Competition on Edible Oil Market in Romania

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Abstract: The point of the departure of our research represents commercial relations which can be unfair when there is an inequality in negotiating power of the buyer and seller: a contract of ambiguous, shortages overshot. In this work we propose an analysis of trade policies on the chain for the disposal of foodstuffs in Romania, an assessment of the market sunflower oil, more exactly as regards control in the field of competition, in order to have a picture of the different practices in competitive consumer welfare purposes, with beneficial effects on the whole economy. In this investigation locate the oil market food to diagnose current behaviors business of consumption among producers - traders - consumers. The aim is to understand, if certain practices are problematic, which could be the implications and how it can be improved.

Key words: Sustainable Consumption • Competition • Brand Producer • Sunflower Oil

INTRODUCTION

At the European level, national competition authorities have warned about unfair trading practices and have expressed their concern that they might be expected to have a negative impact on consumer choice and innovation product in the long term. Under these circumstances, as a natural reaction, intervened some restrictive rules of freedom proclaimed initially and, over time and the need to fight against abusive exercise of the freedom of competition [1].

We believe that, with the implementation of the index HHI (Herfindahl-Hirschman Index) is analyzed to understand the process of concentration of the market, the competition policy. At the EU level has been proposed differentiated use of HHI and the results of this comparison gives answers to the following questions: What are the causes of the appearance of HHI, the critical values of the latter [2]. What are the effects on the market?

To protect competitive relationships in the markets of goods of Romania, the company must comply with the provisions of law 149/2011. In this case, the danger of applying of the containment and prevention is crucial to encourage compliance with competition law [3].

This study has three aspects on which it is based analysis of competition on the market food oil consumption: the level of concentration, private label brands and e-commerce. Romania is currently under the influence a set of factors of world development, among which the most substantial are globalization and regionalisation [4].

Authors can see they are in agreement that at a given moment market concentration is a fact. The authors will examine whether it is positive or negative for competition and for consumer welfare on the market of oil consumption in Romania, in the period 2008-2013. On the one hand, the concentration is a good thing, if the retail companies have brought logistical solutions are the best they have improved life style of the consumer the choice of product.

The second issue under analysis is that of own-brand products. These products have begun to have an impact on competition, especially because they offer many times cheaper alternatives for the consumer. In some member
states, they have come now to a quota of almost 50% in the volume of sales. An analysis in the year 2011 has shown that this level of penetration of meant, in some cases, a significant reduction in the rate of brands, while products sold exclusive, first level brands have maintained market share.

Finally, the authors will discuss briefly e-commerce, a new frontier of the food industry. Trade of organic agricultural products began to increase globally after 1980 [5]. Logistics has been a major challenge so far for the emergence of e-commerce in many markets of consumption, products, but some initiatives are beginning to be fulfilled successfully. Our study shall examine problematic competition, in the context of e-commerce involved in acquiring cooking oil by retailers, consumers [6]. Barrier tariff may also affect exportations when capital is invested to produce commodities which may be imported instead of producing exportable agricultural commodities [7].

**MATERIALS AND METHODS**

In this study, the indicators use competitive assessment of its merits have been: sector indicators and indicators of food market of oil consumption.

Use this indicative breakdown, in order to have an image at the level of food market in Romania in general and oil consumption. Concrete is not an assessment correlated simultaneously and all these indicators to gain information regarding the state of competition in the market. Also, we will be able to identify certain risks for the appearance of behaviors that may negatively affect the state of competition.

The table below present the two categories of indicators on which will be used and then interpret it.

Number of enterprises in food oil industry in Romania is retrieved from the data known through statistical data for the period 2008-2013.

Rate of mobility in the sector [6]. Evolution of the number of enterprises for the production of food oil provides information on existing regulatory barriers to entry and competitive pressure level existing in the sector.

\[
\text{Rate of mobility} = \frac{\text{Number of companies 2011} - \text{Number of companies 2012}}{\text{Number of companies 2011}}
\]

Also, this indicator provide information on trends in competitive intensity in this sector of Romanian food industry as greater mobility intense.

Penetration rate of imports. The imports are greater than the greater competitive pressure on a market.

\[
\text{Penetration rate of imports} = \frac{\text{Imports}}{\text{Consumption}}
\]

**Herfindahl-Hirschman Index (HHI):** HHI index was the most frequently used to measure the degree of concentration of the market. The value varies between 0 (Perfect competition) and 10000 (Monopoly).

\[
HHI = \sum_{i=1}^{N} S_i^2
\]

where \( N \) is the number of undertakings active in the market.

\( S \) - represents the market share of the undertaking „i”.

However, there are no levels of its unanimously accepted for framing a market into the following categories:

- Weak market,
- Average market concentrated,
- Market which was highly concentrated.

<table>
<thead>
<tr>
<th>Table 1: Indicators used for the evaluation of status competition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicators for sector</strong></td>
</tr>
<tr>
<td>Number of enterprises in the sector</td>
</tr>
<tr>
<td>Rate of mobility in the sector</td>
</tr>
<tr>
<td>Penetration rate of imports</td>
</tr>
<tr>
<td>Herfindahl-Hirschman Index (HHI)</td>
</tr>
<tr>
<td>Average turnover/employee in the sector</td>
</tr>
<tr>
<td>Degree of differentiation of the products in the sector</td>
</tr>
<tr>
<td>Rate of concentration (Concentration Ratio - CR)</td>
</tr>
</tbody>
</table>

Source: Report on state of competition, 2012 - Competition Council
Table 2: Levels of significance approved for Herfindahl-Hirschman Index

<table>
<thead>
<tr>
<th>Degree of concentration</th>
<th>European Commission</th>
<th>DOJ’s anti-trust Division + Federal Trade Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced</td>
<td>&lt; 1000</td>
<td>&lt; 1500</td>
</tr>
<tr>
<td>Medium</td>
<td>1000 - 2000</td>
<td>1500-2500</td>
</tr>
<tr>
<td>High</td>
<td>&gt; 2000</td>
<td>&gt; 2500</td>
</tr>
</tbody>
</table>

The table below shows levels used by the European Commission, namely the Justice Department - Federal Trade Commission - USA.

It has to be stressed that the index HHI indicates a market structure at a given moment in time. This index can provide a distorted picture markets with high dynamic, which records significant changes of structure in short periods of time.

Furthermore, in the markets in which there are no products with the potential for differentiation, that is to have a rich range index HHI may provide information about the development of real competition.

**Average Turnover/Employee in the Sector:**
Turnover/employee means an indicator of average productivity in the sector. This indicator varies according to industry specifics and it also does not take into account profitability or subsidies, but has the advantages ease of calculation (Public), as well as the fact that it provides a picture of the dynamics of activity in an economic sector.

**Degree of Differentiation of the Products in the Sector:**
The degree of differentiation of products on the market can be measured in relation to two dimensions: differentiation by their characteristics (Horizontal) and differentiation by quality. Although differences between the two dimensions are not always obvious, the distinction in quality is determined by unanimous perception of consumers, while differentiation through features is the result of subjective and distinct preferences among consumers [8].

In Romania, of the import goods have seduced Romanian consumer quickly, as any product of import was appealing. The need for differentiation between foods in front of import domestic, distinction that a change and at present [9].

Degree of differentiation of the products or services is an important consideration in the analysis of the competition in a market having regard to that: differences in quality and/or characteristics between products generates an additional competition between firms, beyond the price competition.

- Firms producing goods of superior quality are more difficult to disciplined by their rivals, with commercial injury, which can be brought by a price war are relatively small, which results in a low probability of occurrence of a conference.
- Within the framework of a cartel a company, who has the advantage quality, should have a larger share of the market to compensate for the benefits that it may obtain from departing from an agreement with its competitors. On the other hand, this would affect motivations to producers of products/services with a low quality to participate in understanding. Practically, through conferences may be suppressed competition in quality, which makes it difficult including disposal price competition.
- Horizontal differentiation lead to a fall in demand elasticity in price for the market as a whole, which make the possible punishments for departing from a possible policy by the cartel to be more difficult to apply.

Thus, the damages which it may cause a price war between cartel and the companies that deviates are limited.

An interesting outcome of the assessments above consists in the determination of impact it will have on the possibility of outbreaks of innovation conferences. Due to the fact that the process of innovation increases the asymmetries of costs and quality, anti-competitive arrangements appearance is less likely on innovative markets [10, 11].

**Measure of Economies of Scale:**
Economy of scale is an economic concept which provides information on an optimal size of a firm in an industry. At the basis of this concept is the idea that each industry is characterized by a specific technology, i.e. possibility (Limited) to convert raw materials into final products.

Member States in Eastern Europe have relied in particular on both opening and the flexibility of the market of goods as well as that of labor, while Italy and Spain have been confident, instead, the economies of scale on which their markets can be achieved. Spain, he also made notable efforts in the case of infrastructure investments [12].
RESULTS AND DISCUSSION

In Romania, in the year 2008 carrying on their activities 9551 of companies in the food industry, of which 236 companies in the industry oils and fats and in 2012, their number decreased dramatically to 154. Currently, the most significant proportion of the production is obtained only by two large companies with foreign capital and one with domestic capital. These falls were due, in a first phase, privatization and division of most undertakings in the state's private property and subsequently mergers and repeated. A decrease in the number of industrial enterprises appreciates negative, for the development of economic activity and a sustainable consumption for the population.

Average number of employees has evolved in the same direction in relation to the number of establishments, but having a negative impact on the size of the average of the units. Tendency to a medium size units specializing in the manufacture of oils continued, so that in the year 2008, a number of 204 units were 0-9 employees and in 2012, dropped to a half.

Still, it was noticed that a weak presence of oil producers on the market for human consumption (Table 3), shows that capital investments in this sector have potentially uncollectible. An undertaking shall take a decision on entry into a economic sector or in a specific market, when profits flow expected in a reasonable time horizon equals the stranded cost associated with the initial investment required entry in the relevant market.

Rate of mobility in oil industry food consumption is very low, given the barriers to market entry and competitive pressure at any given time. During the period 2008-2014, in Romania and have been carried out its activity three largest producers of cooking oil and the fact that it has not registered for new start-up-changer in the processing-obtaining-sale food oil, denotes a reduced mobility, practically a fierce competition externalized only between big players in the sector.

Changes in the level and dynamics of the average size units for the production of edible oil consumption should be linked to economic-financial results obtained by them. For the characterization, financial-economic results data have affected: turnover, industrial production, direct exports, gross value added, gross profit, for the year, gross investment and investments net of tax [13].

After having exceeded global economic crisis, in 2009, the specialists have provided for an increase of the degree of concentration of the market as a whole [14], due to investments made by leading retailers in Romania, which will intensify competition and in the food sector.

Thus, in Table 4, present a dynamic market sales of oil consumption in 2013, which amounts to about 610 million euros, practically an increase in demand for such products. In the basket of consumption the share of food...
in total trade shows a percentage of 50%. After our research, produce the highest sales via the chains of shops.

Pieces on the market producers have their own brands, but the greatest volume of sales is carried out via the networks of shops, which in their turn have own brands. These sales via the networks of shops shall be carried out without advertising expenses. Their weightings are estimated at 30-40 percent and will be increasing our according to opinion polls among producers.

Will they manage large producers to maintain a balance of sales of own-brand products and sales via networks? So, the consumer will find it had become fewer brands on the shelves of the shops at higher prices than it is today.

In Romania, the market sunflower oil rose in the volume, total category. In conclusion, the three large processors of sunflower seeds have negative results in the last two years, our explanation is that under the conditions of globalisation and rapid opening of markets for Romanian companies with significant market share of 40%, 27%, 10% have a market power limited threat posed by transnational companies, namely of imminent imports.

To measure the degree of concentration of the market, we are in the table below, using the gauge Herfindahl-Hirschman (HHI), the results of this
Table 5: Production of sunflower oil in the period 2008-2011 Tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of sunflower oil</td>
<td>173176</td>
<td>241027</td>
<td>327590</td>
<td>360040</td>
<td>250464</td>
</tr>
</tbody>
</table>

Source: www.fao.org

Table 6: Trends in imports of oil sunflower seeds in period 2008 to 2012 Tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>The oil sunflower seeds</td>
<td>73797</td>
<td>92386</td>
<td>115389</td>
<td>95574</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: www.fao.org

Table 7: The edible oil consumption in Romania during the period 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edible oil (Liters)</td>
<td>12</td>
<td>13.6</td>
<td>15.4</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: www.insse.ro, interrogation tempo-online

Table 8: Degree of concentration on the market food oil producers in Romania, in the year 2013

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Turnover (lei)</th>
<th>The market share%</th>
<th>And2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading producers in accordance</td>
<td>1,110,700,369</td>
<td>40</td>
<td>1600</td>
</tr>
<tr>
<td></td>
<td>751,789,817</td>
<td>27</td>
<td>729</td>
</tr>
<tr>
<td></td>
<td>275,331,285</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>156,166,909</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>143,296,559</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>135,652,241</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>82,544,213</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>42,592,808</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>28,158,475</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>19,411,695</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2,745,644,371</td>
<td>100</td>
<td>HHI= 2526 Reserved</td>
</tr>
</tbody>
</table>

Source: Data collected on the basis of the statements account

research. So, in Romania have the image of a monopoly market, dominated by the first producer (Table 5), a market highly concentrated levels allowed by the European Commission and the Federal Trade Commission - U.S. (>2500).

In Romania, the oil producers market is highly concentrated (HHI= 2526): first three competitors together hold 88% of the volume market, in 2013, (Table 8).

On this market, competition is low, co-exist with companies efficient less efficient (Table 4), since there are no consumers which can prefer range of businesses less effective. Degree of substitutability between is inversely proportional to the degree of differentiation of the product. The Romanian market of oil consumption is dominated by products differentiable, products which have several varieties distinguished by certain characteristics (Qualitative). Between these grades occurring at the same time and a degree of substitutability between them.

More specifically, in Romania, the business of food retail is responsible for this situation. Growing competition, as a result of the existence of a significant number of competitors, expansion type chain-store discount, announcements concerning outputs and entry of main players on the market, as well as modifications to the leader position on the segment, emphasizes consumer preference for products differentiable.

In accordance with the methodology for the calculation of INSSE, the big retailers are represented as follows:

- Under CODE 4639 - wholesale nursing of foodstuffs, beverages and tobacco products.
- Under CODE 4711 - retail shops in general-interest, selling predominantly of foodstuffs, beverages and tobacco.

Food retail market has proved very dynamic in the year 2010, with openings of new shops, in the year 2011, they opened 93 new shops type big hypermarkets. Players on the domestic market have affected retail expansion in cities smaller after they have provided for in cities with higher density of consumers.
Table 9: Developments in turnover for the main actors in the retail sector, in the year 2013

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Turnover (RON)</th>
<th>Profit (RON)</th>
<th>Loss (RON)</th>
<th>Employees (Thousand people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main actors in the retail sector in accordance with CODE 4639</td>
<td>7,260,679,847</td>
<td>331,021,465</td>
<td>-</td>
<td>577</td>
</tr>
<tr>
<td></td>
<td>4,289,031,026</td>
<td>144,301,868</td>
<td>-</td>
<td>640</td>
</tr>
<tr>
<td></td>
<td>2,339,955,235</td>
<td>55,113,401</td>
<td>-</td>
<td>383</td>
</tr>
<tr>
<td></td>
<td>2,300,730,369</td>
<td>-</td>
<td>90,560,511</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td>2,273,251,625</td>
<td>-</td>
<td>303,773,707</td>
<td>493</td>
</tr>
<tr>
<td></td>
<td>2,194,126,524</td>
<td>557,896</td>
<td>-</td>
<td>725</td>
</tr>
<tr>
<td></td>
<td>1,456,261,116</td>
<td>26,873,037</td>
<td>-</td>
<td>328</td>
</tr>
<tr>
<td></td>
<td>1,359,002,194</td>
<td>2,178,995</td>
<td>-</td>
<td>434</td>
</tr>
<tr>
<td></td>
<td>819,338,441</td>
<td>-</td>
<td>4,469,583</td>
<td>403</td>
</tr>
</tbody>
</table>

Source: Data collected on the basis of the statements account

End of the year 2011 has brought a new legislative proposal in the retail sector, namely wrapping imposed hypermarkets to place on the market products of domestically produced in a proportion of at least 80% of the surface area shops with medium or large surface outside urban areas.

**Average Turnover/employee in the Industry Producing Cooking Oil:** In Table 4, presented companies (With foreign capital) of edible oil industry have approximately 2100 employees, which represents 0.02% of the number of employees in the economy, but carried out approximately 78% of the turnover in the sector. Turnover per employee from leading manufacturers of cooking oil in Romania have exceeded in 2013 the level of 300,000 euros/employee, being 30 times higher than the level indicator on the total economy in the year 2011.

According to statistical data, the areas in which entrepreneurs the highest values of turnover units are wholesale trade (55.2 billion lei turnover in 2012, or 30% of the total, 429 companies), construction (15.2 billion lei turnover in 2012, or 8.3% in total, 160 companies), retail, agriculture and food.

The increase in turnover/employee can be explained by saying that producers of cooking oil from Romania have kept pace with accelerated expansion of Retailers estimate and have been unable to obtain a mean annual growth of over 30% in the period 2008-2012.

Changes consumption habits of the population, which have taken place in the oil market, were essential elements in the share increase their own brands of major retailers, whose production has been ensured by the first two producers. First, acquired during these years more production capacity and local brands in order to become a leader locally in this segment.

According to statistical data, in Romania, the level of labor productivity, measured by turnover per employee, the order (Descending order) is: wholesale trade, sales of fuels, goods industry supply, transport, retail trade [15]. Research carried out, it can highlight important initiation of training programs in the field of communication management with organizations [16].

**Market Indicators**

**Changes in Rates of Profitability:** Some authors consider that a more profitability is not and the effect of satisfaction of the consumer. At a given moment, company may have recourse to a reduction in earnings in order to increase consumer satisfaction. Consumer satisfaction with higher-quality, superior design, proper training of the personnel, the variety of products will result in an increase in costs, which reduces firm's profitability.

Business value producing on edible oil market in Romania provides a range of information relating to the market power of them. Table 4 shows us the profitability among producers who have 3-5% of the market share, which we can partner these increases with a possible market power of the company in question. We believe that the market power may be the outcome of the market structure or anti-competitive practices.

Financial crisis, instability of employment, has determined consumers, to be much more concerned about their future, the number of jobs and by default in frequency of purchase and consumption. The decrease in sales of food products, it is a phenomenon that directs was sent to school to promote their own brands. Customers will not take into account buying products “Premium” so that they decide to buy products from brands cheaper and have a more rational attitude toward front of a promotion [17].

The retail sector is the one who wins as a result of the likelihood of adaptation to change behavior of purchase. Economic crisis in the year 2011, has caused major retail chains in Romania introduction to accelerate their own brands of products and to change to a marketing aggressively, designed to customers' needs, which has led to an increase in sales by up to 90%.
Discrepancy between the two results of the investigations of land shows that own brands are searched for low price, but he still didn't have a clear picture in his mind consumers, they search for such products because they have lower price in comparison with 22.8% of Romanians appreciates good quality, that comes from such products at an attractive price, 9.3 percent of the respondents, said their freshness.

There are studies that have tried to establish profiles of consumers, who complains about 50,000 and who have tried to find answers to questions such as:

- What types of consumers are willing to register complaints?
- What are the differences between consumers who filed complaints and those who make compliments?

In the formation of such profile, some specialists believe that demographic variables such as income, occupation, education, age, civil status, social integration, mobility etc helps to achieve significant results. Consumers, who filed complaints, are generally young people, they have a relatively high income and were not loyal to a trade mark even when they were satisfied [18].

Barriers to Market Entry in: Difficulties encountered by companies on entry into new markets may be caused by following existence of barriers which may be:

- Regulations - legal requirements relating to the activities on the market (Opinions, licenses, etc.)
- The structure - requirements which fall within the characteristics of the market (Initial investment, advertising expenses, etc.)

On the one hand, the international community's attention was focused in particular on increasing trend of the countries to have recourse to restrict exports of food products in various forms: increase in customs duties on
exports and the introduction of the new tax, the imposition of quantitative restrictions, including quotas and prohibitions on export.

On the other hand, as in the case of the other foodstuffs, the final price of oil is determined by the retail networks and distribution, depending on their commercial policies. processing, having regard to developments in seed prices, is extremely low, by subtracting powerfully in the last period. Developments in the EUR against the USD may cause operators to look for European products in the forthcoming period.

To prevent the crop sunflower Romanian in the last four years was above expectations and that there is no demand of oil products on the world market, the company's investments in silos, were singularities in Romania. The storage capacity in Romania has doubled, sales have doubled. During the period 2005-2011, basic food products were purchased, the big retailers, from suppliers. Single category, which has a significant change in the year 2011, is category oil, where there is a reduction in the acquisition of products from suppliers of more than 10%, in favor of the import products.

While rules and reform multilateral trade subjects and better functioning of world trade in food and agriculture products are essential components of an improved system of food safety, commercial policies in the scope agriculture cannot guarantee and improve domestic policies of agriculture sphere [19, 20].

Earth's management of natural resources and water, the rights of ownership, storage, energy, transport and distribution networks, credit systems, as well as science and technology - represents as many key considerations in an effective agricultural policy, consumption sustainable and a food safety system performance. Energy efficiency commonly known as (Energy input-output analysis) is closely associated with economic (Profitability) and ecological aspects of the farming systems [21, 22].

Commercial policy has, without the doubt, the place to this drive, but does not in itself solve all challenges in the field of agriculture [23]. These policy options can successfully work in the long run provided that 6 implementation of these policies is consistently pursued [24].

CONCLUSIONS

The authors believe that there would be increases in the margins, a higher degree of differentiation of the products and will be encouraged more and more new business in the processing sunflower oil.

REFERENCES


