

**DYNAMICS OF THE FOREIGN TRADE OF THE REPUBLIC OF MOLDOVA IN TERMS OF LASPEYRES INDICATORS**

*Alexandru CEBAN<sup>1</sup>, PhD Student, Scientific Researcher,  
National Institute for Economic Research, Republic of Moldova*

*The analysis of the foreign trade allows determining the potential markets for export, main economic trade partners and exported / imported goods, the level of participation of a country in the world trade, as well as the degree of country's competitiveness on the external and internal market, which determines the actuality of the researched topic. The paper presents the analysis of the external trade of the Republic of Moldova, observed through Laspeyres indicators, in order to determine the recent developments and find out the most competitive products or sectors that would influence on the development of new dimensions of the national trade. The paper has been developed based on the following research methods: Laspeyres index method, analysis and synthesis which allowed drawing up conclusions, as well as comparative method for the comparison of main trade partners and products.*

*The most relevant results of the paper present a slight recovery of the national economy, while the exports and imports grow modestly. At the same time, an increase in exports to other countries (except CIS and EU countries) is noted, which have the potential to become future strategic partners for the Republic of Moldova.*

**Keywords:** foreign trade, import, export, Laspeyres indicators, economy, Republic of Moldova.

*Analiza comerțului exterior permite determinarea potențialelor piețe pentru export, principalii parteneri comerciali, precum și cele mai importante mărfuri exportate / importate, nivelul de participare a unei țări la comerțul mondial, precum și gradul de competitivitate a țării pe piața internă și externă, fapt ce determină actualitatea temei cercetate. În lucrare este prezentată analiza comerțului exterior al Republicii Moldova, observat prin intermediul indicatorilor Laspeyres, pentru a determina evoluțiile recente și pentru a identifica cele mai competitive produse sau sectoare care ar influența dezvoltarea noilor dimensiuni ale sistemului național de comerț. Lucrarea a fost elaborată pe baza următoarelor metode de cercetare: metoda indicelui Laspeyres, analiza și sinteza care au permis elaborarea concluziilor și metoda comparativă pentru compararea principalilor parteneri și produse comerciale.*

*Rezultatele cercetării demonstrează o ușoară redresare a economiei naționale, în timp ce exporturile și importurile sunt într-o creștere modestă. În același timp, se remarcă o creștere a exporturilor către alte țări (cu excepția țărilor CSI și UE), care au potențialul de a deveni viitori parteneri strategici pentru Republica Moldova.*

**Cuvinte-cheie:** comerț exterior, import, export, indicatori Laspeyres, economie, Republica Moldova.

*Анализ внешней торговли определяет потенциальные экспортные рынки, основных торговых партнёров, а также наиболее важные экспортные / импортные товары, уровень участия страны в мировой торговле и конкурентоспособность страны на внутреннем и внешнем рынках, что определяет актуальность темы исследования. В статье представлен анализ внешней торговли Республики Молдова, наблюдаемый по показателям Ласпейреса, для определения последних событий и определения наиболее конкурентоспособных продуктов или секторов, которые повлияют на развитие новых измерений национальной торговой системы. Были использованы следующие методы исследования: метод индекса Ласпейреса, анализ и синтез, а также сравнительный метод при анализе основных партнеров и коммерческих продуктов.*

*Результаты исследования свидетельствуют о небольшом восстановлении национальной экономики, в то время как экспорт и импорт характеризуется сдержанным ростом. Наблюдается рост экспорта в другие страны (кроме стран СНГ и ЕС), которые могут стать будущими стратегическими партнерами для Республики Молдова.*

**Ключевые слова:** внешняя торговля, импорт, экспорт, индикаторы Ласпейреса, экономика, Республика Молдова.

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<sup>1</sup> ©Alexandru CEBAN, [ceban\\_alexander@yahoo.com](mailto:ceban_alexander@yahoo.com)

**Introduction.** Taking into account the latest developments in the national economy of the Republic of Moldova, there is becoming increasingly important to analyze the external trade, in order to determine the comparative advantage of the country in terms of manufactured products or provided services. The paper focuses on the analysis of the most recent data on the external trade, observed through comparison and Laspeyres indicators methods, which determines its novelty degree, as well as brings up relevant conclusions and recommendations related to the carried out analysis.

As a result of the theoretical research carried out by the author, the article intends to present the most export oriented products of the Republic of Moldova, the main foreign markets for export, as well as the most imported products and their countries of origin. Through Laspeyres indicators the average prices and physical volumes and the price index and physical volume index will be analyzed.

In terms of foreign authors, the topic of external trade has been previously analyzed by Lipsey R. [6], Helpman E. [4], Pomfret R. [7] and others. Among the Moldovan authors that contributed to the development of this topic can be mentioned: Stratan A. [7], Ganciuov V. and Ceban A. [3].

The analysis in the paper has been carried out based on the data provided by the National Bureau of Statistics, UN Comtrade database, scientific literature, as well as other accessed informational resources via internet.

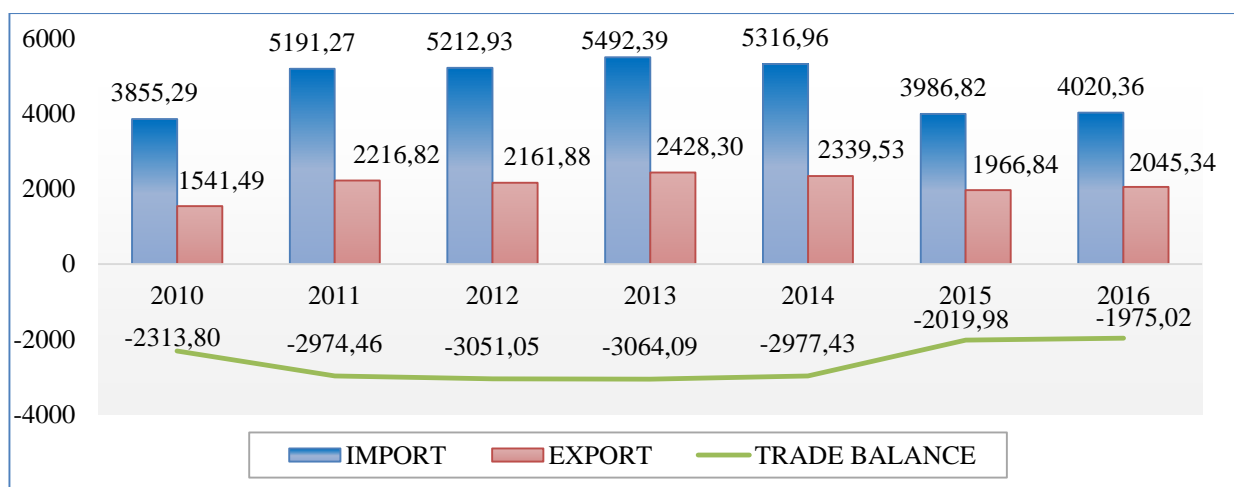
**Applied research methods.** The paper has been developed based on the following general scientific methods, like: analysis and synthesis, induction and deduction, systemic approach, method of analogy as well as critical analysis of the scientific sources and data. A distinguished economic scientific method is the one of Laspeyres index. A Laspeyres index measures the change between two periods of time in the total cost of purchasing a basket of goods and services that is representative of the first, or base, period. The methodology has at least three practical advantages: it is easily explained to the public; it can make repeated use of the same data on consumer purchases; and it need not be revised, assuming users are satisfied with the Laspeyres concept. Another notable advantage is that the Laspeyres is consistent in aggregation down to the lowest level of aggregation. The index can be broken down into sub-aggregates that are interrelated in a simple way [2].

For the calculation of the indices using Laspeyres formulas, the monetary value of the goods and their physical volumes is required both in the reference year and in the base year. In the current analysis, the base year will be considered the year of 2015.

$$I_p = \frac{\sum p_1 q_0}{\sum p_0 q_0} \quad I_q = \frac{\sum p_0 q_1}{\sum p_0 q_0}$$

where:  $I_p$  – price index;  $I_q$  – physical volume index [9].

**Results obtained.** Since 2011, both import and export have increased their value, reaching the maximum levels in 2013. However, in recent years they have suffered a decrease in the indicators, returning approximately to the values of 2010 (Figure 1). While the export of goods in 2015 decreased inessential, in 2016 it managed to maintain its position from the previous year, with a slight increase; the import suffered a larger decrease over the same period, which had a beneficial effect on the trade balance.



**Figure 1. Trade balance of the Republic of Moldova, 2010-2016, million USD**

Source: Elaborated by the author based on the UN Comtrade database [8].

In 2016, exports of goods reached the value of 2045.34 million USD, which represented an increase of 3.99% compared to the previous year (Table 2). This increase is mainly due to exports to European countries and other countries, which recorded a structural increase of 3.23 percentage points and 1.55 percentage points, reaching the values of 65.14% and 14.61% respectively. At the same time, the share of exports to CIS countries declined, accounting for 20.25% of total exports. In regard to imports, an increase of 0.84% compared to the previous year is observed in 2016, this indicator being due to import values from the CIS countries, where an increase of 0.92% was observed, EU countries have had an increase with a 1%, and other countries – with 0.47%.

Table 1

## Foreign trade of the Republic of Moldova, 2016

Indicators	2016		Structure %		The degree of influence on the increase (+), decrease (-) of the indicators	
	mil. USD	in % to previous year	2015	2016	2015	2016
<b>Export – total. of which:</b>	<b>2045.34</b>	<b>103.99</b>	<b>100.0</b>	<b>100</b>	<b>-15.93</b>	<b>3.99</b>
CIS countries – total	414.19	84.13	25.03	20.25	-10.40	-3.97
EU countries – total	1332.42	109.43	61.91	65.14	-1.21	5.84
Other countries	298.74	116.26	13.06	14.61	-4.31	2.12
<b>Import – total. of which:</b>	<b>4020.36</b>	<b>100.84</b>	<b>100.0</b>	<b>100</b>	<b>-25.02</b>	<b>0.84</b>
CIS countries – total	1027.44	100.92	25.54	25.56	-8.11	0.23
EU countries – total	1973.71	101.00	49.02	49.09	-11.54	0.49
Other countries	1019.20	100.47	25.45	25.35	-5.37	0.12
<b>The trade balance deficit. of which:</b>	<b>-1975.02</b>	<b>97.77</b>	<b>100.00</b>	<b>100</b>	<b>-32.16</b>	<b>-2.23</b>
CIS countries – total	-613.26	116.63	26.03	31.05	-6.31	4.33
EU countries – total	-641.29	87.05	36.47	32.47	-19.65	-4.72
Other countries	-720.47	95.11	37.50	36.48	-6.20	-1.83

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

**Export.** Analyzing the evolution of exports for the period 2010-2016 (Figure 2), in the last 4 years there is observed a tendency to reorient the exports from the CIS market, which in 2010 had a share of 40.48%, and in 2016 – 20.25% to the EU market, whose share in 2010 accounted for 47.29% and in 2016 – 65.14%. Exports to other countries in the same period increased insignificantly, thus in 2010 accounting for 12.23% of the total value of exports of goods, and in 2016 – 14.61%.

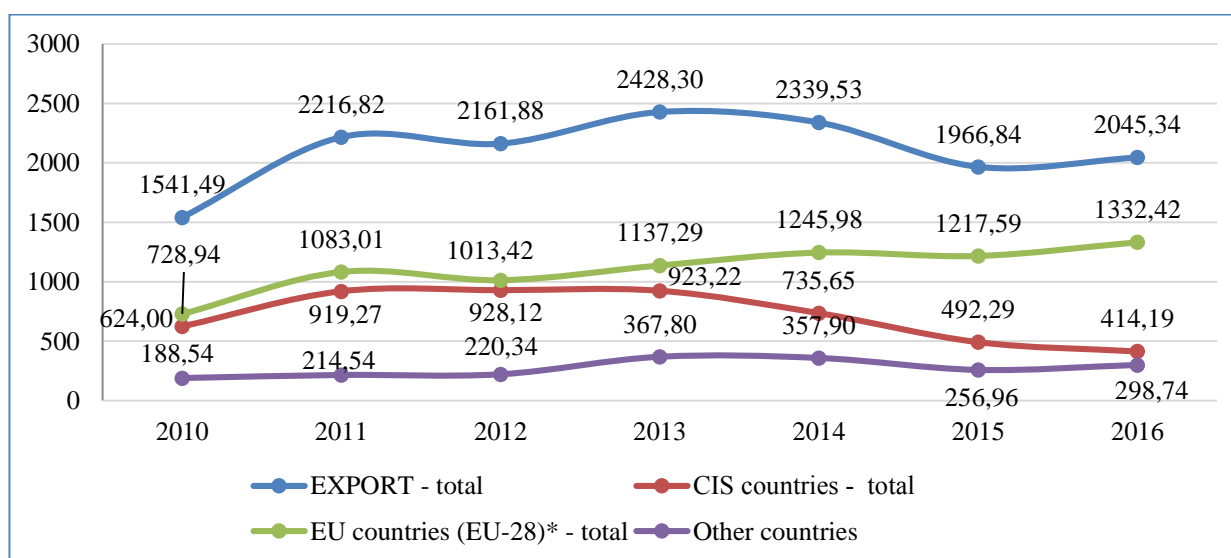


Figure 2. Total exports of goods during the period 2010-2016, million USD

Source: Elaborated by the author based on the UN Comtrade database [8].

The main European countries importing domestic products are Romania, which during the period of 2010-2016 held a share of about 35% of the total exports to the EU countries, followed by Italy, United Kingdom, Germany and Poland. In sum, the value of exports to these countries accounted for 76.98% of total exports to EU countries in 2016.

On the CIS market, the main economic partners are the Russian Federation, with a share of about 60%, followed by Belarus, Kazakhstan, Ukraine and Uzbekistan. These countries account for 97.84% of total exports to CIS countries in 2016.

In terms of exports to other countries, the most significant countries are Turkey, which during the years 2010-2016 has had a share of about 30%, Switzerland, the United States and Iraq, their amount accounting for 55.69% of total exports to other countries for the year 2016.

Table 2

**The main 15 export partner countries (84.29% of total exports)**

Country	Export 2016		Structure %		The degree of influence on the increase (+), decrease (-) of exports	
	Total, mil. USD	% to previous year	2015	2016	2015	2016
TOTAL	2045,34	103,99	100	100	-15,93	3,99
Romania	513,06	114,94	22,69	25,08	0,53	3,39
Russian Federation	233,18	96,90	12,24	11,40	-7,83	-0,38
Italy	198,26	100,61	10,02	9,69	-1,98	0,06
Germany	126,62	108,03	5,96	6,19	-0,87	0,48
Great Britain	114,33	82,76	7,02	5,59	1,28	-1,21
Belarus	103,54	78,70	6,69	5,06	-0,13	-1,42
Bulgaria	76,02	269,92	1,43	3,72	-0,42	2,43
Poland	73,41	107,24	3,48	3,59	0,17	0,25
Turkey	61,68	95,75	3,28	3,02	-1,72	-0,14
Ukraine	49,71	108,44	2,33	2,43	-2,71	0,20
France	44,75	103,76	2,19	2,19	0,24	0,08
Switzerland	44,50	125,81	1,80	2,18	-0,59	0,46
Greece	29,49	116,06	1,29	1,44	-0,06	0,21
Czech Republic	28,29	102,20	1,41	1,38	-0,10	0,03
Austria	27,23	126,07	1,10	1,33	-0,09	0,29

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

Analyzing the main export partners during the years 2010-2016, we note that the leader of this ranking was the Russian Federation until 2014, when, after the embargo imposed on the Republic of Moldova, it was overtaken by Romania, which maintained its position in the following years. Italy ranked third in this ranking, being followed by Germany, Great Britain and Belarus, which during the analyzed period occupied positions 3, 4 and 6. For 2016, these countries contributed to the formation of 63.02% of the total value of exports.

The top of the exported commodity groups according to the Combined Nomenclature of Goods is held by "Vegetable products", which accounts for approximately one-fourth of total exports, followed by "Foodstuffs", "Textiles and products", "Machines and apparatus, electrical equipment and parts thereof; sound recorders and reproducers, television image and sound recorders or reproducers, and parts and accessories of such apparatus" and "Miscellaneous manufactured articles". Although the monetary value of these products is in a declining trend between 2014 and 2016, their share in the total exported products is increasing, reaching a level of 77.76% in 2016.

Table 3

## Export of the Republic of Moldova by groups of goods, 2015-2016

Code	Name of the commodity group	2016		Structure %		Structural changes, p.p.
		mil. USD	% to previous year	2015	2016	2016
I	Live animals; animal products	40,16	107,07	1,91	1,96	0,06
II	Vegetable products	529,50	105,54	25,51	25,89	0,38
III	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	54,29	75,39	3,66	2,65	-1,01
IV	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	321,60	106,05	15,42	15,72	0,30
V	Mineral products	14,25	84,35	0,86	0,70	-0,16
VI	Products of the chemical or allied industries	90,42	76,08	6,04	4,42	-1,62
VII	Plastics and articles thereof; rubber and articles thereof	35,67	88,54	2,05	1,74	-0,30
VIII	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	23,93	95,63	1,27	1,17	-0,10
IX	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	9,67	121,05	0,41	0,47	0,07
X	Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard; paper and paperboard and articles thereof	12,24	115,84	0,54	0,60	0,06
XI	Textiles and textile articles	307,87	112,48	13,92	15,05	1,14
XII	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	29,35	122,20	1,22	1,43	0,21
XIII	Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	44,32	106,09	2,12	2,17	0,04
XIV	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin	0,76	91,99	0,04	0,04	-0,005
XV	Base metals and articles of base metal	43,49	100,57	2,20	2,13	-0,07
XVI	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	297,57	100,70	15,02	14,55	-0,48
XVII	Vehicles, aircraft, vessels and associated transport equipment	27,49	152,36	0,92	1,34	0,43
XVIII	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	28,88	102,12	1,44	1,41	-0,03
XX	Miscellaneous manufactured articles	133,88	124,78	5,45	6,55	1,09
XXI	Works of art, collectors pieces and antiques	0,01	36,13	0,002	0,001	-0,001
<b>EXPORT – total</b>		<b>2045,34</b>	<b>103,99</b>	<b>100</b>	<b>100</b>	<b>X</b>

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

Analyzing Moldova's exports by groups of products, we notice see the significant share of agri-food products, which in 2010 accounted for 47.5% of the total value of exports. Over the next years, there has been a fluctuation in the share of agri-food products, minimum being reached in 2012, as a result of drought and decline of production. Starting with 2013, a recovery of the situation can be observed, except the year 2015, when while the total value of exports of agri-food products decreased compared to the previous year, their share in total exports increased (46.5% in 2015 compared to 45.5% in 2014) due to the decline of the value of all exported goods.

Tablel 4

## Dynamics of export of agri-food goods, 2010-2016

Code	Groups	2010	2011	2012	2013	2014	2015	2016
	EXPORT - total	1541,49	2216,82	2161,88	2428,30	2339,53	1966,84	2045,34
I.	Live animals; animal products	26,97	38,04	37,82	37,17	59,73	37,51	40,16
II.	Vegetable products	340,72	471,00	360,47	507,05	549,67	501,70	529,50
III.	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	47,58	77,49	89,71	44,04	77,52	72,01	54,29
IV.	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	316,94	330,58	390,89	427,29	378,43	303,26	321,60
	Agri-food products	732,21	917,10	878,88	1015,55	1065,35	914,49	945,55
	Share in export, %	47,5	41,4	40,7	41,8	45,5	46,5	46,2

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

### Import

In the analysis of imports during the years 2010-2016 there is observed an increase in the value of imports in 2011, reaching a maximum value in 2013, while in 2015 being approximately at the value of the year 2010. In 2016, there is observed a slight increase of imports. However, by examining them structurally, it is noticed that the Republic of Moldova is gradually becoming more and more dependent on the imports from the European Union countries, which in 2010 accounted for 44.2% and in the year 2016 reached 49.09% of the total imports. The same situation is also observed in imports from other countries, but with some modest rhythms. At the same time, the dependence on CIS countries is decreasing, with a share of 32.6% of the total value of goods imports registered in 2010, while in 2016 it decreased to 25.5%.

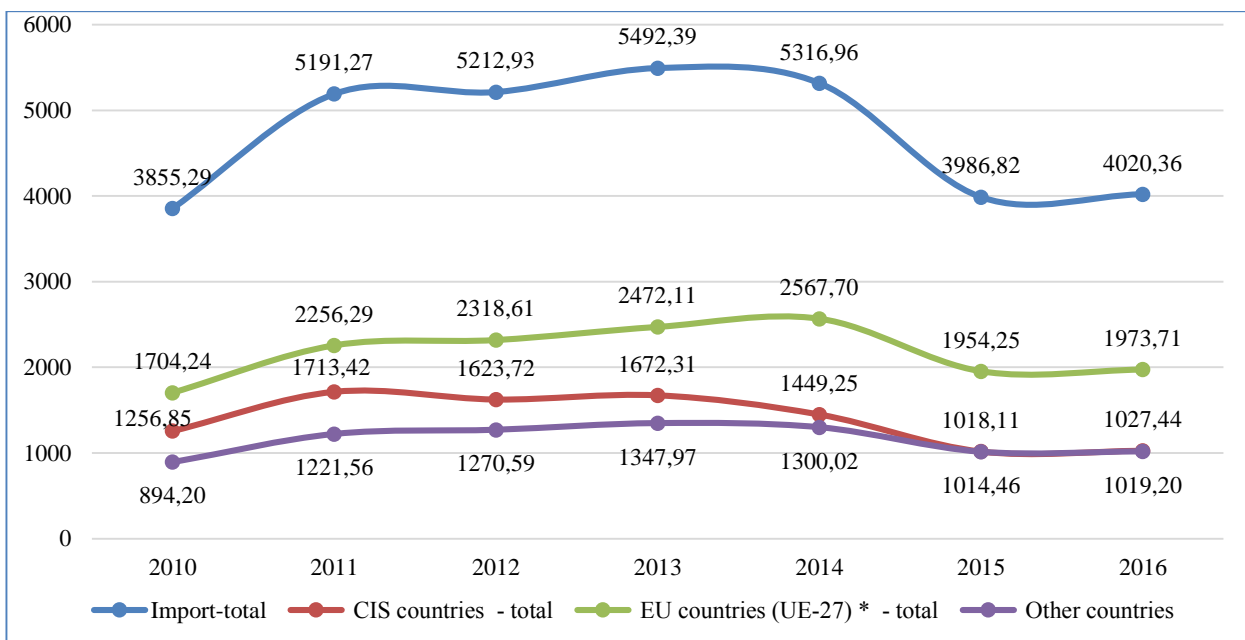


Figure 3. Dynamics of imported goods, 2010-2016, million USD

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

The main 5 trade partners within the European Union are Romania, Germany, Italy, Poland and France. In the period 2010-2016, the share of imports from these countries increased insignificantly, accounting for 66.05% of the total imports from the EU in 2010 and 69.46% in 2016.

The main importers from the CIS countries are the Russian Federation, which has a share of about half of total imports (52.09% in 2016) followed by Ukraine, Belarus, Kazakhstan and Uzbekistan. These partners hold almost all imports from CIS countries (99.73% in 2010 and 99.89% in 2016).

Analyzing imports from other countries, we find China being the largest importer with a share of 38.62% of total imports from other countries for 2016, followed by Turkey, the United States, Switzerland and Japan, which hold a share of 76.3% in 2016.

Table 5

## The first 16 partner countries in import (85.56% of total imports)

Country	Import 2016		Structure %		The degree of influence on growth (+), the decrease (-) of imports	
	Total, mil. \$	% to previous year	2015	2016	2015	2016
Total	4 020,36	100,84	100,00	100,00	-25,02	0,84
Romania	551,50	99,34	13,92	13,72	-4,66	-0,09
Russian Federation	535,20	99,91	13,44	13,31	-3,41	-0,01
China	393,69	107,44	9,19	9,79	-2,16	0,68
Ukraine	383,89	103,44	9,31	9,55	-3,30	0,32
Germany	316,44	98,49	8,06	7,87	-1,99	-0,12
Italy	280,77	100,58	7,00	6,98	-1,36	0,04
Turkey	271,99	95,39	7,15	6,77	-0,30	-0,33
Poland	132,21	108,05	3,07	3,29	-0,63	0,25
Belarus	101,29	120,36	2,11	2,52	-1,09	0,43
France	89,96	111,03	2,03	2,24	-0,24	0,22
Hungary	80,10	115,56	1,74	1,99	-0,31	0,27
Austria	73,74	82,38	2,25	1,83	-0,39	-0,40
Great Britain	62,00	44,87	3,47	1,54	1,30	-1,91
Bulgaria	57,62	84,19	1,72	1,43	-0,24	-0,27
Czech Republic	56,15	109,98	1,28	1,40	-0,29	0,13
USA	53,29	104,97	1,27	1,33	-0,48	0,06

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

The most important 5 groups of imported products are: "Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles", "Mineral products", "Products of the chemical or allied industries", "Textiles and textile articles", "Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes". During the period 2014-2016, the share of these products in the structure of imports practically does not change, being about 61%.

As a rule, the leader of this ranking for many years was the "Mineral products" group, which in the period 2014-2016 reduced its import values by 1.8 times. This fact is due in particular to the subgroup "Mineral fuels, mineral oils and products resulting from their distillation" that accounts for approximately 97% of the total group, and was reduced by 1.8 times during that period. At the same time, the group "Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles" declining by 21.26% in 2015 compared to the previous year, in 2016 kept the value of imports with a small increase of 2% thus moving from the second position on the first position of the leaderboard.

The largest increases as compared to 2015 had the following groups "Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair" (+45,11%), "Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)" (+27.08%), "Vehicles, aircraft, vessels and associated transport equipment" (+21.09%).

Table 6

## Import by group of goods structured by value, USD millions

Code	Name of the commodity group	2016		Structure %		Structural changes, p.p.
		mil. USD	% to previous year	2015	2016	2016
	IMPORT - total	4020,36	100,84	100	100	X
XVI	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	643,24	101,97	15,82	16,00	0,18
V	Mineral products	630,16	85,89	18,40	15,67	-2,73
VI	Products of the chemical or allied industries	502,63	101,37	12,44	12,50	0,06
XI	Textiles and textile articles	345,64	120,89	7,17	8,60	1,43
IV	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	305,18	112,12	6,83	7,59	0,76
XV	Base metals and articles of base metal	273,96	95,82	7,17	6,81	-0,36
VII	Plastics and articles thereof; rubber and articles thereof	257,76	101,46	6,37	6,41	0,04
XVII	Vehicles, aircraft, vessels and associated transport equipment	232,37	121,09	4,81	5,78	0,97
II	Vegetable products	171,62	88,39	4,87	4,27	-0,60
XX	Miscellaneous manufactured articles	115,17	102,08	2,83	2,86	0,03
I	Live animals; animal products	106,84	106,90	2,51	2,66	0,15
XIII	Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	103,72	101,85	2,55	2,58	0,03
IX	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	85,23	101,10	2,11	2,12	0,01
X	Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard; paper and paperboard and articles thereof	78,49	104,67	1,88	1,95	0,07
XVIII	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	56,77	71,36	2,00	1,41	-0,58
VIII	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	48,39	127,08	0,96	1,20	0,25
XII	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	27,32	145,11	0,47	0,68	0,21
III	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	24,41	120,30	0,51	0,61	0,10
XIV	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin	7,37	100,75	0,18	0,18	0,00
XXI	Works of art, collectors pieces and antiques	4,09	93,86	0,109	0,102	-0,01

Source: Elaborated by the author based on the National Bureau of Statistics data [1].



**Assessment of average prices and physical volumes of export and import**

In order to analyze average prices and physical volumes, the price index and physical volume index, which are calculated using Laspeyres formulas, are used. Analyzing average price indices and those of physical export volumes, in 2016 there is registered a 0.68% reduction in average prices and an increase in physical volumes by 11.12%.

**Table 7****Average price index and physical volume index of export by commodity groups in 2016**

No.Gr.	Main groups	2015	2016	Sum ration %	Average price index %	Physical volume index %
		Sum, thous. USD	Sum, thous. USD			
1	2	3	4	5	6	7
<b>I</b>	Live animals; animal products	37 489,34	40 147,68	107,09	92,75	112,40
<b>II</b>	Vegetable products	501 178,66	529 481,01	105,65	89,87	117,65
<b>III</b>	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	72 003,07	54 288,29	75,40	116,87	64,35
<b>IV</b>	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	303 191,59	321 598,88	106,07	105,24	107,37
<b>V</b>	Mineral products	11 962,61	7 189,42	60,10	84,21	73,94
<b>VI</b>	Products of the chemical or allied industries	118 626,92	90 233,93	76,07	96,55	81,32
<b>VII</b>	Plastics and articles thereof; rubber and articles thereof	40 269,15	35 664,37	88,57	102,37	115,05
<b>VIII</b>	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	24 334,39	23 432,85	96,30	93,13	107,84
<b>IX</b>	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	7 986,22	9 666,25	121,04	119,27	110,54
<b>X</b>	Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard; paper and paperboard and articles thereof	10 563,40	12 244,18	115,91	105,41	114,39
<b>XI</b>	Textiles and textile articles	271 556,38	307 859,92	113,37	95,56	125,05
<b>XII</b>	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	23 994,40	29 328,61	122,23	103,07	120,81
<b>XIII</b>	Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	41 742,98	44 316,65	106,17	95,93	113,17
<b>XIV</b>	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin	823,49	757,92	92,04	124,64	80,46
<b>XV</b>	Base metals and articles of base metal	43 125,88	43 475,81	100,81	119,31	108,69

No.Gr.	Main groups	2015	2016	Sum ration %	Average price index %	Physical volume index %
		Sum, thous. USD	Sum, thous. USD			
1	2	3	4	5	6	7
XVI	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	295 176,22	297 565,46	100,81	105,29	105,04
XVII	Vehicles, aircraft, vessels and associated transport equipment	17 628,28	27 484,64	155,91	93,29	135,69
XVIII	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	27 738,49	28 811,16	103,87	110,50	126,63
XX	Miscellaneous manufactured articles	107 127,91	133 633,25	124,74	102,75	129,97
XXI	Works of art, collectors pieces and antiques	7,77	12,07	155,36	12 806,04	1,21
<b>TOTAL</b>		<b>1956527,17</b>	<b>2037192,37</b>	<b>104,12</b>	<b>99,32</b>	<b>111,12</b>

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

The most significant increases were recorded in the groups "Vehicles, aircraft, vessels and associated transport equipment" (+35.69%), "Miscellaneous manufactured articles" (+29.97%), "Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof" (+26.63%), "Textiles and textile articles" (+25.05%). The most significant decreases were recorded in the "Works of art, collectors pieces and antiques" (-98.79%), but it should be noted that the group does not hold a large share on the export market, being quite unpredictable year after year. The second place was held by the group "Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes" (-35.65%), followed by "Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin" (-19.54%). If we refer to the average price indices, we notice that the largest reductions are observed in the groups "Mineral products" (-15.79%), "Vegetable products" (-10.13%), "Live animals; animal products" (-7.25%), as well as within the group "Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)" (-6.87%), etc. However, the most significant increases were recorded in the groups "Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin" (+24.64%), "Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork" (+19.27%) and "Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes" (+16.87%).

By analyzing the average price indices and the physical volumes indices of imports, we note that although the physical volumes index increased by 12.96%, the average price index decreased by 5.78%.

The increase in the physical volume index is due to the groups "Textiles and textile articles" (+42.31%), "Vehicles, aircraft, vessels and associated transport equipment" (+29.48%), "Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair" (+29.13%), "Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes" (+23.62%), etc. But there were groups that suffered reductions in physical volumes and these are "Vegetable products" (-6.25%) and "Works of art, collectors pieces and antiques" (-4.39%). The most significant decreases that led to the decrease of the average import price index had the groups "Mineral products" (-19.94%), "Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof" (-11.80%), "Base metals and articles of base metal" (-7.59%), etc. On the other hand, there are also groups that have also experienced increases in average price indices and these are: Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts

thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair (+15.93) "Live animals; animal products" (+2,89%), "Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes" (+2,11%), "Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard; paper and paperboard and articles thereof" (+0,84%) and "Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin" (+0,2%).

Table 8

## Average price index and physical volume index of imported goods by group of goods in 2016

No. Gr.	Main groups	2015	2016	Sum ration %	Average price index %	Physical volume index %
		Sum, thous. \$	Sum, thous. \$			
1	2	3	4	5	6	7
I	Live animals; animal products	99 733,69	106 794,63	107,08	102,89	108,27
II	Vegetable products	194 166,71	171 622,30	88,39	98,01	93,75
III	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	20 283,93	24 407,87	120,33	99,35	123,62
IV	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	272 181,06	305 180,99	112,12	102,11	114,95
V	Mineral products	733 654,47	630 156,29	85,89	80,06	107,43
VI	Products of the chemical or allied industries	495 632,80	502 626,35	101,41	99,27	104,48
VII	Plastics and articles thereof; rubber and articles thereof	254 048,38	257 764,21	101,46	95,81	106,98
VIII	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	38 077,64	48 358,75	127,00	86,02	269,37
IX	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	84 295,43	85 226,76	101,10	94,68	107,39
X	Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper or paperboard; paper and paperboard and articles thereof	74 988,25	78 486,92	104,67	100,84	104,25
XI	Textiles and textile articles	283 883,13	345 632,08	121,75	94,09	142,31
XII	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	18 827,57	27 319,82	145,11	115,93	129,13
XIII	Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	101 815,39	103 714,77	101,87	97,63	108,29
XIV	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin	7 315,65	7 363,08	100,65	100,20	102,36
XV	Base metals and articles of base metal	285 865,98	273 949,97	95,83	92,41	104,97
XVI	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	630 532,01	643 235,24	102,01	98,02	113,68
XVII	Vehicles, aircraft, vessels and associated transport equipment	189 875,50	232 183,56	122,28	99,18	129,48
XVIII	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	79 500,52	56 764,93	71,40	88,20	106,59
XX	Miscellaneous manufactured articles	110 498,80	113 840,97	103,02	96,82	109,21
XXI	Works of art, collectors pieces and antiques	4 353,46	4 091,42	93,98	98,28	95,61
<b>TOTAL</b>		<b>3979530,37</b>	<b>4018720,90</b>	<b>100,98</b>	<b>94,22</b>	<b>112,96</b>

Source: Elaborated by the author based on the National Bureau of Statistics data [1].

**Conclusions.** Taking into account the previously mentioned, in 2016, there is observed a slight recovery of the national economy, while exports and imports, compared to 2015 are being in a modest growth. Given the existence of a negative trade balance, the Republic of Moldova is undertaking measures to redress the situation, in particular by diversifying economic partners and accessing new external sales markets. Thus, in recent years, there has been an increase in exports to other countries (apart from those in the CIS and the EU), which have the potential to become future strategic partners for our country.

Thanks to the Deep and Comprehensive Free Trade Agreement, European Union countries are becoming more attractive for the export of indigenous products, which is materialized by increasing the volumes of products exported to the EU. In order to increase exports to the EU, it is necessary to improve the quality of exported products by adjusting them to the existing international standards.

At the same time, the CIS countries contribute essentially to the development of the foreign trade of the Republic of Moldova. Thus, despite the events of recent years, such countries as the Russian Federation, Ukraine and Belarus continue to be among the main trading partners of our country, namely, being necessary to continue and develop trade relations with these countries.

Therefore, based on the conclusions mentioned above, the following recommendations may be proposed:

- Increase the efforts in promotion of export of high value added products;
- Identification of potential strategic partners in long term and carrying out the work with them in order to increase exports in the concerned countries;
- Research of new potential markets, in terms of local consumption, product preferences, quality requirements, etc.

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