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STUDY ON THE EVOLUTION OF OLIVE PRICE IN ROMANIA

PETRE IONUȚ LAURENȚIU[1]

Summary: *It is appreciated that the olives in Romania have recorded higher prices, so in this paper it is desirable to analyse exactly the evolution of the prices for the olives, but also the main factors that can influence these changes, such as import prices, the situation of the areas and production in these exporting countries and the correlations between these data. Through the statistical website at European level, Eurostat, it was possible to analyse the price evolutions for olives in the EU member countries, but especially for those from which Romania imports this product. Prices, olive-growing areas in these countries and yields on these areas were analysed. Finally, the relationship between these indicators and the price of olives sold in Romania will be analysed in terms of the intensity of the link.*

Keywords: *olives, price, productions, surfaces, exporters*

JEL Classification: *Q11, Q17*

INTRODUCTION

Although olives are not grown in Romania, because the climate is inadequate for this culture, there is a relatively high consumption of these products, whether we are talking about table olives or about the consumption of olive oil. According to the International Olive Council, in Romania, since the year of its accession to the EU, to date, on average, 22875 tonnes of table olives are consumed annually, which is between 1.1 and 1.2 kilograms per capita, every year. Comparing with other countries, according to the same source, in Romania, more olives are consumed than in Poland, which recorded a consumption in the last year of 10.2 thousand tons, but, surprisingly, the fact that Romania consumes more olives than in Greece, with the latter accounting for an annual consumption of 15,000 tonnes per year. Also in the databases of the International Olive Council, olive oil consumption in Romania is recorded on an average of 3.1 thousand tons annually, being moderate compared to the EU member states.

Thus, the analysis section will only refer to the table olives, its importance due to the high consumption in our country. In the totalitarian period before 1989, there was a phrase in Romania that catalogued this product as the "food of the poor", but now things are not the same, it can be seen that the price level for this product is high and the question of the research is: which factors have influenced this evolution of the price of olives.

The top five producers of table olives on the market in descending order are: Turkey, Spain, Greece, Italy and Portugal. Although Turkey is not yet part of the European Union, it is in the pre-accession period, with official statistical data on the Eurostat website, which can be considered input data, or factors that can influence the evolution of the price for table olives.

Taking into account that this product is not cultivated in Romania, we will analyse data on crops and cultivated areas for countries that have exchange agreements with Romania for this product, namely those that export part of their production to Romania. According to the International Trade Centre, the main exporters of table olives to Romania in recent years are: Greece, Turkey, Egypt, Spain and Italy.

In order to achieve the objective of this research, namely the determination of the olive oil price evolution in Romania, as well as the factors influencing it, the technical and economic situation of the olives sector in these exporting countries, mentioned above, will be analysed.

MATERIAL AND METHOD

To determine the evolution of the table olives price, quantitative and qualitative data will be analysed on the price of olives in the main exporting or producing countries, the cultivated areas

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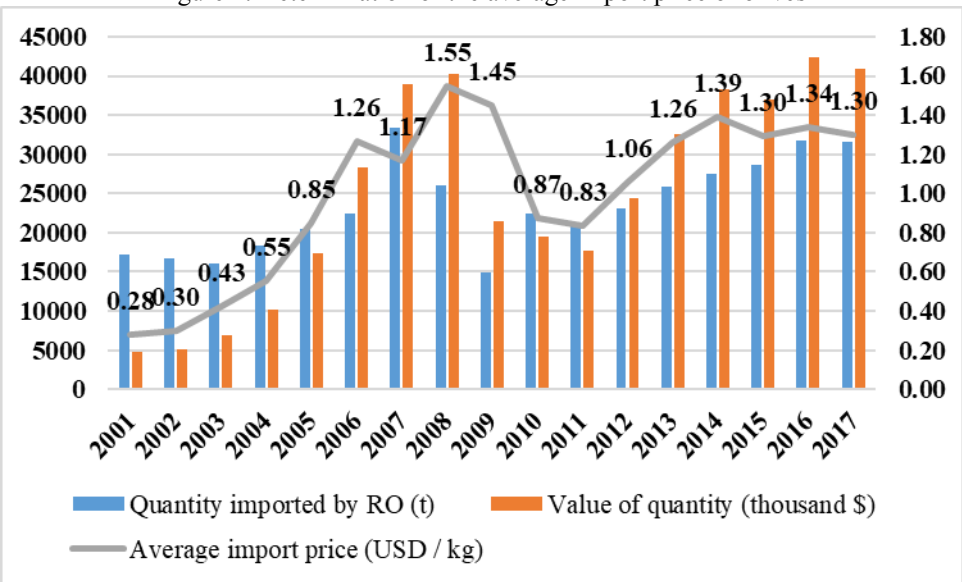
and the yields obtained in order to determine the existence of factors that can influence this price. European and international databases on olives and areas in the countries concerned will be used. As far as the price in Romania is concerned, it will be determined by reporting the value of imports recorded at the International Trade Centre to the quantity of imported olives registered with the same data source.

RESULTS AND DISCUSSIONS

In order to determine the main factors that can influence the price of olives and their evolution in Romania we must first determine this dynamics. Considering that this product or olives are not produced in Romania, they are not found in the national price databases. In order to determine the evolution of the price, the International Trade Centre database was used from where data could be retrieved with reference to the quantity and value of imported olives by Romania, and the average import price for olives could be determined by reporting these two indicators.

Figure 1. Determination of the average import price of olives



Source: own processing based on www.trademap.org

Figure 1 shows both the evolution of the quantities of olives imported by Romania and the value of these quantities in the period 2001-2017, from which the price of the olives that Romania can buy could be determined.

Regarding the quantity of olives imported by Romania during the analysed period, it can be seen that it has both growth and decrease tendencies, with an oscillating evolution, but an increasing one overall. If in 2001 about 17.1 thousand tonnes were imported in 2017, this quantity almost doubled, increasing by 84%, reaching the level of imports of olives of 31.5 thousand tons. Thus, during the reference period, the imported quantity increased from one year to the next, averaging 3.88%, on average an imported olive oil of 23.4 thousand tons.

If the volume of olives imported in Romania increased by 84% (or 1.84 times), the value of the olives increased in the analysed period by 8.6 times, thus there is a much higher increase of the value compared to the quantity, which clearly indicates a higher price per unit of product. Continuing the analysis of the value of the olives brought in Romania, it grew annually with an average growth rate of 14.4%, being 10.5 percentage points higher than that of the quantities. On average, during the analysed period, the value of olives imported in Romania for a single year was 25 million dollars.

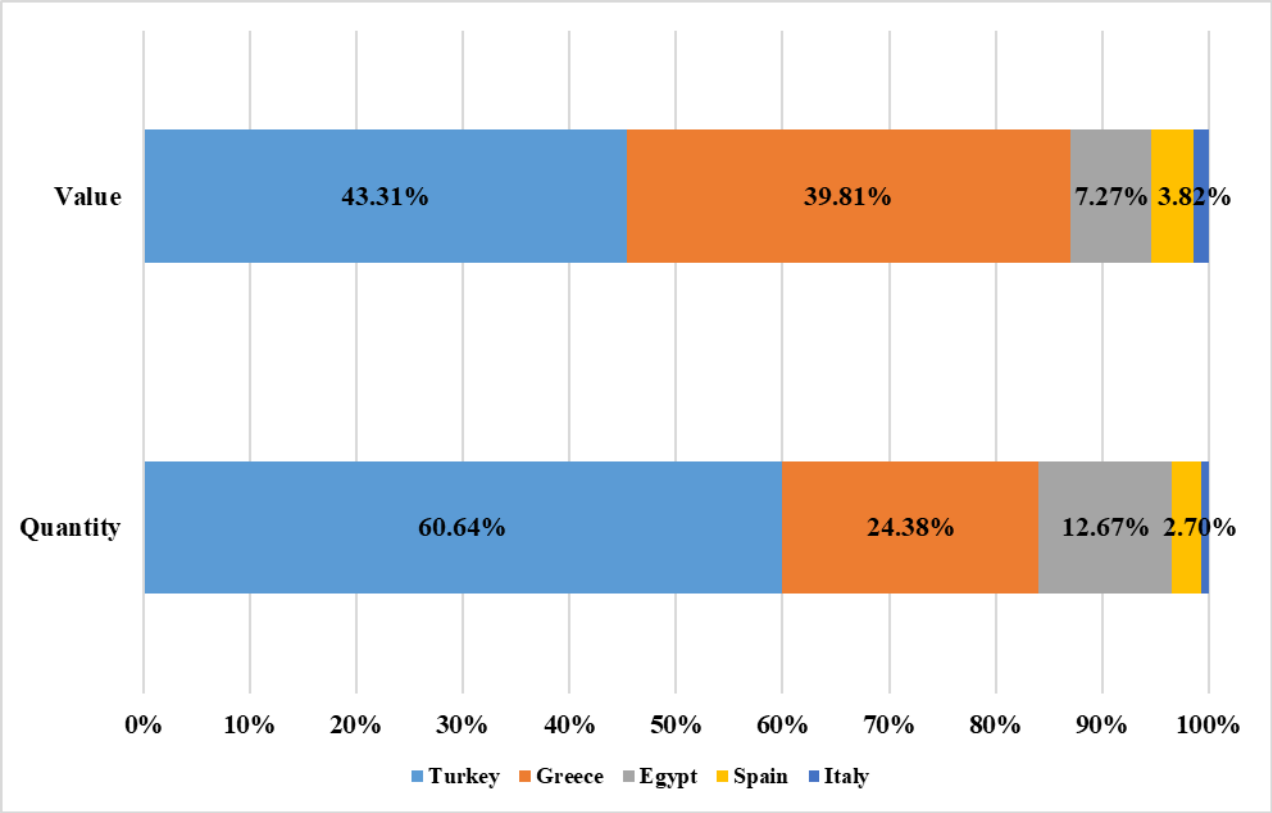
Regarding the average import price of olives, it can be seen that this trend has been oscillating in the reference period following the evolution of the quantities. Given that Romania is dependent 100% on imports for this product, the price is based on demand, ie the quantity

requested. As can be seen when demand increases and the price level is high, and when demand decreases, the price decreases proportionally, a situation easily explained by the economic literature, which is the basis of the demand function. Starting at an average import price of $ 0.28 per kilogram, Romania has imported over the last year under review 4.6 times more expensive, or 1.3 dollars per kilogram, with an average annual rate growth of 10.1%. In 2008, the highest average import price was $ 1.55 per kilo, but achieving an average of the study period resulted in a price of $ 1.01 per kilo of olives.

Thus, it can be seen that the price of olives has increased in Romania in the last 17 years, at a rather high pace, which cannot be just the sign of inflation. This raises questions about the external factors that can influence this price. In order to determine these, we will determine the main countries exporting this product to Romania and the main changes on the olive oil market in these countries in order to correlate these phenomena with the price increase in our country.

Analysing the data from the International Trade Centre, more precisely the structure of the total volume of olives brought in Romania, as well as that of its value, one can distinguish 5 large olives exporting countries to Romania.

Figure 2. Determination of the main olive exporters to Romania



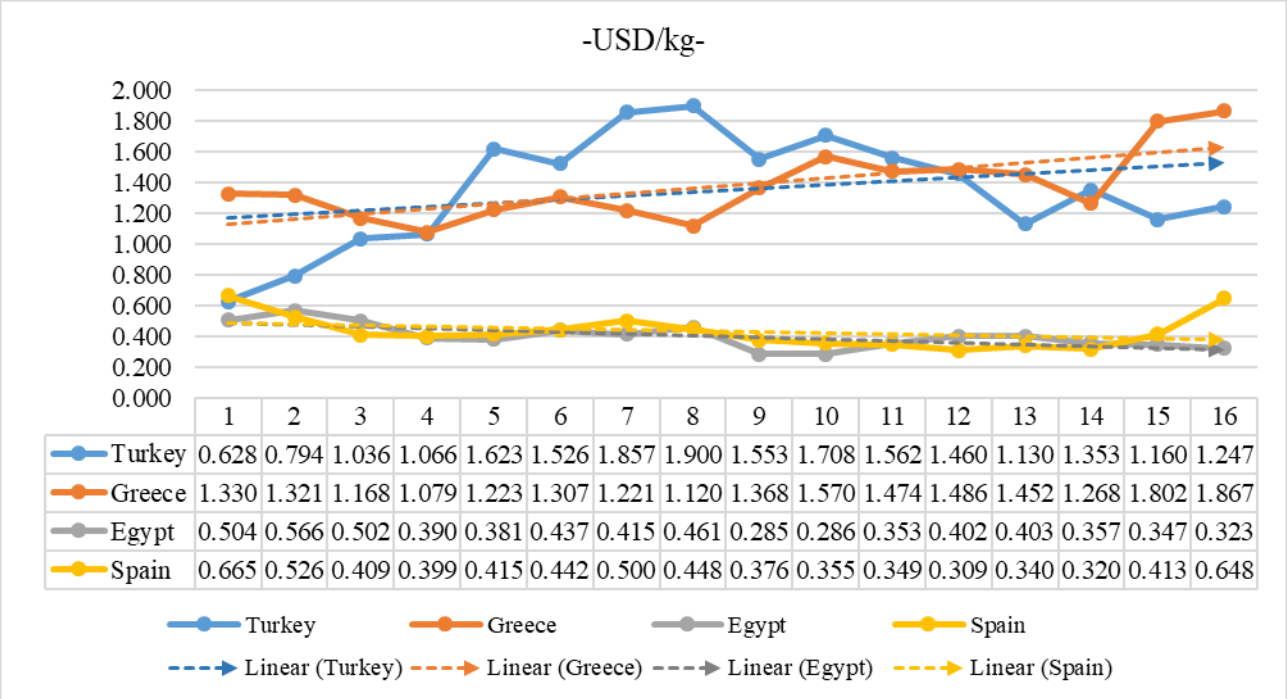
Source: own processing based on www.trademap.org

As can be seen in Figure 2, the countries that export most olives to Romania are determined, both in terms of quantity and value. This structure was made according to the average of the reference years, depending on the years, the ranking may be slightly modified. On average, 60.64% of the olives in Romania come from Turkey, 24.38% from Greece, 12.67% from Egypt, 2.7% from Spain and 0.73% from Italy. Depending on the value of these quantities, the ranking is maintained, with each country occupying the same position, but with different weightings. Thus, for a quantity of more than 60% of the imported one, Turkey has a share of only 43.31%, which leads to a low price for olives of origin. With a smaller share in quantity, Greece has a fairly high share in the value of olives imported in Romania, of 39.81%, which shows a higher price for these olives. Egypt still holds 7.27% of the value, Spain 3.82% and Italy 1.31%.

It is worth mentioning that from 2001 to 2014, Turkey held the largest share of the 5 exporting countries, both in terms of quantity and value, and from 2014 until now Turkey has been overtaken by Greece , currently holding the majority share.

In order to determine possible links between the average import price of olives and the factors that could influence this price, the average selling price of olives in the main exporting countries was analysed.

Figure 3 Determination of olive oil price evolution in exporting countries



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Turkey	0.628	0.794	1.036	1.066	1.623	1.526	1.857	1.900	1.553	1.708	1.562	1.460	1.130	1.353	1.160	1.247
Greece	1.330	1.321	1.168	1.079	1.223	1.307	1.221	1.120	1.368	1.570	1.474	1.486	1.452	1.268	1.802	1.867
Egypt	0.504	0.566	0.502	0.390	0.381	0.437	0.415	0.461	0.285	0.286	0.353	0.402	0.403	0.357	0.347	0.323
Spain	0.665	0.526	0.409	0.399	0.415	0.442	0.500	0.448	0.376	0.355	0.349	0.309	0.340	0.320	0.413	0.648

Source: own processing based on FAOStat and Eurostat

Figure 3 illustrates graphically the evolution of the sales prices of olives in each major exporting country, expressed in dollars per kilogram. An increasing trend can be observed for the two main suppliers of Romania, namely Turkey and Greece. On average, each year, the price of olives grew by 4.67% and 2.28% respectively in these two countries. On average, over the period 2001-2016, the annual price of olives in Turkey was $ 1.35 per kilogram, and in Greece, for this period, the price was $ 1.378 per kilogram.

For the other two exporting countries, namely Egypt and Spain, the price recorded a decreasing trend, with an average annual rate of -2.92% and -0.17%. However, the rather small share of imported quantity and value makes these decreases not to influence the average import price.

There is a significant increase in prices from the first year of the analysis period to the last for the two main suppliers of Romania, so in 2001 in Turkey the price of olives was 0.63 dollars per kilogram and in 2016 it was 1.9 times more, or $ 1.25 per kilogram. Greece's olive oil price has risen steadily over the entire period, 1.4 times, from $ 1.33 per kilo to $ 1.87 per kilo, the highest price for the whole period.

It is worth mentioning that this price is the final one, the selling price, therefore it is higher than the average import price in Romania, which is not the retail price.

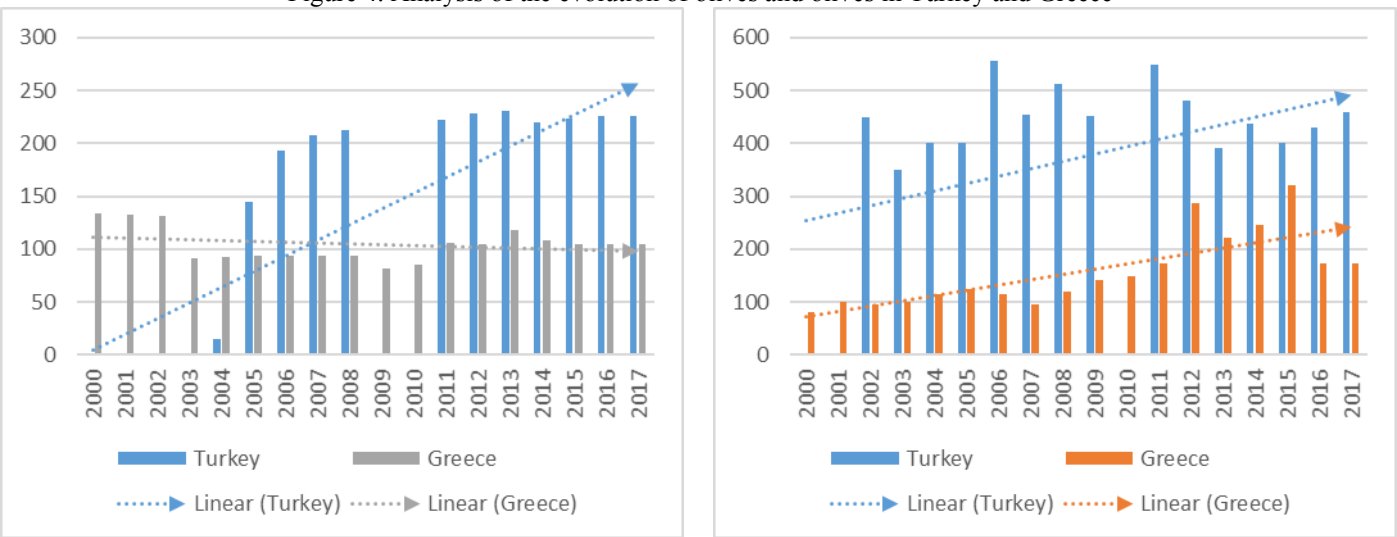
Analysing the evolution of these prices and that applied in Romania, an asymmetry can be observed between the evolution of the price in Turkey (the main supplier on average) and the evolution of the import price. Calculation of the correlation coefficient between the average import price and the price in Turkey showed a coefficient of average intensity to the high of 0.644. Between the average import price and the one practiced in Greece there was no significant coefficient of only 0.28. However, between the average import price and the average price of the

two exporters (Turkey and Greece), the most closely related correlation was recorded, with a coefficient of 0.724.

Concluding, it can be said that the price of olives in Romania is influenced, in particular, by that of Turkey, but also that of Greece.

In order to determine the main factors that led to the increase of the olives in Romania, the areas and productions obtained for this culture were analysed in the two exporting countries of Romania.

Figure 4. Analysis of the evolution of olives and olives in Turkey and Greece



(a) Evolution of olives (1000 ha) (b) The evolution of olive production (1000 t)

Source: own processing based on Eurostat

Analysing the areas under olives in Turkey and Greece, different developments can be observed for the two exporting countries. It can be noticed that this sector of olive cultivation in Turkey has a significant development during the analysed period, but it should be noted that no data were recorded for all the analysed years, but the areas recorded at Eurostat constituted a general trend of growth. The same cannot be said for the olive areas recorded in Greece, which is decreasing in the analysed period, if in 2004 there were about 134,000 hectares, in 2017 there were about 105,000 hectares, with 21,76% fewer . This may be a major reason for rising prices in Greece and, implicitly, in Romania, and the decrease in cultivated areas.

However, by analysing the yields obtained, it can be observed that this theory, by which prices increase due to the low supply, does not prove to be true given that the production has increased on average during the reference period. As we can see, there have been recorded increases in production for both major olives suppliers in Romania, with an average production of 450 thousand tons in 2002, and in the year 2017 there were 460 thousand tons, representing an increase of 2.2%. As for Greece's olive production, a similar trend can be observed, with an average annual growth of 4.64%.

Thus, rising prices for olives in Turkey can be justified by rising inflation, different customs duties and demand on the market. With regard to rising prices in Greece, this phenomenon can be motivated by the reduction of cultivated superpowers, by increasing the rate of inflation and reasons related to consumption (demand).

CONCLUSIONS

In this paper we wanted to determine the evolution of the price of olives in Romania and the main factors that determined this evolution. Reporting the value of imports of olives from Romania to the imported quantity could be determined the average import price. An increasing tendency can be observed in the analysed period. In order to determine the main factors that

influenced this trend, the main olives exporting countries were established in Romania, so both the major olive growers and Turkey and Greece depended on the quantity and value.

Analysing price developments for these two countries, price trends were observed during the reference period. By correlating the average import prices with those recorded in these countries, close links could be established between the import price and the price in Turkey, but also between the import price and the arithmetic mean between Turkey and Greece.

In order to determine in more detail the factors that determined this price evolution, the areas and outputs of the two exporting countries were analysed. Analysing these data, it can be said that the rising price of the Romanian market can be attributed to the decrease of olive-growing areas in Greece, to the increase of the inflation rate, and also to motives in the sphere of consumer and demand. The price in Romania is given at the meeting of the demand with the supply, the first one being quite high, which leads to an increase in the price given that there is no internal supply.

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