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SOME CONSIDERATIONS REGARDING THE FOREIGN TRADE OF ROMANIA WITH OIL SEEDS (2014-2016)

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Abstract

Through the information presented, the study aims to highlight the trends of imports and exports of Romania, in the case of oilseeds (sunflower, rapeseed, oilseed, mustard, soybean and other oilseeds) for the period 2014-2016. As a result, it is based on the use of statistical information provided by international databases, recognized worldwide as FAO. The total national value of exports (average period) was 1062432 thousand $, of which each product contributed with: 1,195.66 thousand dollars flax for oil; 4,002.67 thousand $ mustard; 4852 thousand other oily seeds; 40,311 thousand soybeans; 463,659.67 thousand $ rapeseed; 548,411 thousand $ sunflower. The import, reached a value of 269,456.33 thousand $ (average 2014-2016), which is based on variable contributions of: 751.67 thousand $ flax for oil; 2,400.66 thousand $ mustard; 26,885 thousand other oily seeds; 34,877 thousand $ rapeseed; 62,289.67 thousand soybeans; 142,222.33 thousand $ sunflower. At the average level of the period, an excess trade balance is found (+ 792,975.67 thousand $).

Key words**:** *export, import, trade balance, sunflower, rapeseed, oil, soybean, mustard*

INTRODUCTION

For Romania, oily plants are constituted in an important group of cultures, due to the generally favorable conditions, as a result of the annual areas and productions recorded. The main plant components of this group (oily plants) are represented by sunflower, rapeseed, soy, flax for oil, mustard.

Sunflower, is a widely used plant worldwide, for the production of seeds and oil [4]. At the global level, Sunflower occupies the 5th place of the 13 major crop plants, under the Food security report [10]. Sunflower culture, presents a major dependence on pollinating insects [8].

In Europe, rapeseed is mainly grown as a source for biofuel, but also for edible oil [9]. The importance of rape culture is variable across European countries, as an example, for Germany, rapeseed is the most important oily culture [2]. By its potential, rapeseed generates, on the productive Unit (HA), at least a double amount of oil beside the soybean crop [6].

Soy is a cheap source of protein compared to animal protein [1]. Under the report of trade in soybeans, Romania is constituted in a certain importer. Significant quantities are brought from South America, where Brazil has, for example, doubled exports in the period 2002-2012 [5]. In this context, it is underlined that the price for soybeans in Romania is lower than that on the European market – Rotterdam [7].

The mustard is an oily culture with multiple uses, so we can also discuss the existence of secondary products of type: mustard buds, shell (which can be processed in the form of briquettes) [11].

MATERIALS AND METHODS

The indicators used for drafting the paper were extracted from the specific database [3]. Therefore, export and import (expressed in thousand $ value units) were used, on the basis of which the trade balance (thousand $) was determined.

The documentation was followed by data processing, dynamic series consisting of four

terms (years 2014, 2015, 2016 and the average of the period. Structural indices were determined for the value of exports, the value of imports, as well as dynamic indices (with a mobile base), so that the comparison was used in time.

RESULTS AND DISCUSSIONS

Table 1 presents the level and evolution of Romanian exports of oily seeds.

The year 2014 is characterized by a total value of exports of 1,094,360 thousand $, which is based on sequential, punctual contributions as follows: 1,122 thousand $ flax for oil (0.10%), 6,539 thousand $ mustard (0.60%), 7.286 thousand $ Other oily seeds (0.67%), 28.451 thousand $ soy (2.60%), 449,597 rapeseed thousand $ (41.08%), 601,365 thousand $ sunflower (54.95%).

In the case of 2015, a total value of the national exports of 889,392 thousand $ is found, the structure of which is based on percentage contributions of 56.42% Sunflower – 501,758 thousand $, 37.52% rapeseed – 333,798 thousand $, 5.04% soy – 44,806 thousand $, 0.47% other seeds oily – 4,141 thousand $, 0.42% mustard – 3,715 thousand $, 0.13% flax for oil – 1,174 thousand $.

Table 1. Export of oily seeds

Specification	Year								Period average **		
	2014		2015			2016					
	Th. $*	Str. %**	Th. $*	Str. %**	2015/ 2014**	Th. $*	Str. %**	2016/ 2015**	Th. $*	Str. %	Average/ 2016
Sunflower	601,365	54.95	501,758	56.42	83.44	542,110	45.04	108.04	548,411.00	51.62	101.16
Flax for oil	1,122	0.10	1,174	0.13	104.63	1,291	0.11	109.97	1,195.66	0.11	92.62
Mustard	6,539	0.60	3,715	0.42	56.81	1,754	0.15	47.21	4,002.67	0.38	228.20
Rapeseed	449,597	41.08	333,798	37.52	74.24	607,584	50.48	182.02	463,659.67	43.64	76.31
Soya	28,451	2.60	44,806	5.04	157.48	47,676	3.96	106.41	40,311.00	3.79	84.55
Other oily seeds	7,286	0.67	4,141	0.47	56.84	3,129	0.26	75.56	4,852.00	0.46	155.07
Total	1,094,360	100	889,392	100	81.27	1,203,544	100	135.32	1,062,432.00	100	88.28

Sources: * http://www.fao.org/faostat/fr/#data/TP (05.12.2018), ** own calculation.

If analysis of the situation of the year 2016, it can be noted that at the level of each product, different indicator values were recorded, from 1,291 thousand $ flax for oil (0.11%) up to 607,584 thousand $ in case of rapeseed (50.48%). For the other products, have known the indicator levels of 1,754 thousand $ mustard (0.15%), 3,129 thousand $ other oily seeds (0.26%), 47,676 thousand $ soy (3.96%) and 542,110 thousand $ sunflower (45.04%). The total export value was 1,203,544 thousand $.

Romanian export value was 1,062,432 thousand $ (for period average), of which, for each product, effective, variable contributions are found (Fig. 1): 1,195.66 thousand $ flax for oil (0.11%); 4,002.67 thousand $ mustard (0.38%); 4,852 thousand $ other oily seeds (0.46%); 40,311 thousand $ soy (3.79%); 463,659.67 thousand $ rapeseed (43.64%); 548,411 thousand $ sunflower (51.62%).

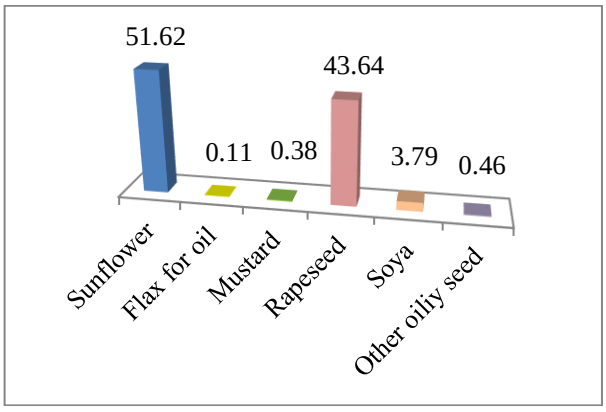

Fig. 1. Structure of exports (% of the period average)
Source: Own design and results.

The levels of exports (Fig. 2), for the period analyzed, some aspects are taking in consideration:

- at the level of sunflower seeds, the indicator has an uneven progression, decreases from the reference term, being 16.56% in case of 2015. For the average and 2016 year, exceeded was recorded, 1.08 and 1.01 times respectively compared to the reference term;
- for oil flax, the indicator evolved ascending (1.04 and 1.09 times) for 2015 and 2016 years. Average being smaller compared to 2016 year – 92.62%;
- for mustard, the indicator's dynamics are a downward one, the decreases in 2015 (-43.19%), followed by other decreases (-52.79%) in the situation of 2016. The average period, shall be 2.28 times the reference term; - the rapeseed has a oscillating indicator evolution, which is highlighted by the existence of two subunit levels of indices (2015 and average) and one super unitary (2016 year);
- at the level of soy seed, the indicator presents in dynamics, super unitary values - 157.48 and 106.41% for 2015 and 2016, respectively, and subunit values – 84.55% for the average of the period;
- for other oily seeds, value exports decreased in the year 2015 (-43.16%), decreases that were maintained in 2016 (-24.44%), after which the average of the period experienced a recovery (+55.07%);
- overall, the uneven evolution of exports is found, the decreases were: 18.73% in 2015 and 11.72% at the average of the period. The year 2016 was superior to the base of cooperation with 35.32%.

The level of imports of oily seeds is presented in table 2, both under the report of its structure and in terms of evolution-over time.

In the case of 2014, the indicator level ranged from 649 thousand $ to the oil flax, up to 131,759 thousand $ in the case of sunflower seeds, and the overall indicator level reached 259,254 thousand $. As a result, variable continental weights are found, in total, as follows: 0.25% flax for oil, 1.18% Mustard – 3,047 thousand $, 11.05% other oily seeds – 28,643 thousand $, 15.23% rapeseed – 39,492 thousand $, 21.47% Soy – 55,664 thousand $ and 50.82% sunflower.

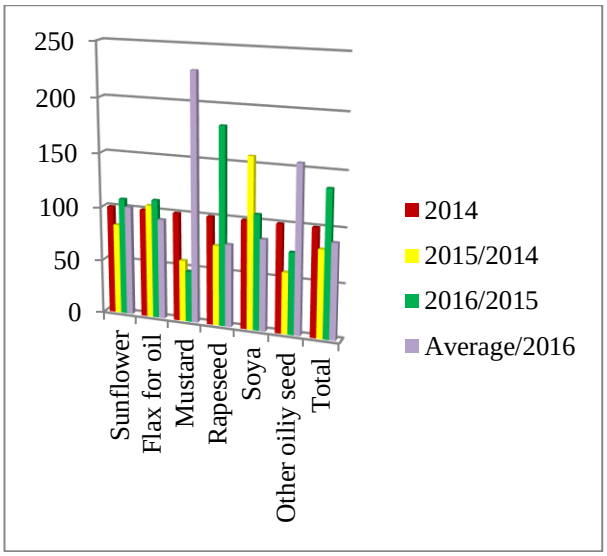

Fig. 2. Export dynamics (%)
Source: Own design and results.

If we look at the situation specific to the year 2015, it can be noted that the national level of the indicator was 274,009 thousand $, to which the specific products made contributions of: 141,686 thousand $ sunflower – 51.71%, 73,095 thousand $ soy – 26.68%, 29,467 thousand $ rapeseed – 10.75%, 26,851 thousand other oily seeds – 9.80%, 2,129 thousand $ mustard – 0.78%, 781 thousand $ flax for oil – 0.28%.

For the year 2016, the variation of the indicator level can be observed, from 825 thousand $ to flax for oil (0.30%), up to 153,222 thousand $ for sunflower (55.71%). The other products recorded 2,026 thousand $ mustard (0.74%), 25,161 thousand $ other oily seeds (9.15%), 35,672 thousand $ rapeseed (12.97%), 58,110 thousand $ soy (21.13%). These values, have made total imports record a value of 275,016 thousand $.

Taking in consideration the average, it is noted that the indicator at national level has reached a value of 269,456.33 thousand $, which is based on percentage-sequential contributions – variables (Fig. 3): 0.28% flax for oil (751.67 thousand $); 0.89% mustard (2,400.66 thousand $); 9.98% other oily seeds (26,885 thousand $); 12.95% rapeseed (34,877 thousand $); 23.12% soy (62,289.67 thousand $); 52.78% sunflower (142,222.33 thousand $).

Table 2. Import of oily seeds

Specification	Year								Period average **		
	2014		2015			2016					
	Th. $*	Str. %**	Th. $*	Str. %**	2015/ 2014**	Th. $*	Str. %**	2016/ 2015**	Th. $*	Str. %	Media/ 2016
Sunflower	131,759	50.82	141,686	51.71	107.53	153,222	55.71	108.14	142,222.33	52.78	92.82
Flax for oil	649	0.25	781	0.28	120.33	825	0.30	105.63	751.67	0.28	91.11
Mustard	3,047	1.18	2,129	0.78	69.87	2,026	0.74	95.16	2,400.66	0.89	118.49
Rapeseed	39,492	15.23	29,467	10.75	74.61	35,672	12.97	121.05	34,877.00	12.95	97.77
Soya	55,664	21.47	73,095	26.68	131.31	58,110	21.13	79.49	62,289.67	23.12	107.19
Other oily seeds	28,643	11.05	26,851	9.80	93.74	25,161	9.15	93.70	26,885.00	9.98	106.85
Total	259,254	100	274,009	100	105.69	275,016	100	100.40	269,456.33	100	97.98

Sources: * http://www.fao.org/faostat/fr/#data/TP (05.12.2018), ** own calculation.

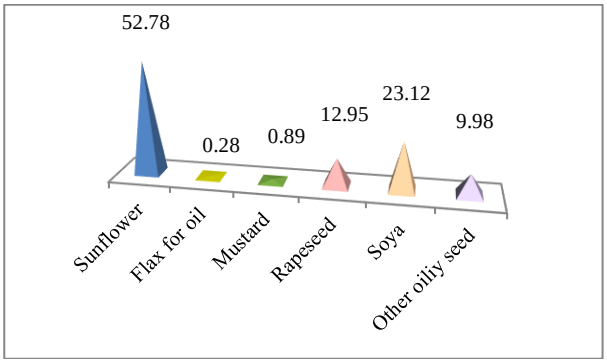

Fig. 3. Structure of imports (% of the period average)
Source: Own design and results.

The indicator dynamics shows (Fig. 4):
- for sunflower, the upward trend is found, the decreases of 7.12% are specific only to the average of the period. In the years 2015 and 2016, the comparison bases are 1.07 and 1.08 times exceeded;
- at the flax for oil level, an upward progression is observed, with differences from the comparison period being 20.33% in 2015 and 5.63% for 2016. The period average was 8.89% below the reference base;
- for mustard, the trend are decreasing for indicator in the years 2015 and 2016 (-30.13 and -4.84%). Increases appear for the period average (+18.49%);
- the evolution was uneven for rapeseed, decreasing in the year 2015 and for the average of the period (-25.39 and -2.23%), and for the year 2016 increases – compared to reference period-by 21.05%;
- in the case of soy seeds the indicator has evolved fluctuating. Thus, super unit values of indices are manifested in 2015 and for the average (131.31 and 107.19%), and smaller values for the year 2016 (79.49%);
- other oily seeds, have a downward evolution of the indicator. Thus, decreases in export levels occur in the year 2015 versus 2014 by 6.26%, after which, for the year 2016, all decreases by 6.30%. Period average increases in dynamics (+6.85%);
- the total imports increase. Thus, the indices are over unitary in the years 2015 and 2016 respectively (105.69 and 100.40%), and sub unitary indices are manifested for the period average (97.98%).

Trade balances are shown in Table 3.
The trade balance of national exchanges with oily seeds was excessing in the year 2014 (+835.106 thousand $), this state of things, being determined by the surpluses recorded for sunflower, rapeseed, mustard and flax for oil (+469,606, +410,105, +3,492 and +473 thousand $ respectively), which were not affected, decisively, by specific deficits for soybeans and other oily seeds: -27,213 and -21,357 thousand $ respectively.

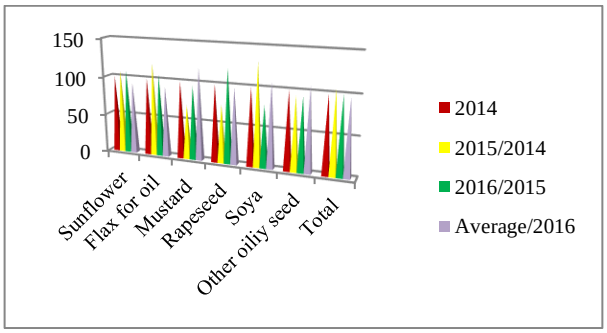

Fig. 4. Import dynamics (%)
Source: Own design and results.

Table 3. Trade balance - thousands $

Specification	Year			Period average
	2014	2015	2016	
Sunflower	+469,606	+360,072	+388,888	+406,188.67
Flax for oil	+473	+393	+466	+443.99
Mustard	+3,492	+1,586	-272	+1,602.01
Rapeseed	+410,105	+304,331	+517,912	+428,782.67
Soya	-27,213	-28,289	-10,434	-21,978.67
Other oily seeds	-21,357	-22,710	-22,032	-22,033.00
Total	+835,106	+615,383	+928,528	+792,975.67

Source:*own calculation based on the data from http://www.fao.org/faostat/fr/#data/TP (05.12.2018).

In the case of 2015, the trade balance maintains its surplus character (+615,383 thousand $), which is determined as in the previous year by the surplus from flax for oil, mustard, rapeseed and sunflower (+393, +1,586, +304,331 and +360,072 thousand $ respectively), Which have not suffered due to the deficits of the other products:-22,710 and -28,289 thousand $ - specific values for other oily and soybean seeds, respectively.

If we are referring to the situation in the year 2016, it can be noted that three products with poor trade balance – mustard, soybeans and other oily seeds (-272, -10,433 and -22,032 thousand $ respectively) appear, while the surplus character is specific to the flax For oil, sunflower and rape (+466, +88,888 and +517,912 thousand $ respectively). As in previous years, we can discuss a surplus world trade balance (+928,528 thousand $).

For period average, there is an excess trade balance (+792,975.67 thousand $), which is based on sequential levels of: +428,782.67 thousand $ rapeseed; +406,188.67 thousand $ sunflower; +1,602.01 thousand $ mustard; +443.99 thousand $ flax for oil; -21,978.67 thousand soybeans; -22,033.00 thousand other oily seeds.

CONCLUSIONS

As regards national exports and their structure, it is noted: exports were dominated by sunflower (51.62%), followed by rapeseed (43.64%), weights for the remainder of the products being less than 5%; the value of indicator dynamics is fluctuating, this trend being determined by sunflower and rapeseed. Exception make soy and mustard – upward and downward evolutions.

If the situation of imports is analyzed, the following conclusions may be drawn:

- the main product is sunflower (52.78%), followed at a considerable distance of soy and rapeseed – 23.12 and 12.95% respectively;
- for other oily seeds, the weight tends to 10% (9.98%), and in the case of oil mustard and flax the weights are less than 1%;
- the indicator's dynamics are an upward one at national level, except for the mustard and other oily seeds (decreasing trend), respectively rapeseed and soybeans (fluctuating trends).

As regards the situation of the trade balance of national trade in oily seeds, the following situations may be observed:

- the balance is strictly exceeding at national level, which is determined by the influence exerted by sunflower, rapeseed;
- for oil and mustard (strictly surplus balances with the exception of the mustard with a weak situation in the case of 2016);
- soybeans and other oily seeds, present a strictly weak balance;
- we can state that the situation is favorable, our country exploiting the favorable conjunctures especially for sunflower and rape.

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