0.000	↑	0.000	↓	0.000	↑	0.000	n/a	0.000	↑	0.000	↑	0.000	↓

Sources: calculations based on UN COMTRADE statistics.