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Evaluation of Comparative Advantage of Azerbaijan Export Products

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Abstract. In this paper, we estimated by using 2013-2017 statistical data and applying Balassa method on six-digit codes subheading more than 2000 commodity`s revealed comparative advantage. Result of the estimation showed that, Azerbaijan have revealed comparative advantage on agriculture products, mineral products, and numerous manufacturing products. Exporting raw materials and semi-finished products that have comparative advantage leads to loosing value added on those products. In this regard, the deepening of processing on many products is important for the country.

Оценка сравнительного преимущества экспортной продукции Азербайджана

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НАУЧНО-ИССЛЕДОВАТЕЛЬСКИЙ ИНСТИТУТ ЭКОНОМИЧЕСКИХ РЕФОРМ
Баку,
Республика Азербайджан

Аннотация. В статье на основе статистических данных за 2013-2017 годы с использованием метода Балассы оценивается сравнительное преимущество более 200 товарных субпозиций, кодируемых 6-значным кодом в соответствии с гармонизированной товарной номенклатурой внешнеэкономической деятельности. Результаты оценки показали, что Азербайджан имеет сравнительное преимущество по сельскохозяйственной продукции, минеральным продуктам и некоторым товарам перерабатывающей промышленности. Экспорт сырья и полуфабрикатов, имеющих сравнительные преимущества, приводит к потере добавленной стоимости этих продуктов. В связи с этим для страны важно углубление переработки по многим видам продуктов.

Key words: revealed comparative advantage, competitiveness, Balassa index, import, export, Azerbaijan.

Ключевые слова: выявленное сравнительного преимущество, конкурентоспособность, индекс Балассы, импорт, экспорт, Азербайджан.

JEL classification: F14, C82, B41

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Introduction

Competitiveness of each country is defined by macro and microeconomic factors. One of the key indicators of competitiveness within macroeconomic factors is the volume of exports and its specific weight in the gross domestic product. The increase in exports depends on the regulation of both domestic and foreign markets, which is the use of the country's existing resources. Although the modern development of the Azerbaijani economy has been ensured by the increase in the export of hydrocarbon resources, the products exported across other sectors of the economy are distinguished. Like other oil exporters, Azerbaijan tries to diversify exports through other products, reducing oil exports in its economic policy. Approval of strategic road maps, which currently identifies the priorities of the country's economy, also supports economic activity that is compatible with international trends by developing the non-oil sector.

1. Literature review

It is known that most open economies seek to gain competitive advantage in international trade, to produce products that meet the requirements of the international market, and to export products that have the advantage over other countries.

Historically, countries exporting products with comparative advantage have been the object of research on economic policy J.S. Mill and A. Smith formulate the theory of absolute advantages to justify the idea of foreign trade liberty. The theory of absolute advantages of A. Smith was later organized the basis of the theory of comparative advantage developed by D. Ricardo, Richard E. Hecker and B. Olin [4, pp.64]. According to the theory of absolute advantages, the product produced in the country is exchanged with products that have less production costs in other countries after paying domestic demand, and there are products that each country has, with less production costs than other countries. Ricardo, however, developed the idea of absolute advantage theory and announced the theory of comparative advantage. In this theory, Ricardo notes that each country has a relative advantage over the export of a product to other products [5]. Comparative advantage in the development and evolution of the theory of international trade is always the basic concept. Comparative advantage analysis is a useful tool that can be used to compare relative costs of production in the economy and identify the sectors and markets with the highest probability of being potentially successful. Balassa Index is widely used to measure the comparative advantage of economic sectors. Thus, numerous studies of comparative superiority have been implemented in different countries.

Chunyan Yu and Chunjie Qi (2015) used OCA, Trade Complementary Index, TCI and Grubel-Lloyd Index (GL) to analyze complementarity and comparative advantages between China and Central and Eastern European countries. The findings show that China's trade with agricultural products in Central and Eastern Europe has high potential for high productivity, comparable advantage, and potential for intra-field trade [2].

Ferti and Hubbard (2002) estimated that Hungary's agricultural competitiveness in front of the European Union was based on four identifiable comparative pricing indexes. These indexes are the Balassa index, the relative trade advantage, the relative export advantage, the relative export priority (the original Balassa index), and relative competition (the difference between the logarithmic values of relative import and export advantages). The results showed that Hungary was less important in determining whether Hungary had a comparative advantage over a particular product group, but the comparative advantage was useful as a binary measure [6].

Gupta and Kumar (2017) have analyzed the RCA's, Ballasa Index to determine Rwanda's trade routes. It has

been revealed that rising reduction has been observed as a result of the sharp competition with other exporting countries in Rwandan's initial export product lines. Therefore, the government must promote reforms in the industrial sector and open up the economy for more industry, especially in agriculture and leather goods [8].

Doris Granabetter (2016) analyzed and evaluated export competitiveness of Austrian district of Burgenland through the RCA index in 2010-2014. The results show that Burgenland has important exports of agricultural products and that economic relationships with neighboring countries are deepening [7].

M. Shahinli (2014) analyzed revealed comparative advantage and competitiveness of Turkey agricultural sector. For this analysis, he used food and agricultural trade date for the years 2000 to 2011. The RCA index was calculated for the 601 agricultural items for Turkey. According to calculations based on the Balassa's RCA index, Turkey was found to have a strong competiveness in the 78 agricultural items in comparison to the global market [10].

2. Current situation of export in Azerbaijan

Looking at the overall figure of the country's economy, it is clear that the gross domestic product (GDP) and export growth rates for 1995-2017 are relatively proportional.

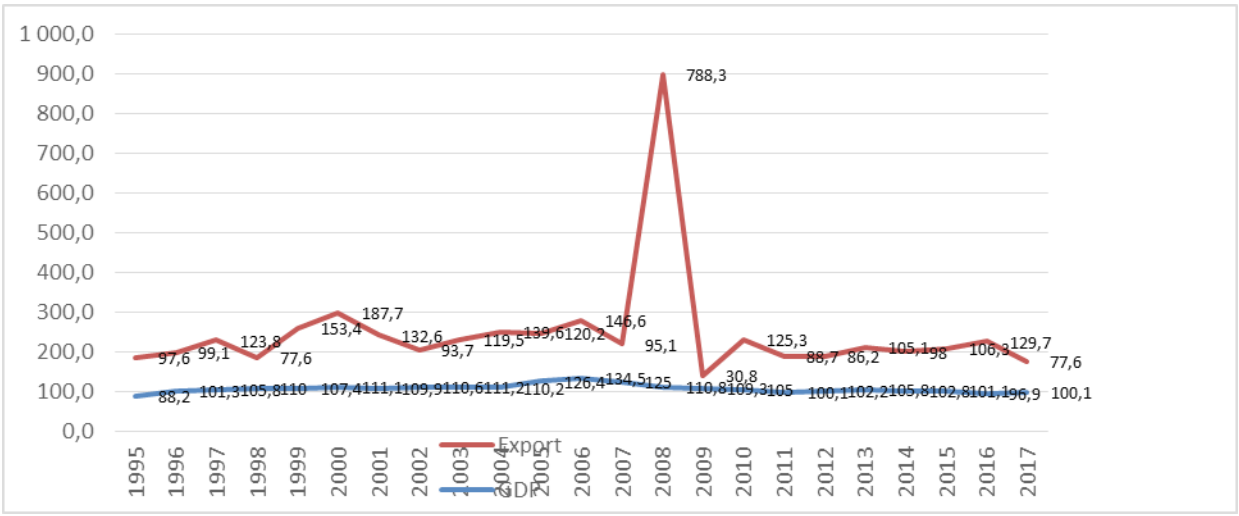

Figure 1. Growth rate of GDP and Export, as percent to previous year
Source: State Statistical Committee of the Republic of Azerbaijan

Export is a key component of GDP, which plays an important role in its formation. Considering the growth rate of exports and GDP during the analyzed period, it turns out that there are more fluctuations in the rate of export growth compared to GDP. This is related with the fact that over 84% of the country's exports are accounted by mineral fuel (gas, oil, gas) and changes in world oil prices. As it is seen from the graph, oil prices in 2008 reached the peak of the last 30 years, which led to an increase in exports. Fold decline in the manat's rate in 2015 has stimulated exports in 2016, while GDP has also significantly decreased. In 2017, the growth rate of exports declined by 22.4 percent compared to the previous year. At the same time, the key export partners with a high share of the country in 2017 were Italy, Turkey, Israel, Russian Federation, Czech Republic, Canada, Georgia, Indonesia, Germany, Portugal, China, India and Ukraine. As regards the dynamics of exports to 10 countries with key export partners in 2013-2017, we can note that in recent years, exports to Germany, Indonesia, Israel and the Russian Federation decreased, while exports to the Czech Republic, Italy, Canada, Portugal and Turkey increased.

According to the above-mentioned countries, the total volume of export in 2017 is 71.9 percent of total exports, amounting to $ 9923.1 million.

In the same period, the products generating more foreign currency flows to the country are presented in Table 2. The weight of exports of mineral fuels, oils and their products, in these products was high in the analyzed period, which was related to the export of crude oil and gas from the country. Changes in oil prices have led to a decline in exports since 2015. From the observed commodity group, since 2013, there has been an increase in the production of fruits and nuts, vegetables, pearls, precious stones, precious metals, aluminum and articles thereof, organic chemicals and cotton exports, plastic articles thereof, sugar and sugar confectionery exports decreased.

Although oil and oil products exports started to decline in 2015, exports of agricultural products, mainly tomatoes, dates, and nuts have increased. In general,

Countries	2013	2014	2015	2016	2017	Graphic description
Canada	0.05	220.25	223.72	98.13	534.28	
Czech Republic	215.92	592.04	549.52	214.37	556.85	
Georgia	519.18	529.55	496.20	416.64	471.35	
Germany	1356.74	1925.56	1223.96	610.83	450.46	
Indonesia	2771.82	2012.32	477.82	77.46	465.13	
Israel	1260.70	1766.95	801.53	664.11	638.94	
Italy	5989.66	4805.62	2254.33	4333.75	4406.43	
Portugal	525.76	552.15	368.87	331.28	446.34	
Russian Federation	1077.84	640.27	417.76	409.26	587.03	
Turkey	525.99	502.49	1477.26	1185.66	1366.34	

Table 1. Dynamics of exports by major countries, million US dollars
Source: State Statistical Committee of the Republic of Azerbaijan

HS code	Groups of product, million USD	2012	2013	2014	2015	2016	2017	Graphic description
27	Mineral fuels, minerals oils and products of their	22259.2	22229.8	20177.2	11187.1	12270.2	12358.8	
08	Edible fruit and nuts, citrus fruit	208.0	173.5	192.2	220.2	243.8	292.7	
07	Edible vegetables and certain roots and tubers	56.0	77.3	98.9	91.7	129.0	210.1	
71	Pearls, precious stones, precious metals and articles thereof	81.5	73.4	77.1	83.2	77.2	141.6	
76	Aluminium and articles thereof	94.9	82.8	86.8	86.1	98.1	117.7	
39	Plastic and articles thereof	108.8	122.1	157.0	112.5	99.0	101.1	
29	Organic chemicals	39.7	34.7	49.5	59.9	43.1	67.3	
52	Cotton	23.4	31.8	14.5	19.5	24.2	52.0	
73	Articles of iron and steel	55.0	53.4	34.8	16.4	57.1	45.1	
17	Sugars and sugar confectionery	214.9	243.8	221.4	212.2	62.3	40.2	

Table 2. Exports of products that earning the more foreign currency to the country
Source: State Statistical Committee of the Republic of Azerbaijan

positive tendencies have been created in recent years to increase the share of non-oil products in exports. This is related to the non-oil sector support policy in the country. At present, achieving diversification of exports by developing non-oil sector is one of the main goals of economic policy. For this purpose, the Decree No. 497 of the President of the Republic of Azerbaijan of September 19, 2018 "On Additional Measures to Support the Competitive Internal Production in the Non-Oil Sector" was approved for this purpose [3]. The identification of competitive products in the non-oil sector necessitates analysis of the country's export comparative advantage and the identification of domestic products that are competitive. In this regard, the article analyzes the structure of the country's exports and obvious comparative advantage.

3. The methodology for identifying products with revealed comparative advantage

The calculation of comparative advantages are currently determined by the approach presented by Bela Balassa [1, 12]. The Balassa Index allows identifying products that have revealed comparative advantage in the country's exports. The RCA index is calculated in the following formula:

ТУТ БУДЕТ ФОРМУЛА?

Here: RCA_{BI} is the Comparative Advantage of Ballassa Index, E_{ij} — export of j_{th} product by the country i, E_{it} — the total export of country i. E_{wj} —

Is a group of countries or world exporters by j_{th} products, $\boldsymbol{E_{wt}}$ — total export by countries group, or world exporters.

The RCA index has a simple interpretation. If $\boldsymbol{RCA_{BI}} > 1$, it is shows that it has a comparative advantage over any product or product group in the country's exports. If $\boldsymbol{RCA_{BI}} < 1$, this means there is no revealed comparative advantage of the country for the product or group to be explored.

4. Used database and evaluation procedure

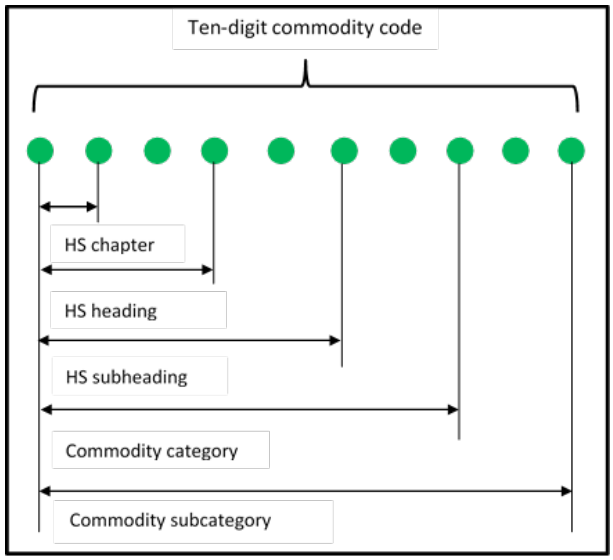

Figure 2. Harmonized Commodity Description and Coding System

The data is composed from State Statistical Committee of the Republic of Azerbaijan [11] and trademap. org internet portal of the International Trade Centre (ITC) [9], which is the joint agency of the World Trade Organization and the United Nations. The data was collected using the six digit codes of the Harmonized System's commodity nomenclature of foreign economic activity during customs clearance goods in foreign trade. Commodity nomenclature consists of 21 divisions and 97 groups and group 77 is not used. This coding, which serves the proper application of import duties and import tariffs for each product group during customs clearance, does not allow determining what kind of economic activity they are. In the international trade practice, the meaning of this coding is explained in the figure 2. As shown in the figure, the commodity position is four-digit. The first two digits represent the HS chapter, and the next two digits indicate the HS heading. Positions are designed to describe the first level of detail relative to commercially available levels. Subheadings of commodities are six-digit. The last two digits are to show the harmony of commodities, which means to show their second detail. The commodity category is eight digits. The last two digits determine the category of subheadings commodities. The subcategory of commodities is a decimal point, and the last two digits represent the commodity description.

The Balassa index methodology used above and in the international practice has been used in the assessment. At the initial stage, the Comparative Advantage (CMO) value of more than 2000 commodity sub-positions, with the Balassa method, was exported using the six digit codes of the Sub-position of the Commodity Nomenclature of External Economic Activity for products derived from the aforementioned sources of information.

5. Revealed comparative advantage of exported products in Azerbaijan

Despite the fact that significant part of the growth in exports is related to mineral fuels, a number of agricultural and industrial products also have a special weight. Now, look at the comparative advantages of these products. It should be noted that the revealed comparative advantages of the products were calculated for 2013-2017.

In general, the export of agricultural products and products from their processing have a comparative advantage over other industrial products. During the analyzed period, vegetable crops include potato, tomato, onion, spinach, salad vegetables, forest nuts, mandarin, apple, quince, apricot, cherry, cherries, peach, plum, palm, perfumery and pharmacy, the comparative advantage of cotton mills is increasing over the years. In 2017, potatoes (9.6), tomatoes (21.3), Fresh or dried hazelnuts or filberts "Corylus spp.",shelled (82.8), quinces (17.5), fresh cherries (13.7), dates (196.9) had a significantly higher share of world exports than the comparative dominant dominance indices. The relative superiority of black tea, extracts of liquorice from other crops has been diminished, but their export potential is high.

Although the comparative advantage index for sunflower, corn oil and their fractions, as well as fats and oils extracted from vegetable oil in 2013-2015, was high in the group of animal and vegetable fats and oils, the index has been small. In contrast, export of other cotton oil and its fractions increased, while exports of margarine was not exported in 2013-2014, but exported in 2015-2017 and have shown comparative advantage over the world's analogical product.

In 2017, tobacco was found to have revealed comparative advantages over white foods such as beet sugars, fruit juices, grape wine, extracted from extraction of cotton oil and other solid wastes. Although

Table 3. Revealed comparative advantage of vegetables products, animals or vegetable fats and oils

HS code	Name of product	2013	2014	2015	2016	2017
070190	Fresh or chilled potatoes (excluding seed)	4,52	8,50	9,43	5,85	9,69
070200	Tomatoes, fresh or chilled	3,58	4,50	8,79	12,75	21,34
070310	Fresh or chilled onions and shallots	0,23	0,43	1,59	0,34	6,16
070700	Cucumbers and gherkins, fresh or chilled	3,77	4,99	3,74	6,57	5,52
070930	Fresh or chilled aubergines «eggplants»	0,19	0,52	0,43	1,55	1,27
070970	Fresh or chilled spinach, New Zealand spinach and orache spinach	0,18	0,13	0,43	0,59	1,80
070999	Fresh or chilled vegetables n.e.s.	0,62	0,51	0,69	1,10	1,42
080221	Fresh or dried hazelnuts or filberts «Corylus spp.», in shell	0,02	4,95	0,01	1,48	2,64
080222	Fresh or dried hazelnuts or filberts «Corylus spp.», shelled	23,91	29,70	49,81	64,40	82,80
080520	Fresh or dried mandarins incl. tangerines and satsumas, clementines, wilkings and similar citrus ...	0,19	0,00	0,03	0,08	3,17
080810	Fresh apples	1,82	2,27	2,67	3,84	5,13
080840	Fresh quinces	5,56	1,14	6,59	19,74	17,50
080910	Fresh apricots	0,07	0,41	0,12	0,46	3,53
080921	Fresh sour cherries «Prunus cerasus»	2,87	4,38	0,55	0,58	3,05
080929	Fresh cherries (excluding sour cherries)	3,70	8,12	14,64	11,41	13,74
080930	Fresh peaches, incl. nectarines	3,00	3,08	0,76	1,89	4,50
080940	Fresh plums and sloes	1,66	3,37	5,24	3,42	6,08
081070	Fresh persimmons	71,27	112,93	207,51	163,00	196,94
081090	Fresh tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, carambola, ...	4,10	3,82	5,35	4,53	4,52
090230	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings ...	12,24	9,88	10,65	2,43	5,45
121190	Plants, parts of plants, incl. seeds and fruits, used primarily in perfumery, in pharmacy or ...	1,43	1,58	0,61	0,88	1,19
130212	Extracts of liquorice (excluding that with a sucrose content by weight of > 10% or in the form ...	0,09	11,13	17,11	8,44	7,27
140420	Cotton linters	0,35	0,71	0,90	0,29	1,41
151219	Sunflower-seed or safflower oil and their fractions, whether or not refined, but not chemically ...	10,8	9,78	12,43	2,76	2,57
151221	Crude cotton-seed oil	0,74	6,94	10,61	6,55	-
151229	Cotton-seed oil and its fractions, whether or not refined, but not chemically modified (excluding ...	1,08	0,64	1,23	14,68	11,54
151529	Maize oil and fractions thereof, whether or not refined, but not chemically modified (excluding ...	63,91	54,52	52,81	1,27	1,72
151620	Vegetable fats and oils and their fractions, partly or wholly hydrogenated, inter-esterified, ...	10,75	12,58	19,11	1,12	1,48
151710	Margarine (excluding liquid)	-	-	26,41	2,56	2,28

in this group of product like Prepared or preserved meat or offal of bovine animals has a revealed comparative advantage until 2015, there is no superior product in 2016-2017.

Many of the mineral products identified in Table 5 have maintained a comparable advantage over the analyzed period. In 2017, the export of bentonite, crude oil products, natural gas in gaseous state, ethylene, propylene, butylene and butadiene gases has the highest specific weight.

The mentioned relative revealed comparative advantage of these chemical products is consistently higher in the years 2015-2017, with increased dynamics. Other materials of primary form and polyethylene, which are formed as a result of polymerization of plastic products.

Table 4. Revealed comparative advantage of prepared foodstuffs; beverages, spirits and vinegar; tobacco

HS code	Name of product	2013	2014	2015	2016	2017
160250	Prepared or preserved meat or offal of bovine animals (excluding sausages and similar products, ...	3,31	2,65	2,11	0,16	0,14
170199	Cane or beet sugar and chemically pure sucrose, in solid form (excluding cane and beet sugar ...	12,16	14,74	23,47	5,32	3,49
200540	Peas «Pisum Sativum», prepared or preserved otherwise than by vinegar or acetic acid (excluding ...	1,11	0,51	0,79	1,17	0,87
200799	Jams, jellies, marmalades, purées or pastes of fruit, obtained by cooking, whether or not containing ...	1,07	0,78	0,55	0,78	0,85
200979	Apple juice, unfermented, Brix value > 20 at 20°C, whether or not containing added sugar or ...	0,42	0,03	1,14	0,35	1,24
200989	Juice of fruit or vegetables, unfermented, whether or not containing added sugar or other sweetening ...	2,70	2,92	2,31	2,48	3,86
220430	Grape must, of an actual alcoholic strength of > 0,5% vol (excluding grape must whose fermentation ...	0,99	0,00	0,79	-	4,39
220820	Spirits obtained by distilling grape wine or grape marc	2,21	2,63	4,15	2,58	2,58
230230	Bran, sharps and other residues of wheat, whether or not in the form of pellets, derived from ...	2,67	2,03	1,75	6,45	3,16
230610	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting ...	18,35	18,91	18,26	6,97	31,10
240110	Tobacco, unstemmed or unstripped	0,88	1,23	1,48	0,98	2,80
240120	Tobacco, partly or wholly stemmed or stripped, otherwise unmanufactured	0,59	0,81	0,75	0,82	1,37

Table 5. Revealed comparative advantage of mineral products

HS code	Name of product	2013	2014	2015	2016	2017
250810	Bentonite	7,52	6,69	7,04	7,19	17,41
252010	Gypsum; anhydrite	3,32	4,52	3,62	3,89	4,61
252310	Cement clinkers	-	-	1,95	3,79	3,93
252321	White portland cement, whether or not artificially coloured	-	-	-	0,05	1,10
270799	Oils and other products of the distillation of high temperature coal tars; similar products ...	0,33	4,24	8,78	7,84	5,26
270900	Petroleum oils and oils obtained from bituminous minerals, crude	10,19	11,35	15,36	19,79	16,12
271019	Medium oils and preparations, of petroleum or bituminous minerals, not containing biodiesel, ...	1,45	1,95	2,66	1,65	1,13
271114	Ethylene, propylene, butylene and butadiene, liquefied (excluding ethylene of a purity of >= ...	3,46	3,84	4,29	6,89	9,66
271121	Natural gas in gaseous state	2,52	1,37	13,66	20,41	12,79
271311	Petroleum coke, non-calcined	3,57	5,23	6,99	4,76	4,76
271600	Electrical energy	0,57	0,82	0,77	1,35	2,16

Although Azerbaijan has a comparative advantage over unprocessed and imported leather exports, the leather products sector is one of the least developed sectors. At present, the share of the industry in total industry is about 0.05%, and non-oil industry — 0.1%. The raw material is exported from the country without processing the skin, and in return, imports of leather products (mainly shoes, purses and other similar products) can lead to the loss of value added in domestic. In 2017, only $ 21.8 million leather shoes and $ 17.8 million leather goods were imported. Exports of raw skins will result in the loss of value added in this area and the resulting breakdown of the value chain for the processing of the raw material. The main reason for the development of this sector in Azerbaijan is the maintenance of large and small cattle in the country for

Table 6. Revealed comparative advantage of chemical industry products, products of plastic mass

HS code	Name of product	2013	2014	2015	2016	2017
280120	Iodine	5,66	5,38	7,88	6,67	6,77
282630	Sodium hexafluoroaluminate «synthetic cryolite»	-	-	3,18	4,99	3,02
290122	Propene «propylene»	1,61	2,79	2,51	1,78	2,89
290511	Methanol «methyl alcohol»	0,00	0,62	7,60	5,64	6,27
290512	Propan-1-ol «propyl alcohol» and propan-2-ol «isopropyl alcohol»	7,14	6,34	7,32	6,08	8,65
310551	Mineral or chemical fertilisers containing nitrates and phosphates (excluding ammonium dihydrogenorthophosphate ...	0,00	0,00	4,32	7,93	7,45
380190	Preparations based on graphite or other carbon in the form of pastes, blocks, plates or other ...	2,46	1,57	2,87	2,27	1,97
390110	Polyethylene with a specific gravity of < 0,94, in primary forms	1,88	3,25	4,63	4,03	3,62
390760	Poly»ethylene terephthalate», in primary forms	0,04	0,08	0,03	0,09	1,43
391190	Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, ...	0,00	0,54	0,56	3,35	5,50

Table 7. Revealed comparative advantage of unprocessed fibers, vaccinated leather, textile materials and goods

HS code	Name of product	2013	2014	2015	2016	2017
410120	Whole raw hides and skins of bovine «incl. buffalo» or equine animals, whether or not dehaired, ...	1,35	0,70	-	5,07	1,79
410150	Whole raw hides and skins of bovine «incl. buffalo» or equine animals, whether or not dehaired ...	-	-	-	1,49	1,04
410221	Raw skins of sheep or lambs, without wool on, pickled, whether or not split	9,17	15,43	16,28	24,53	17,86
410411	Full grains, unsplit and grain splits, in the wet state «incl. wet-blue», of hides and skins ...	1,81	0,80	1,29	0,93	1,96
410419	Hides and skins of bovine «incl. buffalo» or equine animals, in the wet state «incl. wet-blue», ...	-	6,66	5,53	4,62	6,83
410449	Hides and skins of bovine «incl. buffalo» or equine animals, in the dry state «crust», without ...	1,12	2,22	3,18	0,03	-
410510	Skins of sheep or lambs, in the wet state «incl. wet-blue», tanned, without wool on, whether ...	0,18	0,52	0,24	0,92	1,58
Textiles and textile articles						
500300	Silk waste, incl. cocoons unsuitable for reeling, yarn waste and garnetted stock	-	-	-	-	1,70
500710	Woven fabrics of noil silk	-	-	-	-	22,42
500790	Woven fabrics containing predominantly, but < 85% silk or silk waste by weight	4,84	8,06	3,62	1,14	-
520100	Cotton, neither carded nor combed	0,23	0,02	0,56	0,67	2,99
520291	Garnetted stock of cotton	0,07	-	-	-	4,88
520299	Cotton waste (excluding yarn waste, thread waste and garnetted stock)	0,01	0,01	0,13	0,07	2,68
520511	Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear ...	-	0,11	0,88	1,31	3,28
520512	Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear ...	3,74	2,85	4,23	3,59	2,41
520513	Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear ...	1,40	0,21	2,63	5,34	5,75

HS code	Name of product	2013	2014	2015	2016	2017
520514	Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear ...	1,39	0,19	0,45	0,17	-
520532	Multiple «folded» or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight ...	-	0,00	-	8,32	9,93
520823	Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m^2, in three-thread ...	-	-	-	0,75	1,59
540239	Textured synthetic filament yarn (excluding sewing thread, yarn put up for retail sale and ...	2,01	1,46	2,26	2,64	3,15
540720	Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of >= 67 decitex ...	2,19	2,41	1,10	0,76	1,19
580219	Terry towelling and similar woven terry fabrics, of cotton (excluding unbleached, narrow woven ...	-	-	-	0,46	4,74
620799	Men's or boys' singlets and other vests, bathrobes and dressing gowns of textile materials ...	-	-	1,41	1,29	-
630532	Flexible intermediate bulk containers, for the packing of goods, of synthetic or man-made textile ...	2,67	1,36	3,30	3,29	6,83
630533	Sacks and bags, for the packing of goods, of polyethylene or polypropylene strip or the like ...	4,56	3,14	2,79	2,19	2,74

Table 8. Revealed comparative advantage of other products

HS code	Name of product	2013	2014	2015	2016	2017
Articles of stone, plaster, cement, asbestos, mica; glass and glassware						
680100	Setts, curbstones and flagstones, of natural stone (excluding slate)	-	-	-	0,01	9,62
680911	Boards, sheets, panels, tiles and similar articles, of plaster or compositions based on plaster, ...	-	-	-	0,00	1,07
Base metals and articles of base metal						
720450	Remelting scrap ingots of iron or steel (excluding products whose chemical composition conforms ...	0,28	0,41	0,10	0,44	1,36
720720	Semi-finished products of iron or non-alloy steel containing, by weight, >= 0,25% of carbon	5,92	1,52	6,49	16,18	8,47
721499	Bars and rods, of iron or non-alloy steel, only hot-rolled, only hot-drawn or only hot-extruded ...	0,00	0,08	0,76	1,21	4,10
721650	Sections of iron or non-alloy steel, not further worked than hot-rolled, hot-drawn or hot-extruded ...	0,00	0,00	-	0,09	1,26
721810	Steel, stainless, in ingots and other primary forms (excluding waste and scrap in ingot form, ...	1,06	1,19	0,99	6,04	7,88
730429	Casing and tubing, seamless, of iron or steel, of a kind used in drilling for oil or gas (excluding ...	3,20	2,03	1,49	1,11	6,46
730539	Tubes and pipes having circular cross-sections and an external diameter of > 406,4 mm, of iron ...	-	-	4,39	95,02	29,25
740321	Copper-zinc base alloys «brass» unwrought	3,70	4,26	6,04	7,72	0,01
740329	Copper alloys unwrought (excluding copper-zinc base alloys «brass», copper-zinc base alloys ...	1,55	-	1,34	4,75	-
740721	Bars, rods and profiles, of copper-zinc base alloys «brass», n.e.s.	0,00	0,02	0,01	0,97	3,58
741533	Screws, bolts, nuts and similar articles, threaded, of copper (other than screw hooks, ring- ...	0,02	0,27	1,32	1,30	1,35
741539	Screw hooks, screw rings and the like, threaded, of copper (excluding standard screws and bolts ...	-	0,41	0,00	-	38,74
760110	Aluminium, not alloyed, unwrought	2,81	2,92	4,22	2,25	1,19

HS code	Name of product	2013	2014	2015	2016	2017
760120	Unwrought aluminium alloys	0,14	0,16	0,20	0,63	1,30
760611	Plates, sheets and strip, of non-alloy aluminium, of a thickness of > 0,2 mm, square or rectangular ...	-	0,58	2,13	8,19	8,05
760612	Plates, sheets and strip, of aluminium alloys, of a thickness of > 0,2 mm, square or rectangular ...	0,00	0,09	0,42	1,37	2,16
780199	Unwrought lead (excluding refined lead and lead containing by weight antimony as the principal ...	1,34	2,14	1,49	4,86	5,08
Machinery and mechanical appliances, electrical equipment, apparatus						
850422	Liquid dielectric transformers, having a power handling capacity > 650 kVA but <= 10.000 kVA	0,44	0,02	0,06	-	1,63
850434	Transformers having a power handling capacity > 500 kVA (excluding liquid dielectric transformers)	-	0,46	0,12	1,48	0,40
Vehicles and vessels associated transport equipment						
870190	Tractors (excluding those of heading 8709, pedestrian-controlled tractors, road tractors for ...	-	-	0,01	0,02	2,69
870540	Concrete-mixer lorries	-	-	-	1,44	1,20
Miscellaneous manufactured articles						
940600	Prefabricated buildings, whether or not complete or already assembled	0,03	0,04	0,03	0,03	1,59

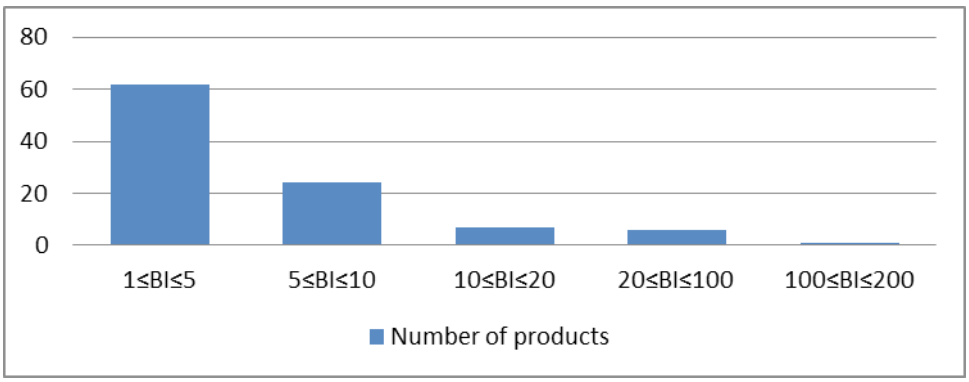

Figure 3. Changing range of calculated indexes of 100 products

the supply of leather, as well as sufficient processing capacity for processing enterprises to process domestic raw materials, high demand for leather products in the world. Therefore, we believe that the development of this sector should be a priority for economic development and encouraged.

In recent years, have become apparent comparative advantages in the export of setts, curbstones and boards, sheets, panels, tiles and similar articles, of plaster. Table 8 shows that, in 2017, some product by the group of base metals and articles their have comparative advantage. Some of those are 720450, 721499, 721650, 721810, 730539, 740721, 760120 etc. HS coding product. There is also a revealed comparative advantage over liquid dielectric transformers, having a power handling capacity > 650 kVA but <= 10.000 kVA, tractors, Concrete-mixer lorries.

In general, we can group the changing range of calculated indexes of 100 products with revealed comparative advantage in 2017, as follows:

Conclusion

The result of the research is that Azerbaijan has great potential for exporting agricultural products, mineral products and some other industrial products. However, it should be noted that many of the products with relatively revealed comparative advantage in exports are exported as raw materials and semi-finished products. This prevents the formation of value chains in the country on those products. Such products include tomatoes, untreated sheep and lambskins, silk fabrics, crude oil products and cotton yarn. The results show that Azerbaijan has great potential for agricultural production. Therefore, it is important to expand the processing of agricultural products in the country.

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