

## EVOLUTION AND STRUCTURE OF FOREIGN TRADE IN AGRICULTURAL PRODUCTS FROM ROMANIA IN THE PERIOD 2008-2019

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**Abstract.** *The paper aims to investigate the foreign trade in agricultural products for the total external trade in agriculture (export/import) and in particular for the territorial area of the European Union. The analysis includes in structure the main sections of products (live animals and animal products; vegetable products; animal or vegetable fats and oils; food, beverages and tobacco). The analysis pursued the comparison of values and percentages towards year 2008, with the previous year and to the total export/import of products by product sections. The analysis highlighted the following conclusions: The total value of agricultural exports registers higher increases compared to the export rates at national level; The amount of export of agricultural products shows differentiations rendered by high weights for vegetable products, food, beverages and tobacco, but also low levels in the case of exports for animals, fats and oils (vegetable/animal); Agricultural exports to the European Union reflect annual increases with significant variations in percentage levels. There is a decrease in exports of live animals and animal products, fats and oils (vegetable/animal) along with an increase in vegetable and food products; The value analysis of the total imports of agricultural products from Romania both on the total and in the structure of the analyzed products, highlights the existence of important increases. Of particular note are the import of animal, vegetable and food products, beverages and tobacco; The total value and the percentage rates of agricultural imports from Romania with the European Union are higher than the total imports, with reference to animal, vegetable and food products, beverages and tobacco; The level of Romania's foreign trade balance, with agricultural products, for the analyzed period, 2008-2019 shows very large oscillations from 456 thousand Euro in 2014, to -1246 thousand Euro in 2019 and to -2181 thousand Euro in 2008.*

**Keywords:** foreign trade with agricultural products, export/import, export/import value, balance, balance sheet

### 1. Introduction

The paper aims to highlight the levels of the most important forms and structures in foreign trade of agricultural products in Romania. The analysis made by an expression of the physical and value levels of export / import, for the period 2008-2021, aims to highlight the sequence of existing rhythms. There are both favorable

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growth trends, regression / stagnation, but which are accompanied by annual oscillations sometimes very pronounced.

It should be noted that exports of agricultural products to the EU's territorial area may be growing faster than the dynamics of total agricultural exports. But this form of exchange (export) is maintained at a lower level than imports (the value of agricultural imports from Romania with the European Union is a majority).

At the same time, annual rhythms can be highlighted for animal and vegetable products with reference to the growth and decrease curves for certain periods of years.

The dominant overall of imports is found at animal, vegetable and food products, beverages and tobacco.

Reproduced by summarizing the significance of the foreign trade balance, we can see a trend (for certain products) at which we found a higher export than import and which by the influence on the whole of foreign trade does not determine a favorable balance.

In this context, the paper aimed to analyze the evolution and structure of foreign trade in agricultural products from Romania in the period 2008-2019.

## **2. Materials and Methods**

The investigation methodology was based on annual physical and value levels of the period 2008 - 2019. Appropriate references were made to the structure of the main groups of agricultural products related to foreign trade (export / import).

According to the Nomenclature of the European Union, the nominations of the product groups were: live animals and animal products; vegetable products; animal or vegetable fats and oils; food, beverages and tobacco.

The comparisons were based on both the structural total and the succession of the years of the analyzed period.

It should be mentioned that initially the analysis indicators followed the comparative form which were presented in a trivalent form, respectively: at national level and of the amount delimited by the relations with the EU for the whole export activity; at national level regarding the ensemble/total of agricultural products involved in the activity of foreign trade; in the structure of each of the four groups of agricultural products.

Expressed in value, the balance of foreign trade in agricultural products completed the level of knowledge of the current situation, but especially the possibility of a favorable equilibrium trend [1].

### 3. Results and Discussions

#### 3.1. The comparative situation of the export of agricultural products from Romania

The overall analysis regarding the foreign trade at national level can be considered a preamble of knowing the structure of all the other directions of investigation.

Table 1 lists such a situation of domestic exports for the period 2008-2019 as follows:

- at national level, the total value of exports for the analyzed period registers a sharp growth rate. If in 2008 there is a level of 33.7 billion € in the last year of analysis, the increase is 67.7 billion € amplification of the succession of years;
- for the export of agricultural products the levels recorded an increase, but for which annual variations are found. If in 2008 the export has a level of only 2.16 billion €, in the last year it reaches 7.18 billion €. In this comparative form of analysis, annual variations in the period 2014-2018 are found, which exceed 10% compared to the national level. At the same time, a comparison with the previous year shows an increase for each of the annual dynamics.

**Table 1.** Total export value (FOB), from Romania, according to the Nomenclature from the European Union

No.	Specification	MU	2008	2010	2012	2014	2016	2018	2019
1	Total export la national level	Billion €	33.72	37.36	45.06	52.46	57.39	67.72	68.99
		% vs 2008	<b>100</b>	110.78	133.63	155.57	170.17	200.81	204.59
2	of which: Total agricultural exports	Billion €	2.16	3.11	4.04	5.57	6.16	6.50	7.18
3	compared to total exports	%	6.42	8.33	8.97	10.63	10.75	9.6	10.41
4	compared to the base year	%	<b>100</b>	143.74	186.78	257.58	284.92	300.27	331.84
5	compared to the previous year	%	-	138.79	100.58	105.54	104.24	101.48	110.51

Source: NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [3, 6].

Hence the conclusion that both overall exports at the national level and exports at the agricultural level are increasing. It can be stated that the growth rate for exports of agricultural products is more pronounced than for the overall export of the whole.

### 3.2. The comparative situation of the export of agricultural products from Romania by structure

The analysis of the export of agricultural products was deepened in the structure of four product groups, the phenomenon being given by adequate comparative elements at the territorial level of the whole and at the EU level.

The total value of agricultural exports from Romania is based on enemy sections for the analyzed periods, as presented in Table 2.

The data from Table 2 present the following aspects:

- for the whole of agricultural exports, its value level falls within a favorable growth rate. Thus, in the last year of the analysis, the level reaches an increase of 3.31 hours compared to the first year. It should be mentioned the annual export variations whose oscillations compared to the previous year are between 1.48% and 38.79%. Significantly, this amount of exports to total agriculture for most years is lower than the level of imports (between 49.8% and 108.90%). Regarding the annual variations, it is possible to limit a growth period signaled for the years 2008-2014 (49.80 → 108.90%) and the period 2015 - 2019 where there is a decline (97.7 → 85.2%);
- for the same period of the product group live animals and animal products, the value of exports increases the value of exports (it reaches more than 3 times in 2019 compared to 2008), to which is added the maintenance of those variations compared to the previous year (between +34.62% and -5.40%). At the same time, the share of these product groups compared to the total level of agricultural exports is very low, to which are added the significant annual variations (between 18.07% and 12.83%);
- the group of vegetable products, through the total value of the export of agricultural products, is predominantly the registered level being between 56.66% and 48.71%. The increase of 2019 is +32.47 compared to 2008, and the fluctuations of the annual surveys are between +51.47 and -6.12%;
- for the group of products fattening the animals and the animals, there is an increase in the annual comparative values (2.24 times) but which continues with a decrease compared to the total products exported from agriculture (between 3.14% and 6.01%). The annual variations are maintained between +86.46% and 24.37% which fall within the product group with the highest amplitudes;
- the group of food, beverages and food products occupies an important position in the total value of agricultural exports from Romania, at which the evolutionary rate reaches 30.01% of the total. The increase registered in the last year (2019) compared to the first year (2008) is 3.69 times. The annual variations register more positive oscillations, being between +0.58% and +38.79%.

The shape presented for the total export of agricultural products indicates a total increase, along with a lower level than imports.

**Table 2.** Total value of exports (FOB), agricultural in Romania, by sections (according to the Nomenclature of the European Union \*)

	Specification	Indicators of comparative structure	MU	2008	2010	2012	2014	2016	2018	2019
1	I. Live animals and animal products	Annual value	Th. €	277,985	433,571	731,139	742,755	813,967	895,227	928,064
		Compared to the previous year	%	-	133.1	125.26	99.66	104.12	94.6	103.66
		compared to the base year	%	100	155.96	263.01	267.19	292.8	322.04	333.85
		compared to total agricultural exports *	%	12.83	13.93	18.07	13.31	13.19	13.76	12.91
2	II. Vegetable Products	Annual value	Th. €	1,198,292	1,625,160	1,970,328	3,071,764	3,437,493	3,590,864	3,876,148
		Compared to the previous year	%	-	144.46	93.97	102.91	111.8	102.53	107.94
		compared to the base year	%	100	135.62	164.42	256.34	286.86	299.66	323.47
		compared to total agricultural exports *	%	55.34	52.21	48.71	55.07	55.71	55.23	53.94
3	III. Animal or vegetable fats and oils	Annual value	Th. €	105,538	164,170	182,829	213,371	194,056	224,211	224,491
		Compared to the previous year	%	-	186.46	75.63	88.98	86.75	106.22	100.12
		compared to the base year	%	100	155.55	173.23	202.17	183.87	212.44	212.71
		compared to total agricultural exports *	%	4.87	5.27	4.52	3.82	3.14	3.44	3.12
4	IV. Food, beverages and tobacco	Annual value	Th. €	583,385	889,531	1,160,026	1,549,328	1,723,717	1,791,171	2,156,309
		Compared to the previous year	%	-	126.4	105.59	117.84	93.77	102.51	120.38
		compared to the base year	%	100	152.47	198.84	265.57	295.46	307.03	369.62
		compared to total agricultural exports *	%	26.94	28.57	28.68	27.77	27.94	27.55	30.01
5	TOTAL agriculture (total 1,2,3,4)	Annual value	Th. €	2,165,200	3,112,432	4,044,322	5,577,218	6,169,233	6,501,473	7,185,012
		Compared to the previous year	%	-	138.79	100.58	105.54	104.24	101.48	110.51
		compared to the base year	%	100	143.74	186.78	257.58	284.92	300.27	331.84
		compared to total agricultural exports *	%	49.8	79.4	84.34	108.9	90.87	85.15	85.22

Source, NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [2, 6].

The value of agricultural exports from Romania with the EU is one of the most important aspects of the economic equilibrium policies of the current stage. It is in fact a matter of wanting to know the quantities of agricultural products expressed in values exported to the EU.

Table 3 presents the indicators regarding the export value of the agricultural products in their dynamics.

**Table 3.** Agricultural export value (FOB), from Romania, with the European Union (according to the Nomenclature from the European Union \*)

	Specification/ MU	Indicators of comparative structure	MU	2008	2010	2012	2014	2016	2018	2019
1	I. Live animals and animal products	Annual value	Th.€	233,762	339,318	534,205	541,545	527,775	632,042	593,079
		Compared to the previous year	%	-	123.31	113.12	100.35	92.91	103.68	93.83
		compared to the base year	%	100	145.15	228.52	231.66	225.77	270.37	253.71
		compared to total agricultural exports *	%	16.34	14.82	18.99	15.61	13.78	13.99	12.99
2	II. Vegetable Products	Annual value	Th.€	607,519	1,005,578	1,087,776	1,437,364	1,680,648	2,246,334	1,985,761
		Compared to the previous year	%	-	131.45	86.74	112.34	106.85	111.53	88.4
		compared to the base year	%	100	165.52	179.05	236.59	276.64	369.75	326.86
		compared to total agricultural exports *	%	42.48	43.92	38.66	41.44	43.88	49.75	43.49
3	III. Animal or vegetable fats and oils	Annual value	Th.€	90,039	159,216	178,319	143,954	145,312	181,909	183,061
		Compared to the previous year	%	-	208.39	78.66	66.29	86.14	119.74	100.63
		compared to the base year	%	100	176.83	198.04	159.87	161.38	202.03	203.31
		compared to total agricultural exports *	%	6.29	6.95	6.33	4.15	3.79	4.02	4.01
4	IV. Food, beverages and tobacco	Annual value	Th.€	498,638	785,274	1,012,680	1,345,055	1,475,993	1,454,565	1,803,133
		Compared to the previous year	%	-	125.44	105.65	118.86	93.55	99.17	123.96
		compared to the base year	%	100	157.48	203.08	269.74	296	291.7	361.61
		compared to total agricultural exports *	%	34.87	34.3	36	38.78	38.54	32.21	39.49
5	TOTAL agriculture (total 1,2,3,4)	Annual value	Th.€	1,429,958	2,289,386	2,812,980	3,467,918	3,829,728	4,514,850	4,565,034
		Compared to the previous year	%	-	131.38	96.61	109.47	98.52	106.42	101.11
		compared to the base year	%	100	160.1	196.71	242.51	267.82	315.73	319.24
		compared to total agricultural exports *	%	66.04	73.55	69.55	62.18	62.07	69.44	63.53

Source: NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [6].

The data from Table 3 highlighted the following aspects:

-for the total value of agricultural exports, from Romania, with the European Union, there is an increase of 3.19 times (which represents the level of the last year of analysis compared to the first year). At the same time, we can mention the annual variations that in the majority of the years are represented in the majority by positive oscillations (+ 31.38% and +1.11%). Comparison with total exports

from agriculture indicates for the relationship with the EU signals that are worth between 59.94% and 77.7%, hence the possibility of multiple increases;

- for the group of live animals and animal products, the value of exports to the EU is increasing and can be estimated at 2.53 times in 2019 compared to 2008, the annual variations of the period being maintained. With special reference to the comparison with agricultural imports with the EU, between 12.99% and 18.99% are recorded for this section. It can be noted that the period 2012-2019 represents a decrease in the share of exports compared to total agricultural imports with the EU (18.99 → 12.99);

- the vegetable products section can be said to be representative of Romania's exports to the EU, it is in an increase that in recent years is over three years, with the maintenance of some annual variations. Exports of these vegetable groups compared to total agricultural imports with the EU are represented by comparative weights between 38.6% and 49.7%;

- for animal and animal fat and vegetables, there are sharp variations (between -33.31% and +108.39%), an increase that reaches 2.93 in 2019 compared to 2008. Comparisons expressed by the weight of total agricultural imports with the EU represent a decrease in the number of years 7.78% to 3.58%.

The section represented by exports to the EU of food, beverages and tobacco shows a comparative level of growth which in the last year is 3.61 times, at which the annual variations are maintained. Regarding the share of this export in relation to the total value of agricultural exports with the EU, there are significant levels (between 32.21% and 40.58%).

In short, the export of agricultural products to the EU's territorial destination can be higher than the total export of agriculture (the shares being between 59.94% and 77.70%), but it can be added that exports are lower than imports. The structure of the products in sections can be seen as a predominance of vegetable products along with food, beverages and one, both for overall exports and agricultural exports with the EU.

### **3.3. The comparative situation of the import of agricultural products from Romania**

The import of agricultural products from Romania is the side that completes the knowledge of the foreign trade with agricultural products from Romania. To elucidate this problem, the analysis was performed on total imports and continued with the EU area.

\* The total value of agricultural imports from Romania is of particular importance in terms of the needs of human consumption, along with the potential of national

production. A first aspect analyzed was the knowledge of the total levels presented in the value and comparative information as presented in Table 4.

**Table 4.** Total value of imports (FOB), agricultural in Romania, by sections (according to the Nomenclature of the European Union \*)

	Specification	Indicators of comparative structure	MU	2008	2010	2012	2014	2016	2018	2019
1	I. Live animals and animal products	Annual value	Th.€	1,191,297	984,428	1,034,909	1,225,844	1,440,754	1,773,796	1,979,526
		Compared to the previous year	%	-	88.23	107.21	110.04	114.88	105.04	111.59
		compared to the base year	%	100	82.63	86.87	102.89	120.94	148.89	166.16
		compared to total agricultural exports *	%	27.4	25.11	21.58	23.93	21.22	23.2323	23.47
2	II. Vegetable Products	Annual value	Th.€	1,259,344	1,141,133	1,416,336	1,513,741	2,329,388	2,316,611	2,516,267
		Compared to the previous year	%	-	113.79	106.98	104.02	114.34	96.71	108.62
		compared to the base year	%	100	90.61	112.47	120.20	184.97	183.95	199.81
		compared to total agricultural exports *	%	28.97	29.11	29.54	29.56	34.31	30.34	29.85
3	III. Animal or vegetable fats and oils	Annual value	Th.€	227,089	217,195	238,646	163,919	189,372	172,245	173,686
		Compared to the previous year	%	-	135.40	97.22	79.80	102.93	89.73	100.84
		compared to the base year	%	100	95.64	105.09	72.18	83.39	75.85	76.48
		compared to total agricultural exports *	%	5.22	5.54	4.98	3.20	2.79	2.26	2.06
4	IV. Food, beverages and tobacco	Annual value	Th.€	1,669,236	1,577,161	2,105,242	2,217,730	2,829,548	3,372,391	3,761,636
		Compared to the previous year	%	-	102.13	110.16	101.85	109.68	107.15	111.54
		compared to the base year	%	100	94.48	126.12	132.85	169.51	202.032	225.35
		compared to total agricultural exports *	%	38.4	40.23	43.9	43.3	41.67	44.16	44.61
5	TOTAL agriculture (total 1,2,3,4)	Annual value	Th.€	4,346,966	3,919,917	4,795,133	5,121,234	6,789,062	7,635,043	8,431,115
		Compared to the previous year	%	-	102.52	107.86	103.41	112.12	102.85	110.42
		compared to the base year	%	100	90.17	110.3	117.81	156.17	175.64	193.95
		compared to total agricultural exports *	%	125.15	122.6	124.88	121.57	118.99	118.86	116.61

Source: NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [4, 6].

From the data shown in Table 4, the following aspects have been highlighted:

-regarding the total imports of agricultural products, through the annual records in the analyzed period, there is a succession of increases which in comparison with 2019 compared to 2008 is 1.93 times. The annual variations are maintained with moderate oscillations (between -12.05% and +13.41%). Considered a main comparison of the total import of the agricultural sector compared to the import



from the EU where the population from 2008-2019 exceeds 100% (variations of surpluses being between +25.47% and 18.86%);

- the section of products that includes the import of certain live and animal products inherits an ascent which in the last year reflects an increase of 1.66 times compared to the first year, but whose oscillations are between -11.77% and +14.88%. At the same time, this level of imports compared to the total annual agricultural imports represents oscillating levels between 21.58% and 29.18%, with the mention of an annual decrease (from 27.40% in the first year to 23.16% in the last year);

- the imported vegetable products can be considered by the preponderance the value of the imported vegetable products reflects an increase of 1.99 times, but with variations, being signaled variations and very high seas (between -18.98% and +66.16%). Comparison with the total value of agricultural imports is significant import for these products with levels between 26.23% and 34.31%;

- the products represented by fattening (animals + plants) are represented by this category whose manual import rate is decreasing the variations being delimited between -29.47% and +8.09%. At the same time, this group of products represents the structural level that indicates the lowest ones from agricultural imports (it reaches only 2.06 of the total in 2019), being found a successive annual decreasing trend (5.22% → 2.06%);

- foodstuffs, beverages and the maintenance of the priority in the total value of imports (in comparison with the total import levels are between 38.40% and 44.61%). At the same time, there is an increase in annual increases compared to this total of imports compared to the previous year (between -7.49% and +26.12%).

It can be concluded that the import of the agricultural products analyzed in value by the total value as a result of the structure for the majority of the annual levels increases with the maintenance of some variations in the dynamics of the analyzed periods. Priority is given to animal, vegetable and food products, beverages, of which the cumulative share is over 90%.

\* The total value of agricultural imports from Romania with the European Union represents a section with a special importance in foreign trade. Both total and continuous structure investigations were performed, the total and comparative levels of which are shown in Table 5, which showed the following:

- for the total value of agricultural imports from the EU it is in an increase where it can be said that the last year is double the first year (by comparing 2019 to 2008 the level is 208.1%). Simultaneously with the total agricultural imports, these imports from the EU are between 79.90% and 85.74% (year 2021);

-for the section live animals and animal products, the value of imports in the analyzed dynamics is an increase whose level in the last year reaches a level of 1.71 times compared to 2008. It should be mentioned the annual variations whose oscillations are signaled between -6.02 % and 12.37%. The comparison with the total agricultural import for this form of import is signaled a decrease from 32.16% to 33.82% in the first years to 26.62% and 26.58% in the last years of the analyzed period;

**Table 5.** Value of agricultural import (FOB) from Romania, with the European Union (according to the Nomenclature from the European Union \*)

	Specification	Indicators of comparative structure	MU	2008	2010	2012	2014	2016	2018	2019
1	I. Live animals and animal products	Annual value	Th. €	1,117,326	920,248	982,663	1,179,805	1,388,165	1,709,986	1,921,647
		Compared to the previous year	%	-	87.99	108.42	109.62	115.01	105.19	112.38
		compared to the base year	%	100	82.36	87.95	105.59	124.24	153.04	171.99
		compared to total agricultural exports *	%	32.16	28.78	25.59	28	24.33	26.62	26.58
2	II. Vegetable Products	Annual value	Th. €	955,239	910,875	1,184,624	1,235,260	1,912,876	1,802,710	2,046,688
		Compared to the previous year	%	-	116.63	110.39	103.16	115.90	94.42	113.53
		compared to the base year	%	100	95.36	124.01	129.31	200.25	188.72	214.26
		compared to total agricultural exports *	%	27.50	28.49	30.85	29.32	33.53	28.06	28.31
3	III. Animal or vegetable fats and oils	Annual value	Th. €	160,666	181,029	195,139	138,962	165,676	145,622	145,124
		Compared to the previous year	%	-	138.72	96.51	84.97	107.47	88.57	99.66
		compared to the base year	%	100	112.67	121.46	86.49	103.12	90.64	90.33
		compared to total agricultural exports *	%	4.63	5.66	5.08	3.30	2.90	2.27	2.01
4	IV. Food, beverages and tobacco	Annual value	Th. €	1,240,018	1,184,946	1,477,208	1,658,414	2,238,742	2,765,064	3,116,153
		Compared to the previous year	%	-	104.4	108.5	103.4	117.0	110.5	112.7
		compared to the base year	%	100	95.6	119.1	133.7	180.5	223.0	251.3
		compared to total agricultural exports *	%	35.7	37.1	38.5	39.4	39.2	43.0	43.1
5	TOTAL agriculture (total 1,2,3,4)	Annual value	Th. €	3,473,249	3,197,098	3,839,634	4,212,441	5,705,459	6,423,382	7,229,612
		Compared to the previous year	%	-	103.4	108.4	104.3	115.8	103.6	112.6
		compared to the base year	%	100	92.0	110.5	121.3	164.3	184.9	208.2
		compared to total agricultural exports *	%	79.9	81.6	80.1	82.3	84.0	84.1	85.7

Source: NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [6].

-the import situation for vegetable products seems to increase, so that the growth rate is 2.14 times higher in the last year (2019) than in the first year (2008). The trend of annual oscillations is maintained by oscillations between -18.25% and +15.90%. With special reference to the levels that represent the comparison with the total agricultural import with the EU, we can see an evolution that outlines a curve that in the first part of the period initially reflects an increase, but which in the analyzed dynamics continues through a decrease;

-for fats and oils (animals or vegetables) both the comparative levels compared to the base year and the rhythms reflect situations in the decrease of the years of the period. The share of total agricultural products in relation to total agricultural imports with the EU is lower than 2.5 times;

-food, beverages and tobacco recorded significant increases, which in the last year amounted to 2.51 times compared to the base year (2008). Further to the total agricultural import from the EU, in the succession of the years, increases of 35.70% → 43.10% are highlighted.

It is possible to deduce a differentiation in the overall evolution of imports which shows both growth trends with regard to food, beverages and tobacco, a stagnation with a tendency to decrease for plant products, a definite decrease for live animals and animal products, along with fats. In summary, the comparative analysis shows that the value level of the total of these agricultural imports decreases, but that the levels of agricultural imports with the EU increase.

### 3.4. The balance of agricultural products from Romania

Regarding the synthesis given by the balance of the whole trade with agricultural products resulting from the export-import comparative structures, the final meanings + and - of the annual values are indicated by the favorability of these forms of trade. In total foreign trade and with the EU, the tables are explicitly presented in values.

Balance of foreign trade in agricultural products in Romania si presented in Table 6.

**Table 6.** Balance of foreign trade with agricultural products from Romania, (Export-Import) at the national level

.	Specification	MU	2008	2010	2012	2014	2016	2018	2019
1	I. Live animals and animal products	mil €	-913.3	-550.9	-303.8	-483.1	-626.8	-878.6	-1,051.5
2	II. Vegetable Products	mil €	-61.1	484.0	554.0	1,558.0	1,108.1	1,274.3	1,359.9
3	III. Animal or vegetable fats and oils	mil €	-121.6	-53.0	-55.8	49.5	4.7	52.0	50.8
4	IV. Food, beverages and tobacco	mil €	-1,085.9	-687.6	-945.2	-668.4	-1,105.8	-1,581.2	-1,605.3
5	TOTAL agriculture (total 1,2,3,4)	mil €	-2,181.8	-807.5	-750.8	456.0	-619.8	-1,133.6	-1,246.1

Source: NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [5, 6].

According to the dynamics of the levels of values ± shown in Table 6, it can be found:

- in the structure of the product sections, the total exports of vegetable products and fats/oils (animal/vegetable) showed a positive trend with positive results (especially since the second half of the period);

- a completely negative situation due to the values of the packaging can be found for the animal product along with food/beverages/tobacco (the balance of the export / import comparison has negative values in the analysis);

-on the whole exported agricultural products the fluctuations and the annual balance sheets limit the levels can be delimited in the following periods: period 2008-2012 for which the negative meaning indicates a decrease of exports compared to imports; the period 2014-2015 with positive values that indicate the most favorable values from the achieved levels; period 2015-2019 which is represented by a favorable upward increase in balance sheet values.

Synthetically, by interpreting these figures / meanings of the balances for the total agricultural exports, there is an overall negative trend of these activities, but in the structure the levels are evolutionarily positive for vegetable products and fats / oils.

\* Balance of foreign trade in agricultural products from Romania with the European Union. The value levels given in Table 7 indicate the differentials whose interpretative meanings can be considered by the following:

- negative trend for the whole dynamics of the years for live animals / animal products and food/beverages/tobacco;

- the existence for certain years with favorable levels for vegetable products and fats/oils.

**Table 7.** Balance of foreign trade with agricultural products, from Romania, (Export-Import) with the European Union

	Specification	MU	2008	2010	2012	2014	2016	2018	2019
1	I. Live animals and animal products	mil €	-883.6	-580.9	-448.5	-638.3	-860.4	-1,077.9	-1,328.6
2	II. Vegetable Products	mil €	-347.7	94.7	-96.8	202.1	-232.2	443.6	-60.9
3	III. Animal or vegetable fats and oils	mil €	-70.6	-21.8	-16.8	5.0	-20.4	36.3	37.9
4	IV. Food, beverages and tobacco	mil €	-741.4	-399.7	-464.5	-313.4	-762.7	-1,310.5	-1,313.0
5	TOTAL agriculture (total 1,2,3,4)	mil €	-2,043.3	-907.7	-1,026.7	-744.5	-1,875.7	-1,908.5	-2,664.6

Source: NIS, 2021, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 [6].

Of all these, it is not possible to say that there is a lower export than the unimportant import which does not determine a favorable balance. Only for vegetable products, oils and fats/oils is there a favorable trend.

## Conclusions

The analysis of the foreign trade with agricultural products from Romania for the period 2008-2021 presented in terms of export/import value levels can be summarized as follows:

(1) The whole of the foreign trade expressed by the total value of the agricultural export registers increases, at which variations are signaled, but at which it can be mentioned that these amplifications are more accentuated compared to the succession of the existing rhythms at national level.

(2) In the case of the analysis of the amount of export of agricultural products, we find that they can be part of a favorable growth trend, the trend being maintained by comparison with total agricultural imports. In the structure of the products from the analysis carried out in the period 2008-2019, it appears that in relation to total exports agricultural products can be reported differences in high weights for plant products, food, beverages and tobacco, along with low levels for exports to animals, fats and oils (vegetable/animal). It can be mentioned that for the whole structure of the products there is an increase but accompanied by annual value oscillations sometimes very accentuated.

(3) The analysis of these agricultural exports to the EU shown by appropriate comparative elements are reflected in annual increases, but by comparison with total agricultural exports the levels are delimited by pre-percentage levels ranging between 59.94% and 77.7%. At the same time, there is a decrease in the export of live animals and animal products, fats and oils (vegetable/animal) along with an increase in vegetable and food products. In short, the export of agricultural products to the EU's territorial area can be in line with higher than the dynamics of total exports from agriculture, but it can be added that exports remain below imports.

(4) The value analysis of the total imports of agricultural products from Romania both as a whole and in structure shows that for most of the annual levels there are increases but with the maintenance of some variations in the dynamics of the analyzed period. The dominant ensemble of these imports is owned by animal, vegetable and food products, beverages and tobacco.

(5) The value of the agricultural import from Romania with the European Union represents a majority amount (compared to total imports), with reference to the sections that include the products of special importance (which include animal, vegetable and food products, beverages and tobacco). At the same time, from the analysis of the annual rhythms for animal and vegetable products, growth and decrease curves can be observed for certain periods of years.

(6) The interpretation of the meanings of the foreign trade balance indicates an overall negative trend of this activity. It can be mentioned that in the final period analyzed the levels of the balance sheet result of certain products is evolutionarily positive (with reference to vegetable products and fats/oils). It can be mentioned that there is for some products an export higher than the import but which on the whole of the foreign trade does not determine a favorable balance.

## REFERENCES

- [1] Constantin M., Explanatory dictionary of agromarketing, Ed. Of the Romanian Academy of Scientists, Bucharest (2021).
- [2] Council Directive 74/409/EEC on the harmonization of the laws of the member states related to honey.
- [3] National Institute of Statistics, Statistical Yearbook of Romania (2015).
- [4] National Institute of Statistics, Contact details of living standards in Romania, Population earnings and consumption (2015).
- [5] National Institute of Statistics, Food Balances, (2008-2015).
- [6] National Institute of Statistics, Foreign trade, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>, Accessed on March 20, 2021 (2021).