THE PRICE OF SUNFLOWER SEEDS IN THE EUROPEAN UNION (2016 - 2018)

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Key words: sunflower, area, total production, average production, price, absolute variation, regional situation

ABSTRACT

Through its content, the paper aims to present the evolution of the price for sunflower seeds, for the component states of the European Union. The analysed time interval is 2016-2018, so that the short-term price evolution can be observed.

The price must be analysed in the context of the conditions for the practice of this crop, for the 28 Member States of the European Union, in the light of the differences in the degree of development, capitalization and subsidization of agricultural production.

The selling price registered a national multiannual average of 357.03 $/t, with extreme values of 280.90 $/t for Austria (2018) and 433.90 $/t for Portugal (2017), and the total amplitude of variation registered a level of 153 $/t. Regarding the annual amplitudes of variation of the indicator, they were 102.10 $/t in 2016, 113.90 $/t in 2017, 139.50 $/t for 2018 and 110.73 $/t for the average of the period.

INTRODUCTION

The activity in agricultural production - vegetable and animal -, in terms of the basic condition - profitability and economic efficiency - is directly related to prices operating on the free market.

The prices highlight the relationships of agricultural holdings with upstream and downstream branches.

The upstream branches are involved in the supply prices of factors of production - agricultural machinery, installations, spare parts, fuels, lubricants, etc.

The downstream branches - trade and manufacturing - intervene through the selling prices of plant and animal products, as well as raw materials, of the same origin.

The prices of agricultural products - vegetable and animal - are the decisive factor in motivating the increase of supply on the free market.

Adequate prices must ensure that production costs are covered and at the same time profitability, as a basis for relaunching productive activity in agricultural units.

In terms of size, prices must cover the social costs of production, which at the same time is the main element in negotiating prices for agricultural products - vegetables and animals.

Sunflower production is of industrial, fodder, agro-technical-technological importance, export and source of profit (we sought to highlight the price situation precisely on the basis of this last recital).

METHOD AND MATERIAL

The elaboration of this study appealed to the method of comparison in time and space. In addition to the time sequences included in the analysis, we also operated with their average.

The main indicator used is the producer price ($/t), but also the harvested area (ha), the total production (t), the average production (kg/ha). Prices in US dollars are equal to the manufacturer's prices in local currency (the conversion was made on the basis of exchange rate data. The main source of the exchange rate used is the IMF.

The analysis was performed both at regional level of the European Union and at national level (28 component states), presenting the positioning of each country in relation

to the regional average price level, the absolute variations of the indicator ($/t) and the dynamics of the indicator (%). In the case of cultivated areas and implicitly of the total and average productions there are no data for Belgium, Cyprus, Denmark, Estonia, Finland, Latvia, Lithuania, Luxembourg, Ireland, Malta, Great Britain, Holland, Sweden, and in the case of the price there are no data for Belgium, Cyprus, Denmark, Estonia, Finland, Italy, Latvia, Lithuania, Luxembourg, Ireland, Malta, United Kingdom, Netherlands, Poland, Slovenia, Sweden.

RESULTS AND DISCUSSIONS

Highlighting the price situation was done starting from the components of the primary supply of sunflower seeds. Overall, the European Union harvested 4,146,507.32 ha of sunflower, obtained 9,686,439.66 t as total production and a level of 2,336 kg/ha for average production (indicators set as average for the period 2016-2018).

The harvested area determines the grouping of European Union states as follows: states that have cultivated up to 100,000 ha (Slovakia - highest level 79,943.67 ha, Greece, Croatia, Austria, Czech Republic, Germany, Portugal, Poland and Slovenia - lowest level 276 ha) - 6.54% of the total area; states that cultivated over 100,000 ha (Italy - the lowest level 109,677.33 ha - 2.64% of the total level of the indicator, France - 13.47%, Hungary - 15.60%, Spain - 17.15%, Bulgaria - 20.14%, Romania - the highest level 1,014,631 ha - 24.46%) - 93.46% of the total area (Fig. 1).

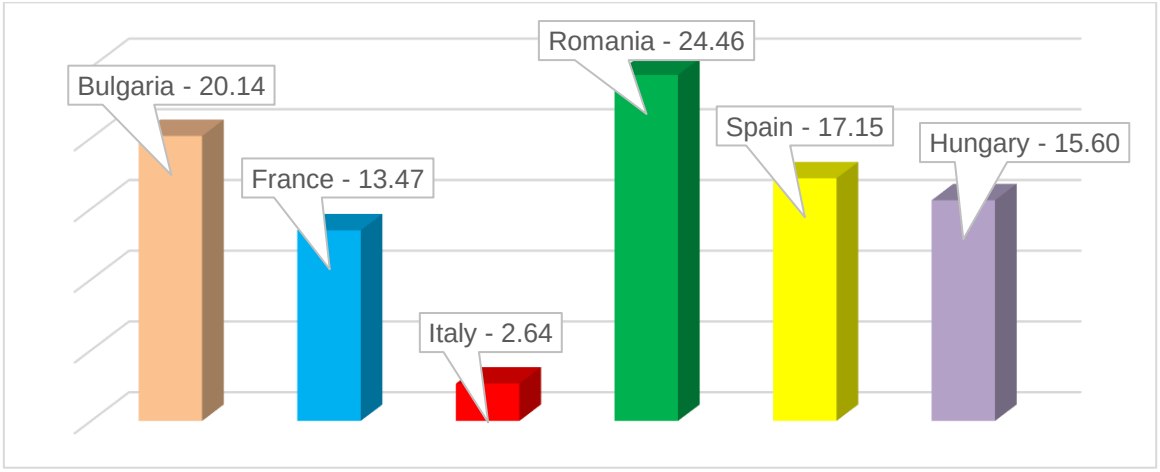

Fig. 1. The main sunflower-growing countries in the European Union (% of total - processed by: www.fao.org)

In terms of total production, we considered it interesting to differentiate the states as follows: productions up to 100,000 t (Slovenia - 638.33 t - lowest level, Poland, Portugal, Germany, Czech Republic, Austria - 57,200 t); productions between 100,000.1 and 1,000,000 t (Croatia - 112,412 t, Greece, Slovakia, Italy, Spain - 854,755.33 t); productions of over 1,000,000 t (France - 1,339,773 t, meaning 13.83% of the total, Bulgaria - 20.16%, Hungary - 19.72% and Romania - 2,669,257.67 t, which represented 27.56% of the Community total - Fig. 2).

From the point of view of the average production per productive unit, there are two large groups of states: up to 2,000 kg/ha (Germany, Poland, Portugal, Spain); over 2,000 kg/ha (Croatia, Hungary, Austria, Slovakia, Romania, Greece, Czech Republic, France, Bulgaria, Slovenia, Italy).

The positioning of the cultivating countries compared to the regional level of average production per productive unit is shown in Figure 3.

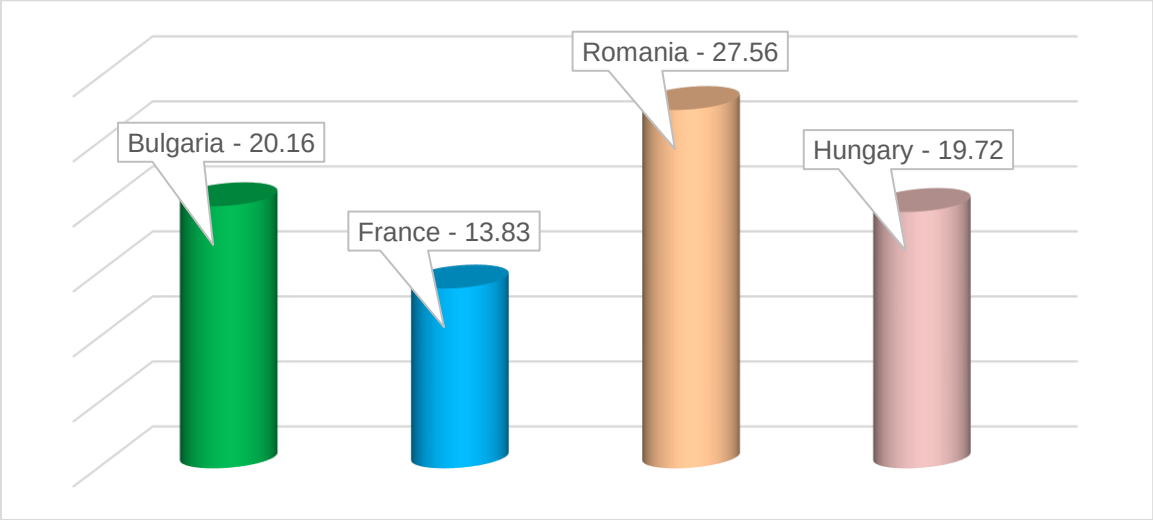

Fig. 2. The main sunflower producing countries in the European Union (% of total - processed by: www.fao.org)

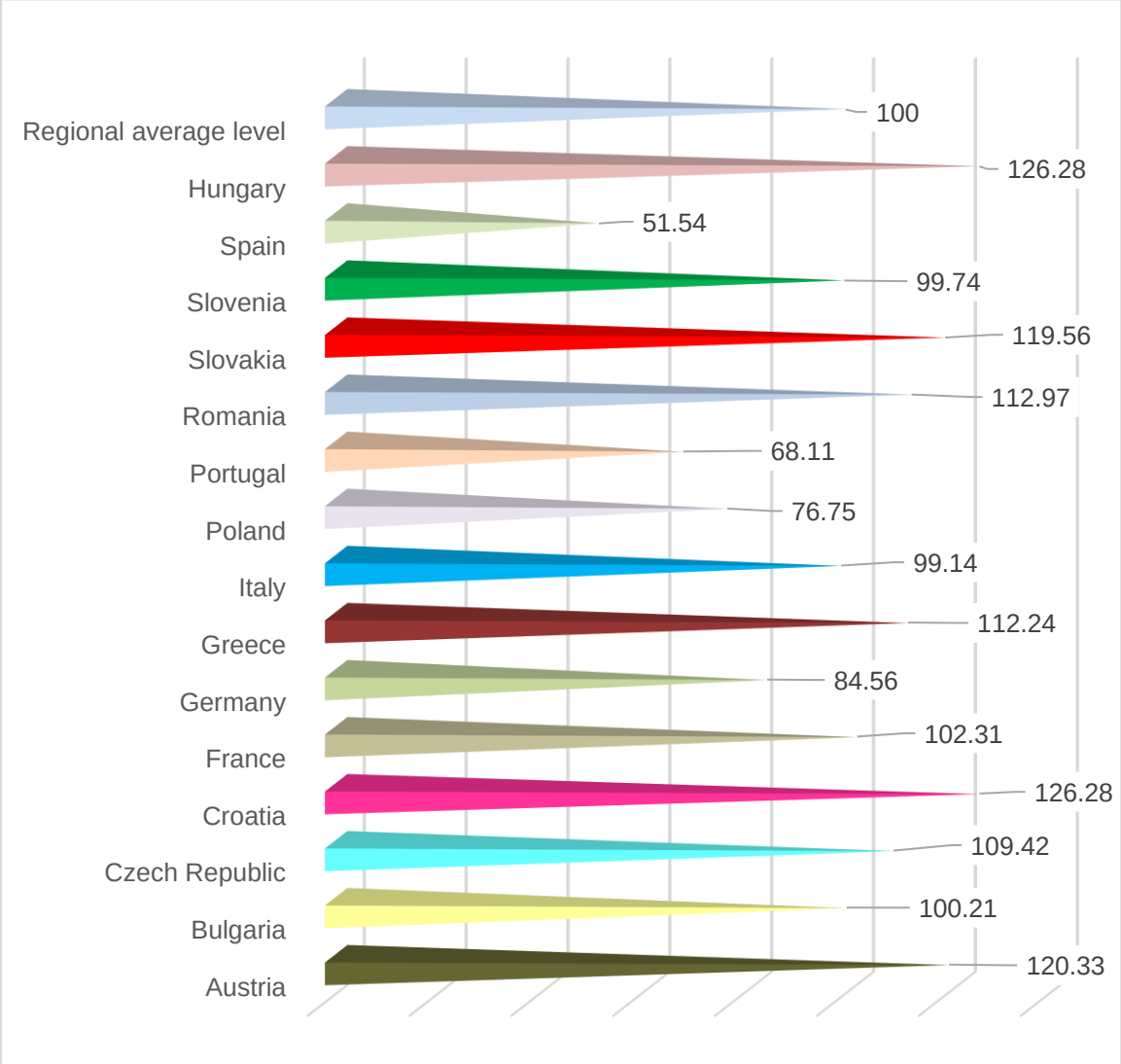

Fig. 3. Positioning of sunflower growers compared to the Community level of average production per hectare (% of total - processed after: www.fao.org)

Table 1 contains the data related to the specific situation, in terms of price for sunflower - national and regional levels (under the conditions mentioned in the previous chapter (lack of data for Italy and Slovenia, but also for Germany in 2016).

Table 1.

The price for sunflower in the European Union ($/t) 2016-2018

No.	Specification	Year			Average period **	
		2016*	2017*	2018*	Effective	% compared to the regional average
1	Austria	333.00	320.00	280.90	311.30	87.19
2	Bulgaria	394.20	362.80	343.40	366.80	102.74
3	Czech Republic	391.40	382.10	362.40	378.67	106.06
4	Croatia	324.90	333.10	296.80	318.26	89.14
5	France	427.00	399.30	420.40	415.57	116.40
6	Germany	-	333.60	371.30	352.45	98.72
7	Greece	387.20	394.40	413.10	398.23	111.54
8	Portugal	419.10	433.90	413.10	422.03	118.21
9	Romania	372.00	338.10	334.90	348.33	97.56
10	Slovakia	358.40	351.20	334.40	348.00	97.47
11	Spain	385.20	371.10	361.50	372.60	104.36
12	Hungary	375.90	364.40	359.80	366.70	102.71
13	Regional average level	378.94	365.33	326.83	357.03	100

*http://www.fao.org/faostat/fr/#data/PP (15.01.2021)
** own calculations

At the level of 2016, the average price at regional level was 378.94 $/t, compared to which there were, at the level of the component countries, both supra-unit values and sub-unit levels. Thus Bulgaria, the Czech Republic, France, Greece, Portugal and Spain are characterized by supra-unitary levels: 394.20, 391.40, 427.0, 387.20, 419.10 and 385.20 $/t respectively. Subunit levels reached: 333.0 $/t for Austria, 324.90 $/t for Croatia, 372.0 $/t for Romania, 358.40 $/t for Slovakia and 375.90 $/t for Hungary.

The year 2017 is characterized by price variation limits from 333.10 $/t for Croatia to 433.90 $/t for Portugal. Consequently, we are talking about states that registered lower levels, compared to the reporting base (regional level of the indicator - 365.33 $/t) - 320.0 $/t Austria, 333.60 $/t Germany, 338.10 $/t Romania, 351.20 $/t Slovakia, 362.80 $/t Bulgaria, and 364.40 $/t Hungary, as well as higher levels (regional average) - 382.10 $/t Czech Republic, 371.10 $/t Spain, 394.40 $/t Greece, 399.30 $/t France.

If we refer to the specific situation of 2018, we find a regional price of 326.83 $/t, compared to which the component states positioned themselves as follows: overruns - Bulgaria 343.40 $/t, Spain 361.50 $/t, Czech Republic 362.40 $/t, Germany 371.30 $/t, France 420.40 $/t, Greece and Portugal 413.10 $/t; decreases - Hungary 359.80 $/t, Romania 334.90 $/t, Slovakia 334.40 $/t, Croatia 296.80 $/t, Austria 280.90 $/t.

Starting from the annual situations, previously presented, the average of the period was determined, characterized by a regional level of the indicator of 357.03 $/t. Compared to this state of affairs, the component states were positioned as follows: subunit levels: 98.72% Germany - 352.45 $/t, 97.56% Romania - 348.33 $/t, 97.47% Slovakia - 348.0 $/t, 89.14% Croatia - 318.26 $/t, 87.19% Austria - 311.30 $/t (Fig. 4); supra-unitary levels: 102.71% Hungary - 366.70 $/t, 102.74% Bulgaria - 366.80 $/t, 104.36% Spain - 372.60 $/t,

106.06% Czech Republic - 378.67 $/t, 111.54% Greece - 398.23 $/t, 116.40% France - 415.57 $/t, 118.21% Portugal - 422.03 $/t (Fig. 5).

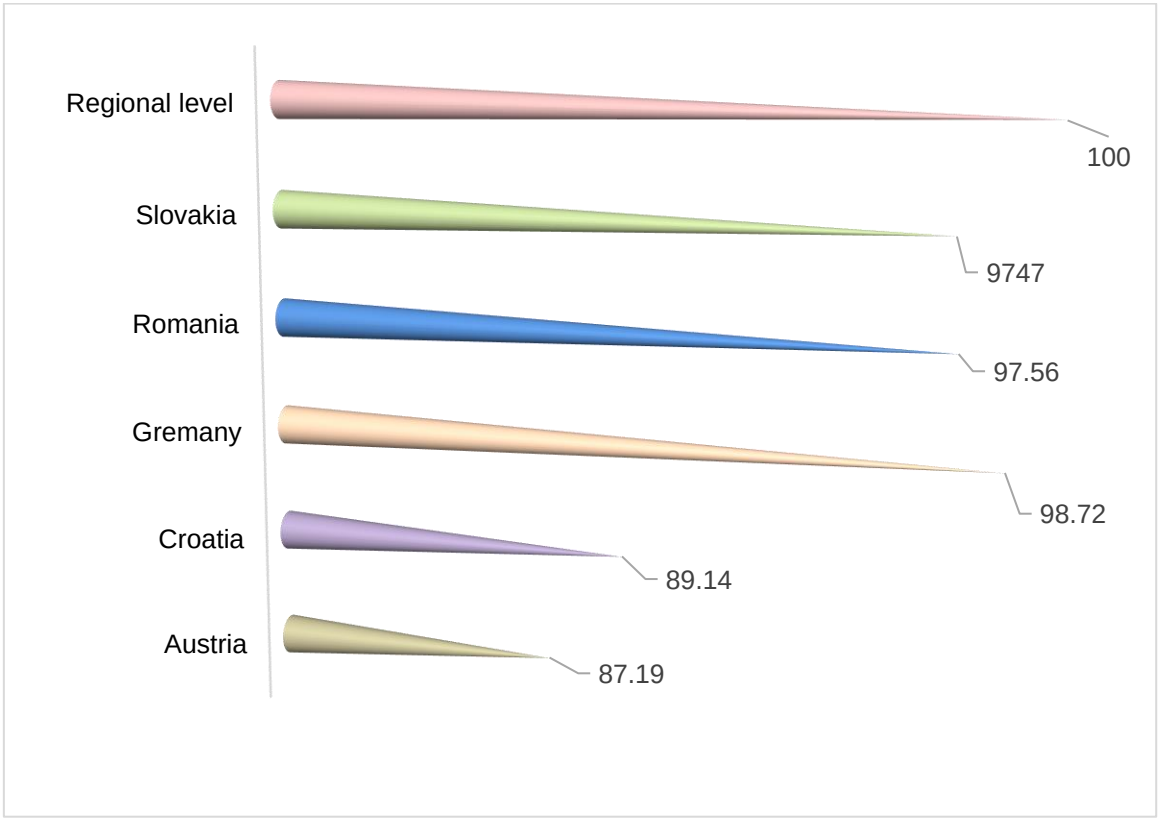

Fig. 4. Positioning of countries with prices below the average level of the European Union (%)

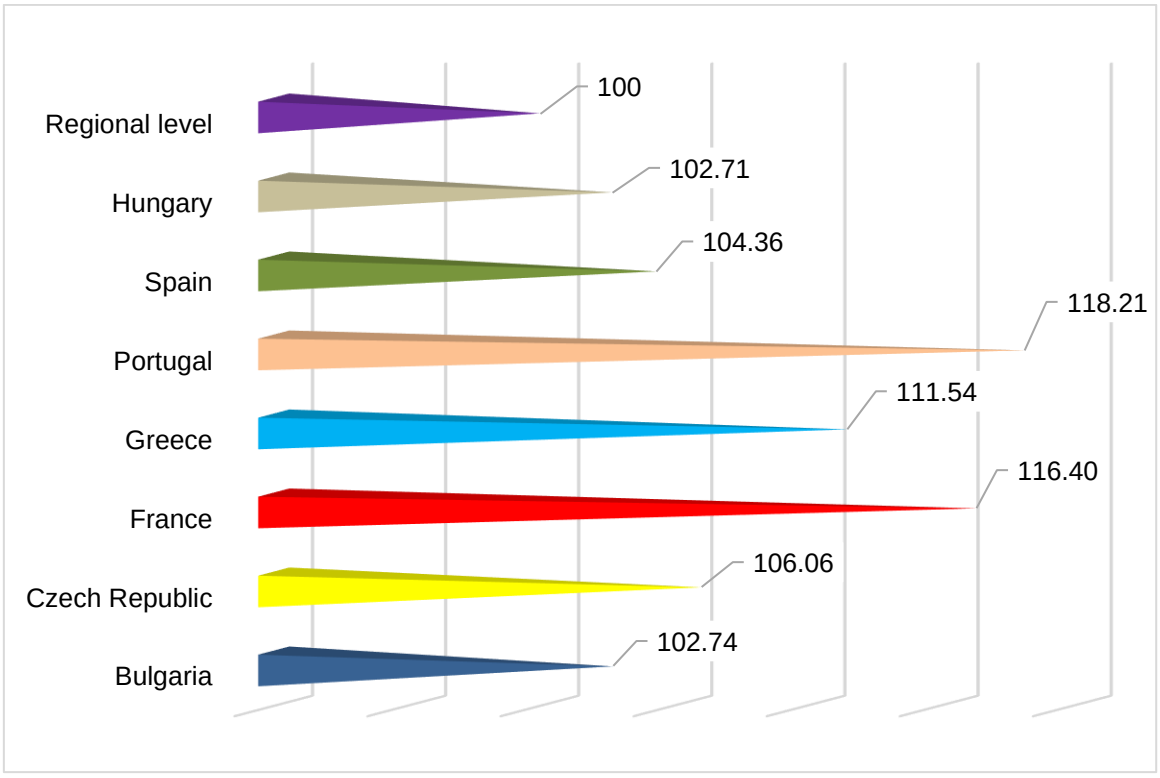

Fig. 5. Positioning of countries with prices above the EU average (%)

Table 2 shows the absolute variation of the price ($/t), at the level of the component states of the European Union and at the level of the region.

Table 2.

The absolute variation in the price of sunflower * (±$/t)

No.	Specification	±Δ 2017 vs. 2016	±Δ 2018 vs. 2017	±Δ Media vs. 2018
1	Austria	-13.00	-39.10	+30.40
2	Bulgaria	-31.40	-19.40	+23.40
3	Czech Republic	-9.30	-19.70	+16.27
4	Croatia	+8.20	-36.30	+21.46
5	France	-27.70	+21.10	-4.83
6	Germany	**	+37.70	-18.85
7	Greece	+7.20	+18.70	-14.87
8	Portugal	+14.80	-20.80	+8.93
9	Romania	-33.90	-3.20	+13.93
10	Slovakia	-7.20	-16.80	+13.60
11	Spain	-14.10	-9.60	+11.10
12	Hungary	-11.50	-4.60	+6.90
13	Regional average level	-13.61	-38.50	+30.20

* own calculations
** missing data

For Austria, there are increases for the average period compared to the reporting base (+30.40 $/t), but also decreases in 2017 and 2018 (-13.0 and -39.10 $/t, respectively).

Bulgaria is characterized by the existence of two situations when the indicator decreases, compared to the reference period - 2017 and 2018 (-31.40 and -19.40 $/t) and by a situation of increasing the level of the indicator - the average of the period (+23 .40 $/t).

The Czech Republic shows an evolution characterized by absolute decreases in the years 2017 and 2018 (-9.30 and -19.70 $/t, respectively), but also by increases in the indicator for the average of the period (+16.27 $/t).

In the case of Croatia, there are two upward trends in the level of the indicator in 2017 and for the average of the period (+8.20 and +21.46 $/t) as well as a downward trend in 2018 (-36.30 $/t).

In the case of France, it is found that the indicator showed two decreasing trends (-27.70 $/t for 2017 and -4.83 $/t for the average period) and an increasing trend for 2018 (+21.10 $/t).

Germany is characterized by the existence of a situation when the indicator increases, compared to the reference term - 2018 (+37.70 $/t) and by a situation of decreasing the level of the indicator - the average of the period (-18.85 $/t).

Greece shows an evolution characterized by absolute decreases for the average of the period (-14.87 $/t), but also by increases of the indicator in the case of 2017 and 2018 (+7.20 and +18.70 $/t respectively).

In Portugal there is a decrease of 20.80 $/t for 2018 compared to the reference term, as well as two increases in 2017 and in the average of the period (+14.80 and +8.93 $/t respectively).

In the case of Romania, there are two decreasing trends in the level of the indicator for 2017 and for 2018 (-33.90 and -3.20 $/t, respectively) as well as an upward trend in the case of the average period (+13.93 $/t).

Slovakia shows decreasing trends for 2017 and 2018 (-7.20 and -16.80 $/t, respectively), as well as an increasing trend for the average period (+13.60 $/t).

At the level of Spain there are two decreases with 14.10 and 9.60 $/t in 2017 and 2018 respectively (compared to the reference term), but also an increase for the average of the period (+11.10 $/t).

In the case of Hungary, it is found that the indicator showed two decreasing trends for 2017 and 2018 (-11.50 and -4.60 $/t respectively) and an increasing trend in the case of the average period (+6.90 $/t).

At the regional level, there is a fluctuation of the price, the negative differences characterizing the years 2017 and 2018 (-13.61 and -38.50 $/t, respectively), and in the case of the average period there is an increasing level of the indicator compared to the reference term (+30.20 $/t - Fig. 6).

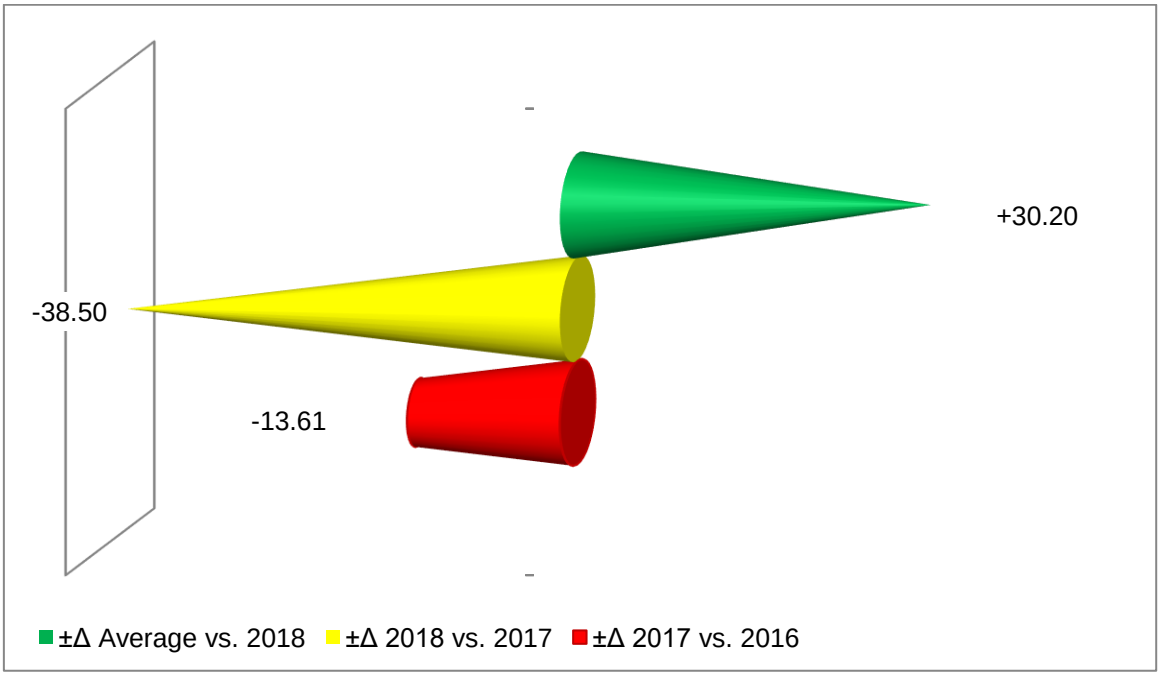

Fig. 6. Absolute variation of the average price at regional level ($/t)

CONCLUSIONS

It is worth noting, from the beginning, the variety of cultivation conditions for the 15 states (Austria, Bulgaria, Czech Republic, Croatia, France, Germany, Greece, Italy, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Hungary), aspect which causes variations in the culture technologies used. As a result, we can discuss the variable suitability of the culture, for different areas, as well as the variable importance given to this culture at the level of the 15 countries.

At regional level, the evolution of the price is a descending one, a phenomenon that is also manifested for the vast majority of the component states (Austria, Bulgaria, Czech Republic, Croatia, Portugal, Romania, Slovakia, Spain and Hungary). There are also states characterized by uneven developments (France), as well as countries with upward developments (Germany and Greece).

Finally, it can be concluded that price is an indicator "dictated" both by the existing market relationship between supply and demand, but it is also influenced by the "strategic" nature of the product.

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