# Analysis of Romania's Trade Balance with Agri-Food Products

Nicolae Istudor
Emilia Gogu
Irina-Elena Petrescu
Mihai Istudor
The Bucharest University of Economic Studies, Romania
nicolae.istudor@ase.ro
emilia.gogu@csie.ase.ro
irina.petrescu@ase.ro
istudormihai14@stud.ase.ro

#### **Abstract**

The paper represents an analysis of the evolution of Romania's trade balance at the level of the national economy, as well as that of agri-food products, from 2000 to 2021. The degree of coverage of import by export was also determined, an indicator that reflects the economy's ability to export an adequate volume of goods and services to cover import needs during a year. It is calculated in percentage terms as a ratio between the value of exports and imports. At the level of the national economy, the degree of coverage of imports by exports fluctuated between 2000 and 2021. In 2021, it registered a slight decrease compared to 2000, by 3.3%. By category of agri-food products, there are significant increases in the degree of coverage in the case of cereals and decreases in the case of vegetables, as a result of the increase in imports.

**Key words:** competitiveness, trade balance, agri-food sector

J.E.L. classification: F14, Q13, Q17

# 1. Introduction

The most advantageous countries in terms of ensuring food security are those that have an agricultural potential capable of supplying large quantities of agricultural raw materials and food in excess of their national needs. According to Bazgă and Chelmu, 2013, among these countries is Romania, which has a generous agricultural potential, being, in this aspect, in 5th place among the EU countries, able to cover the food needs of about 80 million people. Romania has a high agricultural potential with the agricultural area used in 2020 of 13.59 million ha, of which 65.60% (8.92 million ha) is arable land, according to Eurostat data.

It can be appreciated that such countries can have, and most of them do have, food independence. This comparative advantage that Romania has is insufficiently exploited, because, according to the estimates of experts and some national and international institutions in the field, approx. 70% of the aggregate demand for food, existing on the profile markets in our country, is covered by the import of such products. Under these conditions, the current state of dependence and food security in Romania is unacceptable in the medium and long term.

## 2. Findings

The importance of agriculture is given by the role of this sector in ensuring food security, but also by its share in the gross added value. From the analysis of this indicator, in the period 2000 - 2019, an oscillating level of the weight of the added value from agriculture in the gross added value obtained at the level of the national economy is found. Thus, the share of added value obtained in

agriculture in 2000 represented 11.4%, in 2001, it reached the maximum level of the analyzed period (14.6%), and in 2019 it reached only 4.4%.

Table 1. Gross added value (million lei, comparable prices)

			million lei, comp			Share %				
Year	Agriculture	Industry	Construction	Services	Total	Agriculture	Industry	Construction	Services	
2000	5778	14649	2993	27357	50777	11,4	28,8	5,9	53,9	
2001	11251	21935	4657	39392	77235	14,6	28,4	6,0	51,0	
2002	14552	33163	7329	56842	111886	13,0	29,6	6,6	50,8	
2003	18189	43345	9958	69177	140669	12,9	30,8	7,1	49,2	
2004	27133	53033	13224	96006	189396	14,3	28,0	7,0	50,7	
2005	25760	63978	17367	121203	228308	11,3	28,0	7,6	53,1	
2006	25161	77890	24719	148230	276001	9,1	28,2	9,0	53,7	
2007	19690	85381	35178	186418	326666	6,0	26,1	10,8	57,1	
2008	28925	120130	53520	212859	415434	7,0	28,9	12,9	51,2	
2009	33293	135186	55143	239117	462739	7,2	29,2	11,9	51,7	
2010	27853	139344	45841	244680	457718	6,1	30,4	10,0	53,5	
2011	32822	169952	29870	245534	478179	6,9	35,5	6,2	51,3	
2012	25975	152521	36171	287208	501874	5,2	30,4	7,2	57,2	
2013	36979	155471	45895	304213	542557	6,8	28,7	8,5	56,1	
2014	35902	168316	46166	329753	580137	6,2	29,0	8,0	56,8	
2015	28068	177043	44686	356996	606792	4,6	29,2	7,4	58,8	
2016	31080	180261	46996	397684	656021	4,7	27,5	7,2	60,6	
2017	35599	199186	42541	458380	735705	4,8	27,1	5,8	62,3	
2018	40476	212339	39480	514870	807166	5,0	26,3	4,9	63,8	
2019	39163	212940	55778	586977	894858	4,4	23,8	6,2	65,6	
Dyna mics compa red with 2000	678%	1454%	1864%	2146%	1762%					

Source: Data processing by authors according to INS data, accessed June 2021

Decreases in the share of gross added value are also found in the case of industry, from 28.8% in 2000 to 23.8% in 2019. In the case of construction, there is an oscillation in the share of gross added value, with significant increases in the period 2007 - 2010, especially in 2008, when it reaches 12.8%, representing the highest value in the entire analyzed period. In the case of services, there is a significant increase, from 53.9% in 2000 to 65.6% in 2019.

Table 2. Import, export and foreign balance trend in the period 2000-2021

Import trend in the period 2000-2021										
Total import of Romania	$Yti = 3590, 5t_i + 10674$									
Romania's import with EU member states	Yti = 2879,4ti + 4328,9									
Romania's import of food products	Yti = 410,72ti - 112,09									
Romania's import of food products with EU member states	Yti = 383,49ti - 805,99									
Export Trend in the period 2000-2021										
Total export of Romania	Yti = 3097,6ti + 4908,6									
Romania's export with EU member states	Yti = 2368,6ti + 2186,4									
Romania's export of food products	Yti = 427,13ti - 1264									
Romania's export of food products with EU member states	Yti = 266,03ti - 714,71									
The trend of the balance of the external balance in the pe	eriod 2000-2021									
Total balance of Romania's foreign trade balance	Yti = -492,92ti - 5765,3									
The balance of Romania's external trade balance with the EU member states	Yti = -510,85ti - 2142,5									
The balance of Romania's foreign trade balance with food products	Yti = 16,405ti - 1151,9									
The balance of Romania's foreign trade balance with food products with EU member states	Yti = -117,45ti + 91,272									

Source: Data processing by authors according to INS data, accessed June 2021

In table no. 2 the trend of the chronological equations for the interval 2000-2021 and the balance of Romania's external trade balance as a whole and with the EU member states is determined, which reflects the difference between the value of exports and that of imports of goods, services and food products of a country.

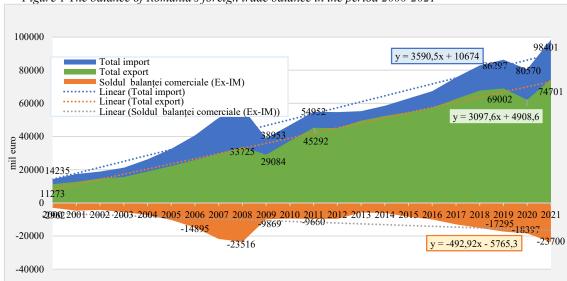


Figure 1 The balance of Romania's foreign trade balance in the period 2000-2021

Source: Data processing by authors according to INS data, accessed June 2021

From the analysis of Romania's foreign trade from 2000 to 2021, it is found that the value of Romania's imports increases annually by 3.59 billion Euros, while the value of Romania's exports increases annually by 3.09 billion Euros, and the external trade balance deficit deepens annually with 492.92 million Euros.

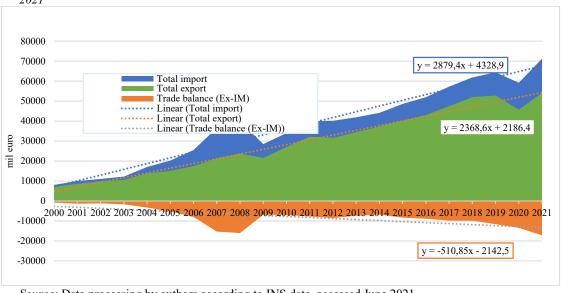


Figure 2 The balance of Romania's external trade balance with the EU member states in the period 2000-2021

Source: Data processing by authors according to INS data, accessed June 2021

From the analysis of Romania's trade with the member states of the European Union, in the period 2000 - 2021, it is found that the value of imports from the EU increases annually by 2.8 billion Euros, the value of Romania's exports to the EU member states increases annually by 2.36 billion Euros and the external trade balance deficit deepens annually by 510 million Euros.

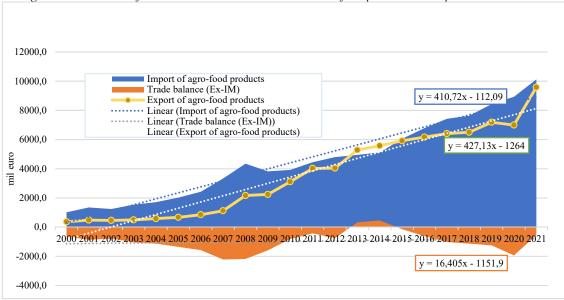


Figure 3 The balance of Romania's external trade balance with food products in the period 2000-2021

Source: Data processing by authors according to INS data, accessed June 2021

From the analysis of Romania's foreign trade in agri-food products, from the period 2000 - 2021, it is found that the value of Romania's agri-food imports increases annually by 410.72 million Euros, the value of Romania's agri-food exports increases annually by 427.13 million Euros , and the trade balance with agro-food products is positive and increases annually by 16.40 million Euros (insignificant).

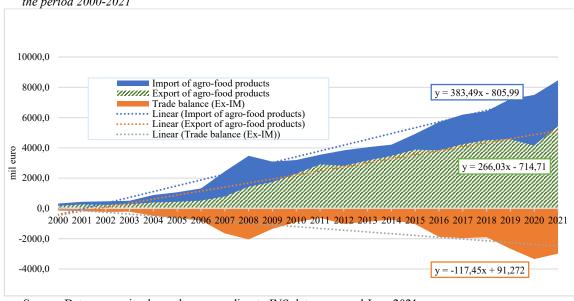


Figure 3. The balance of Romania's external trade balance with EU member states with food products in the period 2000-2021

Source: Data processing by authors according to INS data, accessed June 2021

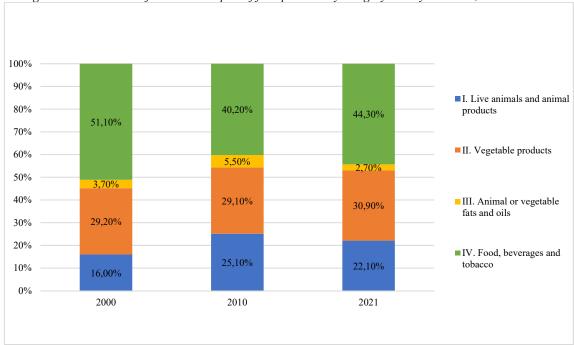
From the analysis of Romania's trade in agri-food products with the EU member states, in the period 2000 - 2021, it is found that the value of Romania's agri-food product imports with the EU member states increases annually by 383.49 million Euros, the value of Romania's agri-food product exports by EU member states, increases annually by 266.03 million Euros, and the trade balance deficit with agro-food products is negative and deepens annually by 117.45 million Euros.

Table 5. The share of Romanian imports by product type in 2000, 2010 and 2021(%)

		Total s	tates of tl	ne world	With EU member states		
Import		2000	2010	2021	2000	2010	2021
Food products of which:			8,36%	10,29%	4,00%	9,41%	11,87%
I. Live animals and animal products			25,1%	22,1%	24,1%	28,8%	25,5%
II. Vegetable products			29,1%	30,9%	21,4%	28,5%	29,2%
Ofzulaiola	07. Vegetables, plants, roots and tubers	7,5%	13,1%	16,9%	10,1%	10,1%	15,0%
Of which:	10. Cereals	21,1%	21,7%	20,4%	12,9%	26,0%	24,7%
III. Animal	or vegetable fats and oils	3,7%	5,5%	2,7%	6,2%	5,7%	2,5%
IV. Food, beverages and tobacco			40,2%	44,3%	48,2%	37,1%	42,8%
Rest of the products			91,6%	89,7%	96,0%	90,6%	88,1%

Source: Data processing by authors according to INS data, accessed June 2021

Figure 4. The structure of Romania's import of food products by category in the years 2000, 2010 and 2021



Source: Data processing by authors according to INS data, accessed June 2021

From the analysis of the available data, it appears that the share of imports of agri-food products in the total imports made by Romania represented 7.13%, in the year 2000, respectively 10.29%, in the year 2021.

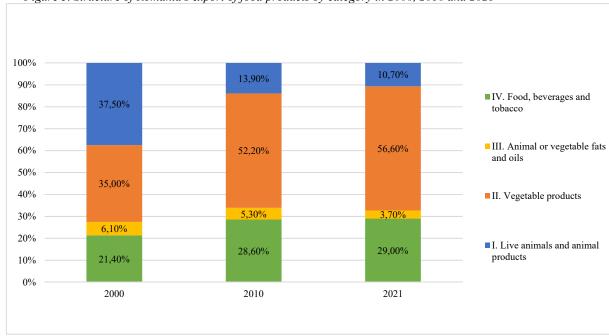
From the analysis of the structure of Romania's agri-food imports, a slight decrease is found only in the case of the category "Animal or vegetable fats and oils", the rest of the other 3 categories, respectively "Food products, beverages and tobacco", "Vegetable products" and "Animals vines and animal products", recorded increases (see the data presented in Figure no. 4).

Table no. 6. Share of Romania's exports by product type in 2000, 2010 and 2021 (%)

Category of products			tates of tl	ne world	With EU member states		
			2010	2021	2000	2010	2021
Food products of which:			8,33%	12,83%	2,44%	8,48%	10,12%
I. Live animals and animal products			13,9%	10,7%	43,6%	14,8%	10,4%
II. Vegetable products		35,0%	52,2%	56,6%	35,1%	43,9%	47,6%
Of subjects	07. Legume, plante, radacini și tuberculi	15,4%	4,0%	2,0%	23,9%	6,2%	3,8%
Of which:	10. Cereale	28,2%	54,9%	66,8%	8,8%	43,2%	41,3%
III. Animal or vegetable fats and oils		6,1%	5,3%	3,7%	0,4%	7,0%	4,5%
IV. Food, beverages and tobacco			28,6%	29,0%	21,0%	34,3%	37,5%
Rest of products			91,7%	87,2%	97,6%	91,5%	89,9%

Source: Data processing by authors according to INS data, accessed June 2021

Figure 5. Structure of Romania's export of food products by category in 2000, 2010 and 2021



Source: Data processing by authors according to INS data, accessed June 2021

The share of agri-food exports in Romania's total exports represented 3.26% in 2000, retrospectively 12.83% in 2021. From the analysis of the structure of Romania's agri-food exports, the following can be found:

- the category "Food products, beverages and tobacco" increases in weight in total by 7.6%;
- the category "Animal or vegetable fats and oils" decreases in total weight by 2.4%;
- the "Vegetable products" category increases by 21.6% (raw cereals);
- the "Live animals and animal products" category decreases by 26.8%.

The share of Romania's total imports and food products with the EU member states in the period 2000-2021, presents two completely different periods and pictures, before and after Romania's entry into the EU, respectively the period 2000-2006 and 2007-2021. Before Romania's entry into the EU, the share of our country's imports with the EU was between 56% and 65%, in which the share of cereals varied greatly from year to year, as follows: 6.7% (in 2003) and 48.8% (in 2006).

After joining the EU, the shares of Romania's total imports and food products with the EU member states have increased significantly, thus over 93% of the total live animals and animal products are destined for the EU, a situation also recorded for the "Cereals" product group. In contrast to these, "Vegetable products", respectively "Animal or vegetable fats and oils" have weights between 79 and 82%.

Table no. 7. Calculation of the balance of Romania's foreign trade balance as a whole and with EU states in the period 2000-2021

in ine pe	Total Romania with the countries of the world					Romania with the EU states					
Year	Total import (mil.euro)	Total export (mil.euro)	Trade balance (Ex-IM) (mil.euro)	The degree of coverage of imports by exports (%)	Total import (mil.euro)	Total export (mil.euro)	Trade balance (Ex-IM) (mil.euro)	The degree of coverage of imports by exports (%)			
2000	14235	11273	-2962	79,2%	8046	7195	-851	89,4%			
2001	17383	12722	-4661	73,2%	9975	8623	-1352	86,4%			
2002	18881	14675	-4206	77,7%	11033	9864	-1169	89,4%			
2003	21201	15614	-5588	73,6%	12223	10571	-1651	86,5%			
2004	26281	18935	-7346	72,0%	17065	13807	-3258	80,9%			
2005	32568	22255	-10313	68,3%	20251	15043	-5208	74,3%			
2006	40746	25850	-14895	63,4%	25487	17500	-7987	68,7%			
2007	51322	29549	-21773	57,6%	36587	21269	-15318	58,1%			
2008	57240	33725	-23516	58,9%	39838	23765	-16074	59,7%			
2009	38953	29084	-9869	74,7%	28472	21600	-6871	75,9%			
2010	46869	37360	-9509	79,7%	33978	27013	-6964	79,5%			
2011	54952	45292	-9660	82,4%	39953	32166	-7787	80,5%			
2012	54703	45069	-9634	82,4%	40173	31601	-8571	78,7%			
2013	55317	49562	-5755	89,6%	41916	34508	-7408	82,3%			
2014	58522	52466	-6056	89,7%	44124	37315	-6809	84,6%			
2015	62971	54610	-8361	86,7%	48598	40257	-8341	82,8%			
2016	67364	57392	-9972	85,2%	51951	43080	-8870	82,9%			
2017	75604	62644	-12960	82,9%	57281	47482	-9798	82,9%			
2018	82840	67723	-15116	81,8%	61877	51983	-9894	84,0%			
2019	86297	69002	-17295	80,0%	64403	52836	-11567	82,0%			
2020	80570	62173	-18397	77,2%	59240	45779	-13461	77,3%			
2021	98401	74701	-23700	75,9%	71265	54095	-17170	75,9%			

Source: Data processing by authors according to INS data, accessed June 2021

From the analysis of the data presented in Table no. 7, it follows that, in the period 2000 - 2021, the balance of the trade balance of Romania at the level of the national economy registers negative values, the maximum being recorded in the year 2021 (with a deficit of 23,700 million euros), and the minimum in 2013 (with a deficit of 5,755 million euros).

Also, the balance of Romania's trade balance in relation to the member states, at the level of the national economy, registers negative values, the maximum being recorded in 2021 (with a deficit of 17,170 million euros), and the minimum before accession, in the year 2000 (with a deficit of 851 million euros), and after accession, in 2009 (with a deficit of 6,871 million euros).

Table no. 8. Calculation of the balance of the foreign trade balance with food products of Romania as a whole and with the EU states in the period 2000-2021

	Total Ron	nania with th	e countries of	the world	Romania with the EU states					
Year	Import of food products (mil.euro)	Export of food products (mil.euro)	Trade balance (Ex-IM) (mil.euro)	The degree of coverage of imports by exports (%)	Import of food products (mil.euro)	Export of food products (mil.euro)	Trade balance (Ex-IM) (mil.euro)	The degree of coverage of imports by exports (%)		
2000	1015,1	367,6	-647,469	36,2%	322,1	175,4	-146,721	54,5%		
2001	1350,8	484,0	-866,781	35,8%	434,8	262,5	-172,392	60,4%		
2002	1245,7	460,6	-785,041	37,0%	470,5	236,3	-234,222	50,2%		
2003	1535,3	497,9	-1037,402	32,4%	505,2	284,7	-220,46	56,4%		
2004	1713,9	587,4	-1126,531	34,3%	884,5	390,8	-493,647	44,2%		
2005	2021,9	673,3	-1348,657	33,3%	1067,9	437,7	-630,192	41,0%		
2006	2424,8	854,0	-1570,82	35,2%	1323,1	518,0	-805,084	39,1%		
2007	3338,9	1122,3	-2216,609	33,6%	2440,9	791,9	-1648,956	32,4%		
2008	4347,0	2165,2	-2181,766	49,8%	3473,2	1430,0	-2043,291	41,2%		
2009	3823,3	2242,4	-1580,849	58,7%	3092,0	1742,5	-1349,534	56,4%		
2010	3919,9	3112,4	-807,485	79,4%	3197,1	2289,4	-907,712	71,6%		
2011	4445,6	4020,7	-424,926	90,4%	3543,0	2911,4	-631,595	82,2%		
2012	4795,1	4044,3	-750,811	84,3%	3839,6	2813,0	-1026,654	73,3%		
2013	4952,0	5284,4	332,368	106,7%	4040,4	3167,7	-872,766	78,4%		
2014	5121,2	5577,2	455,984	108,9%	4212,4	3467,9	-744,523	82,3%		
2015	6055,2	5918,2	-137	97,7%	4925,8	3887,1	-1038,708	78,9%		
2016	6789,1	6169,2	-619,829	90,9%	5705,5	3829,7	-1875,731	67,1%		
2017	7423,1	6406,6	-1016,578	86,3%	6201,4	4242,1	-1959,322	68,4%		
2018	7635,0	6501,5	-1133,57	85,2%	6423,4	4514,9	-1908,532	70,3%		

2019	8431,1	7185,0	-1246,103	85,2%	7229,6	4565,0	-2664,578	63,1%
2020	8932,5	6994,1	-1938,445	78,3%	7498,1	4153,3	-3344,778	55,4%
2021	10130,1	9587.0	-543,044	94,6%	8459,8	5471,9	-2987,957	64,7%

Source: Data processing by authors according to INS data, accessed June 2021

Unlike Romania's trade balance at the level of the national economy, the trade balance with agrifood products recorded positive balances in 2013 (with a surplus of 332 million euros), respectively in 2014 (with a surplus of around 456 million euros). It should be noted that in 2015 a relatively good situation is also recorded, with a negative balance of only 137 million euros. Also, as it results from the analysis of the data presented in Table no. 8, as in the case of Romania's trade balance, in relation to the member states, at the level of the national economy, the trade balance with agri-food products registers deficits throughout the period 2000-2021. The maximum level being recorded in 2020 (with a deficit of about 3,335 million euros), and the minimum before accession, in 2000 (with a deficit of about 147 million euros), and after accession, in 2011 (with a deficit of 632 million euros).

Another relevant indicator in the analysis of the structure and efficiency of Romania's foreign trade concerns the degree of coverage of import by export. This indicator reflects the ability of our economy to export an adequate volume of goods and services to cover import needs during a year. It is calculated in percentage terms as a ratio between the value of exports and imports. Next, its level was determined both on the total economy and on categories of food products at the level of each EU member state.

Table no. 9. The degree of coverage of imports by exports per total and for food products, total foreign

trade of Romania in the period 2000-2021 (%)

	Degree of L I :		2021 (70)	Of which:			
Year	coverage total foreign trade	I. Live animals and animal products	II. Vegetable products	07. Vegetables, plants, roots and tubers	10. Cereals	III. Animal or vegetable fats and oils	IV. Food, beverages and tobacco
2000	79,2%	85,0%	43,5%	89,2%	57,9%	59,3%	15,1%
2001	73,2%	46,6%	53,7%	156,7%	58,3%	73,8%	17,4%
2002	77,7%	48,9%	63,3%	131,2%	253,2%	14,2%	19,7%
2003	73,6%	72,2%	28,7%	77,1%	5,7%	49,8%	17,8%
2004	72,0%	51,6%	38,1%	95,5%	19,6%	123,6%	15,8%
2005	68,3%	29,6%	63,2%	84,9%	204,2%	106,4%	16,1%
2006	63,4%	29,9%	75,7%	46,7%	337,7%	76,9%	16,2%
2007	57,6%	29,0%	42,5%	29,5%	55,8%	47,1%	28,1%
2008	58,9%	23,3%	95,2%	26,8%	206,9%	46,5%	34,9%
2009	74,7%	29,2%	112,2%	35,8%	252,5%	54,9%	45,6%
2010	79,7%	44,0%	142,4%	43,6%	359,7%	75,6%	56,4%
2011	82,4%	60,5%	158,4%	34,9%	328,9%	98,5%	57,5%
2012	82,4%	70,6%	139,1%	32,8%	358,0%	76,6%	55,1%
2013	89,6%	66,9%	205,1%	43,0%	605,6%	116,7%	60,4%
2014	89,7%	60,6%	202,9%	38,8%	670,1%	130,2%	69,9%
2015	86,7%	62,3%	150,9%	32,9%	371,1%	121,6%	71,3%
2016	85,2%	56,5%	147,6%	23,7%	354,2%	102,5%	60,9%
2017	82,9%	56,0%	146,2%	34,0%	423,4%	110,0%	55,5%
2018	81,8%	50,5%	155,0%	22,9%	669,8%	130,2%	53,1%
2019	80,0%	46,9%	154,1%	18,5%	650,3%	129,3%	57,3%
2020	77,2%	42,4%	114,7%	19,3%	308,5%	96,5%	68,3%
2021	75,9%	45,7%	173,2%	20,3%	566,2%	131,4%	61,9%

Source: Data processing by authors according to INS data, accessed June 2021

At the level of the national economy, the degree of coverage of imports by exports fluctuated between 2000 and 2021. In 2021, it registered a slight decrease compared to 2000, by 3.3%. By category of agri-food products, there are significant increases in the degree of coverage in the case of cereals and decreases in the case of vegetables, as a result of the increase in imports.

It is worth noting that, between 2000 and 2021, the value of food imports increased from 1.01 billion Euros to 10.13 billion Euros. The biggest increases can be seen since 2007, the year of Romania's accession to the European Union. In 2021, the value of imports of agri-food products from EU member states represents 83.5% of the total imports of agri-food products.

Also, the value of exports of agri-food products increased between 2000 and 2021, from 367 million Euros in 2000 to 9.5 billion Euros in 2021.

It is worth noting the deficit of the trade balance for agri-food products which, in 2020, reaches a record level of 1.93 billion euros, as a result of the effects of the prolonged drought of that year.

The dependence of agriculture on the climate factor is also demonstrated by the value of the deficit in 2021, considered a very good agricultural year, with the deficit falling to 543 million Euros.

Table no. 10. The degree of coverage of imports by exports in total and for food products, in Romania's

foreign trade with the EU in the period 2000-2021 (%)

J. I. g. i.	iac with the L	At the EU level of which:									
•	Degree of coverage with EU states	I. Live	II.	Of whic	h:	III. Animal	IV. Food,				
Year		animals and animal products	Vegetable products	07. Vegetables, plants, roots and tubers	10. Cereals	or vegetable fats and oils	beverages and tobacco				
2000	89,43%	98,35%	89,28%	212,38%	60,75%	3,12%	23,69%				
2001	86,44%	67,15%	130,78%	674,49%	79,57%	15,26%	31,13%				
2002	89,41%	52,02%	143,40%	457,03%	860,95%	0,61%	26,38%				
2003	86,49%	112,38%	70,36%	247,05%	10,43%	15,03%	23,83%				
2004	80,91%	55,49%	71,72%	173,21%	42,16%	94,76%	19,10%				
2005	74,28%	35,14%	95,69%	173,12%	281,88%	74,17%	19,81%				
2006	68,66%	30,99%	94,63%	78,01%	411,56%	83,70%	17,26%				
2007	58,13%	25,34%	40,58%	57,39%	58,29%	73,53%	29,65%				
2008	59,65%	20,92%	63,60%	41,29%	50,33%	56,04%	40,21%				
2009	75,87%	26,31%	97,95%	47,90%	159,77%	58,55%	55,17%				
2010	79,50%	36,87%	110,40%	67,66%	183,38%	87,95%	66,27%				
2011	80,51%	52,10%	116,85%	45,84%	177,73%	112,11%	70,41%				
2012	78,66%	54,36%	91,82%	41,43%	163,10%	91,38%	68,55%				
2013	82,33%	50,14%	106,85%	50,48%	163,54%	132,77%	70,58%				
2014	84,57%	45,90%	116,36%	46,55%	242,55%	103,59%	81,10%				
2015	82,84%	47,06%	95,30%	39,45%	135,20%	109,42%	82,41%				
2016	82,93%	38,02%	87,86%	24,06%	113,71%	87,71%	65,93%				
2017	82,89%	37,50%	105,48%	28,69%	171,13%	92,40%	58,62%				
2018	84,01%	36,96%	124,61%	30,49%	346,84%	124,92%	52,61%				
2019	82,04%	30,86%	97,03%	23,06%	255,21%	126,14%	57,86%				
2020	77,28%	24,25%	73,16%	24,48%	104,47%	84,87%	59,89%				
2021	75,91%	26,28%	105,41%	26,36%	175,97%	118,67%	56,65%				

Source: Data processing by authors according to INS data, accessed June 2021

With regard to trade with the EU member states, it can be seen that at the level of the national economy, the trade balance deficit deepens, and the degree of coverage of imports by exports decreases, this trend has been noticeable since the pre-accession period.

Although our country has favorable agro-pedological conditions for the development of animal husbandry and horticulture, it is found that for these two categories, the degree of coverage of consumption needs from own production decreases, reaching about 26% for both categories (in 2021).

The degree of coverage is high in the case of the "Cereals" category, the balance of the trade balance being a positive one. Romania's accession to the EU allowed farmers access to non-reimbursable European funds, thus contributing to the increase in production and, implicitly, export capacity for this category. For the future period, our country should focus on increasing the processing capacity of agricultural products (raw material), so as to reduce food imports from a value point of view.

### 3. Conclusions

In order to balance Romania's trade balance in agri-food products, it is necessary to take into account the increase in their competitiveness both on the domestic market and especially on the foreign market. The increase in competitiveness can be achieved through two pillars, namely by ensuring the quality of agri-food products and by offering them to the market at affordable prices for consumers.

From the analysis of Romania's trade balance for these products, it is found that its balance, with the exception of 2013 and 2014, is negative throughout the analysis period, which means that the value of imports exceeds the value of exports of agri-food products. Also, the dependence of Romania's agri-food sector on the climate factor is demonstrated even through the balance of the

trade balance. Thus, the agricultural years that faced extreme climatic phenomena, such as 2020, are the years in which the negative balance of the balance deepens.

In agricultural years considered good for agriculture, such as 2021, there is a significant increase in exports of agri-food products, which also causes a decrease in the negative balance of the trade balance with agri-food products. In order to increase the competitiveness of the agri-food sector, the European Union allocates non-reimbursable European funds for rural development. Romania has benefited from significant funds since the pre-accession period, through the SAPARD program (about 1.15 billion Euros). In the post-accession period, Romania benefited from funds through the National Rural Development Program for the periods 2007 – 2013 (around 8.022 billion Euros) and 2014 – 2020 (around 8.2 billion Euros). For the 2021-2027 programming period, the financial support for rural development decreases to around 6.75 billion Euros, but the support allocated to direct payments and market measures increases.

It should be mentioned that, in order to become competitive on the European market of agri-food products (and not only), to these sums allocated by the EU, it is necessary to add substantial amounts from the state budget of our country.

In conclusion, we can say that accessing non-reimbursable European funds and implementing projects aimed at increasing the competitiveness of the agri-food sector, as well as making investments in the agri-food sector from own revenues (budgetary and domestic private), will contribute to the quantitative and qualitative growth of agri-food products and, consequently, in balancing the trade balance for these products.

#### 4. References

- Bazgă, B., Chelmu, S., 2013. Securitatea alimentară: Potențialul agricol, componentă a securității
  naționale a României [Food security: Agricultural potential, component of Romania's national
  security], [online] Available at: <a href="https://intelligence.sri.ro/securitatea-alimentara-potentialul-agricol-componenta-securitatii-nationale-romaniei/">https://intelligence.sri.ro/securitatea-alimentara-potentialul-agricol-componenta-securitatii-nationale-romaniei/</a>
- Istudor, N., Petrescu, I.E., 2021. "Competitivitatea sectorului agroalimentar din România pe piața mondială din perspectiva anilor 2040" [The competitiveness of the Romanian agri-food sector on the world market from the perspective of the 2040s], in Boştină, C., Zaman, Ghe., Istudor, N. (coord), 2021. Să gândim dincolo de azi Modelul economic românesc în Uniunea Europeană, România orizont 2040 [Let's think beyond today The Romanian economic model in the European Union, Romania horizon 2040]. Bucharest: Economics Publishing House.
- Istudor, N., 2006. Dezvoltarea regională și rurală a României în contextul integrării în Uniunea Europeană [Regional and rural development of Romania in the context of integration into the European Union]. Bucharest: ASE Publishing House.
- National Institute of Statistics, 2022. Tempo Online
- Săvoiu Gh., Gogu E., Țaicu M., 2017. Hierarchies of Asociative Dynamics, Starting from Romania's Macro-Economic Imbalances in the EU-28. What Does Romania's Economic Evolution in the EU-28 Look Like? *Romanian Statistical Review* no. 3, pp. 35-46 ISSN WOS:000423922600003