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Sorinel Ionel BUCUR, Viorica GAVRILĂ

Institute of Agricultural Economics, Romanian Academy, Bucharest
bucursorinelionel@yahoo.com
vio.gavrila@yahoo.com

WINE PRODUCTION IN ROMANIA – DEVELOPMENTS AND TRENDS FROM THE PERSPECTIVE OF FOOD SECURITY AND SAFETY

ABSTRACT

In the last 30 years, the transition from the centrally-planned economy system to the rigours, requirements and constraints of the market economy has generated significant structural and behavioural changes at national level, which had an impact both on the performance and competitiveness of national economy and on the capacity to ensure food security and safety for the population. Like in most activity sectors from agri-food economy, yet with higher intensities, the wine sector in Romania, both the primary and the secondary (processing) sector, has faced numerous problems for the last 30 years, with a direct effect on the capacity to ensure food security and safety at this level. From this perspective, the present approach aims to carry out a diagnosis of the wine production in Romania, in terms of its capacity to meet the domestic consumption needs and valorise the obtained production.

Key words: viticulture, food security and safety, consumption, trade balance, development potential.

JEL Classification: Q10, Q11, Q17.

1. INTRODUCTION

As part of the security of each state, food security consists in the capacity of each economy to ensure the supply of the population with basic quality foodstuffs, by the combination/rational use of existing resources.

The coverage of consumption needs for a certain product can be achieved either from domestic production or from imports. The efficient use of domestic production also implies the increase of quantities for export. Regardless of the nature of analysed products, each state must adopt measures in the agri-food sector that can contribute to ensuring the highest degree of coverage of domestic consumption needs.

In viticulture, the implementation of such measures, both in the primary and in the processing sector, should be reflected in a high degree of coverage of domestic consumption needs, with quality products, without significantly resorting to imports.

2. STATE OF KNOWLEDGE

The food security and safety issue has been the topic of intense debates, both at national and global level, in conceptual and pragmatic terms, trying to identify how to use the existing resources in a most efficient way, so as to meet domestic consumption needs.

According to experts (Gavrilescu *et al*., 2000), the two main determinants of food security are food availability and access to food. Food security at individual level does not necessarily ensure food security at family level.

The radical transformation of national agricultural systems, as a result of influences given by the convergence with the demands and directions of the European agricultural model, has determined a significant change in the situation of agri-food markets, affecting the food trade, its structure and food safety implicitly (Drăgoi *et al*., 2018).

According to experts, the polarised agrarian structure can influence food security. Thus, the presence of a great number of small farms can increase agricultural production volatility, as small farms are less endowed with resources, apply less productive technologies and may become a disruptive factor for agricultural supply stability (Luca *et al*., 2022).

As regards the wine sector, there are concerns at international level for the elaboration of studies regarding the competitiveness of this sector, the domestic consumption or the evolution of the balance of trade. According to experts (Gavrilă, 2020), in the wine sector, the EU policy has focused on reducing surpluses through measures targeting production, and on the other hand, on obtaining a high-quality production.

In the above-mentioned context, we consider that the present approach adds to the background research, representing an analysis of the degree to which food security is ensured in the wine sector.

3. METHODOLOGY

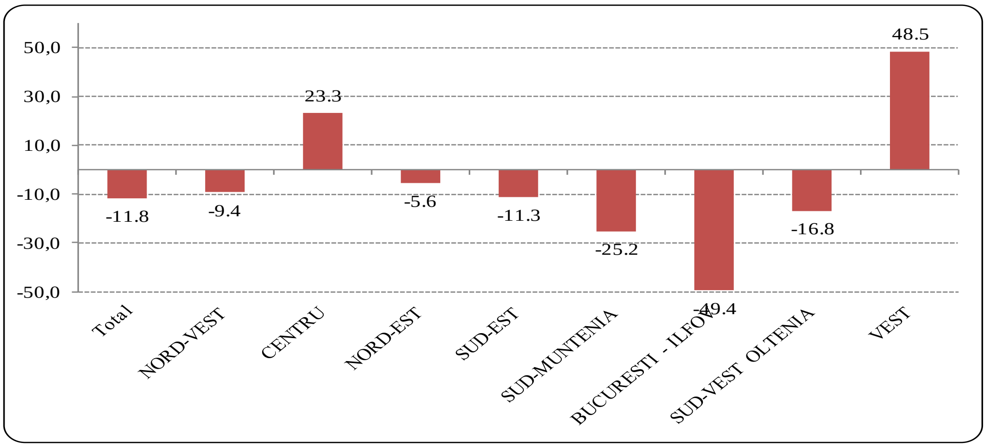
The present approach is based on public information provided by the National Institute of Statistics, through Tempo – Online database, as well as on information from the FAOSTAT database. The analysis uses established statistical methods, such as comparisons, structures and dynamics; the analysed indicators are: cultivated area, physical production, domestic demand, food consumption demand, consumption/capita/year, as well as foreign trade indicators.

4. RESULTS AND DISCUSSIONS

In the post-accession period, the area under vineyards diminished by 11.8% nationwide, from 187,629 ha (2007) to 165,553 ha (2021).

A significant diminution of the area under vineyards (by more than 40 percent) was noticed in the region București–Ilfov, while in the regions *Centru* and *Vest* the area under vineyards increased in the year 2021 compared to 2007, by percentages ranging from 23.3% to 48.5%.

It is worth noting that in the year 2021, the *Sud-Est* Region had 66,945 ha under vineyards, accounting for 40.4% of total areas under vineyards at national level (Figure 1).



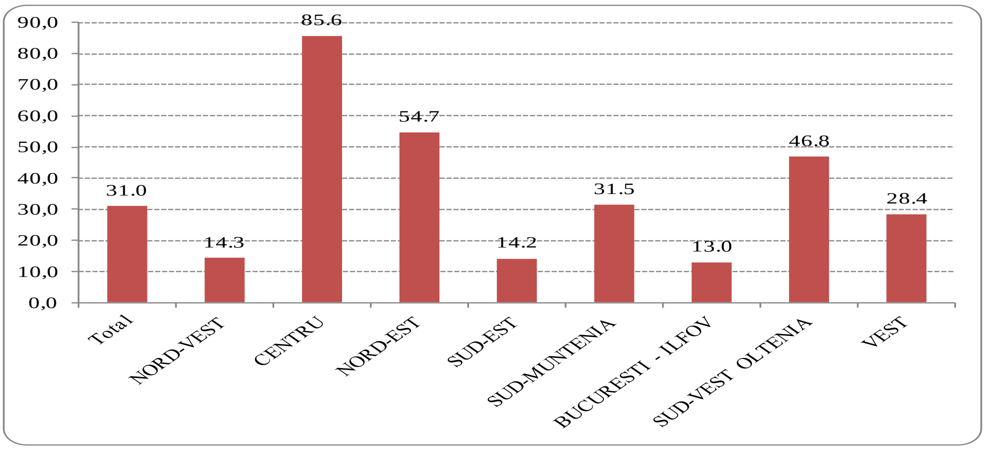
Source: Author's calculations based on Tempo-Online, NIS data, 2022

Figure 1. Dynamics of areas under vineyards in the year 2021 compared to 2007, nationwide and by regions (%)

Although the area under vineyards decreased in the period 2007–2021, the average grape yield per hectare, as well as total grape production increased in the same period. Thus, the average grape yield increased by 31%, from 4654 kg/ha (2007) to 6096 kg/ha (2021), which is a noticeable trend in all regions, by percentages ranging from 14.2% (*Sud-Est* Region) to 85.6% (*Centru* Region) (Figure 2).

In the year 2021, the largest average grape yields were found in three regions, namely Vest (7532 kg/ha), *Sud-Est* (6494 kg/ha) and *Nord-Est* (6485 kg/ha).

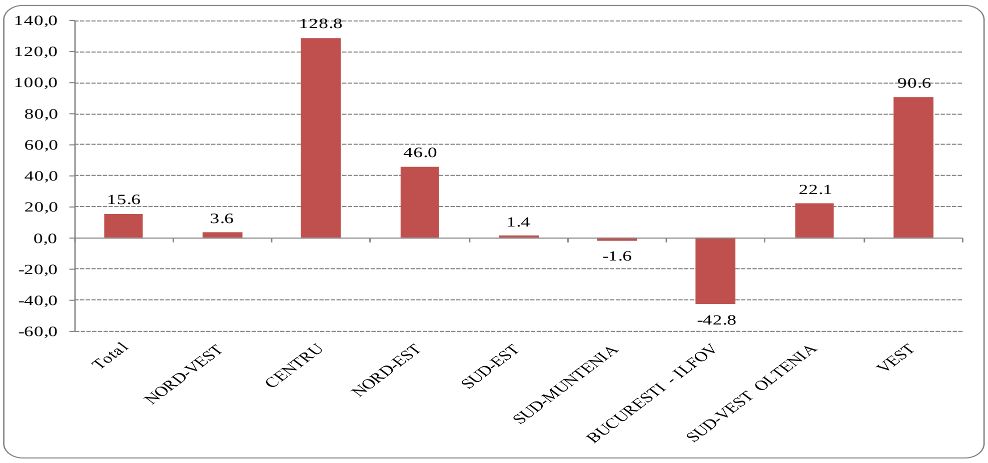
As it was mentioned before, total grape production followed an upward trend, to reach 1,009,187 tonnes in the year 2021, up by 15.6% compared to the year 2007. In the case of total grape production across regions, it is worth noting an oscillating evolution from one region to another, by percentages ranging from -42.8% (*București-Ilfov*) to 128.8% (*Centru* Region), due to changes in cultivated areas in each region (Figure 3).



Source: Author’s calculations based on Tempo-Online, NIS data, 2022

Figure 2. Dynamics of average grape yields per hectare in the year 2021 compared to 2007, nationwide and by regions (%)

Speaking about wine grape production, it is worth noting that out of total grape production, the amount intended for processing represents more than 90%, on the rise both overall (4.2%) and by regions. Thus, while per total the share of wine grape production reached about 95% of total production, in the *Centru* Region the entire grape production is intended for processing into wine (Table 1).



Source: Author’s calculations based on Tempo-Online data, NIS, 2022

Figure 3. Dynamics of total grape production per hectare in the year 2021 compared to 2007, nationwide and by regions (%)

Table 1

Share of wine grape production in total grape production (%)

	2007	2021	2021/2007 (pp)
TOTAL	90.7	94.9	4.2
NORD-VEST	98.2	98.5	0.3
CENTRU	99.1	100.0	0.9
NORD-EST	97.1	98.3	1.2
SUD-EST	84.5	90.3	5.8
SUD-MUNTENIA	96.5	98.5	2.0
BUCUREȘTI–ILFOV	98.6	99.8	1.2
SUD-VEST OLTENIA	97.6	98.5	0.9
VEST	85.1	95.5	10.4

Source: Author's calculations based on Tempo-Online, NIS data, 2022

In the context of the objective of the present approach, namely to carry out a diagnosis of wine production in Romania, from the perspective of its capacity to cover the domestic consumption needs and to valorise the obtained production, relevant information was identified in FAOSTAT database, and from the analysis of data the following aspects are worth noting:

In the period 2017–2019, the domestic wine demand increased by 5.5% (from 364 thousand tonnes in 2017 to 384 thousand tonnes in 2019), while a similar increase was found in the wine production intended for consumption.

In the same period, the annual wine consumption per capita increased by 7.3%, from 18.01 litres (2017) to 19.32 litres (2019) (Table 2). Compared to the other EU member states, Romania ranks 14th in terms of annual average wine consumption in EU-27, Luxembourg ranking 1st in EU-27 (63.59 litres/capita/year).

Table 2

Evolution of domestic wine demand, of wine quantity intended for consumption and of annual consumption *per capita*

	2017	**2018**	**2019**	**2019/2017 (%)**
Domestic demand (thousand tonnes)	364	242	384	5.5
Quantity intended for consumption (thousand tonnes)	354	239	374	5.6
Annual consumption per capita	18.01	12.26	19.32	7.3

Source: Author's calculations based on Tempo-Online, NIS data, 2022

As regards the balance of resources necessary to cover the domestic demand, determined as the sum of domestic production and imports, is should be noted that in the investigated period, the share of imports increased from 12.7% (2017) to 14.1% (2019), by 1.4 percentage points respectively. Practically, in the year 2019, in order to cover the domestic consumption needs, Romania imported 34360 tonnes of wine, down by 28.7% from the year 2017.

As regards the uses (domestic production plus exports), although the share of exports is on the rise by 1.5 percentage points, it still remains low, in the year 2019 representing about 7.4% of the balance of uses. This increase in the share of exports in total balance of uses is due to the increase of exports by 29.4% in the year 2019 compared to 2017 (Table 3).

Table 3

Evolution of the balance of resources and balance of uses in the period 2017–2019

	2017	**2018**	**2019**	**2019/2017**
Balance of resources (tonnes)	493.541	199.306	486.646	-1.40%
% imports	12.7	36.8	14.1	1.4 percentage points
Balance of uses (tonnes)	457.806	161.831	451.420	-1.40%
% exports	5.9	22.1	7.4	1.5 percentage points

Source: Author's calculations based on FAOSTAT data, 2022

In terms of foreign trade, in value terms, is should be noted that in the period 2017-2020, the value of wine imports increased by 26.6%, from 62541 thousand USD (2017) to 79159 thousand USD (2020). The value of exports also followed an upward trend, increasing by 30% in four years. However, the balance of trade remained negative and continued to decrease (24%), the value of imports being almost double every year compared to the value of exports (Table 4).

Table 4

Evolution of the trade balance value (thousand USD)

	2017	**2018**	**2019**	**2020**	**2020/2017 (%)**
Import	62541	73306	68646	79152	26.6
Export	26806	35831	33420	34849	30.0
Balance	-35735	-37475	-35226	-44303	24.0

Source: Author's calculations based on FAOSTAT data, 2022

In terms of the average import and export prices, it should be noted that in the period 2017-2020, the average import price was systematically above the export price. Thus, in the year 2020, the average import price increased by 41.8% compared to 2017, to reach 1862.8 USD/tonne, while the export price increased only by 2.4% in the same period, which reveals an inefficient use of domestic wine production for export, at much lower prices than import prices (Table 5).

Table 5

Evolution of average import and export prices of wine (USD/tonne)

	2017	**2018**	**2019**	**2020**	**2020/2017 (%)**
Import	1313.3	2126.0	1997.8	1862.8	41.8
Export	1860.9	2012.2	1792.5	1905.8	2.4

Source: Author's calculations based on FAOSTAT data, 2022

5. CONCLUSIONS

In the post-accession period, the Romanian wine sector has experienced important structural changes, both in primary production and mainly in the valorisation of wine production, in terms of coverage of domestic consumption needs. Although the areas under vineyards decreased in the period 2007–2021, the average grape yield and total production significantly increased, with a few small exceptions.

The domestic demand and the annual wine consumption also followed an increasing trend. In terms of annual average wine consumption per capita, Romania ranks 14th in the EU, with 19.32 litres, slightly below the European average (20.3 litres). In the year 2019, Romania imported 34360 tonnes of wine to cover its domestic demand, accounting for 14.1% of the balance of resources. Its wine exports are low compared to imports. The balance of trade remains negative, with imports almost double compared to exports, while average prices significantly increased in the case of imports (41.8% in 2020 compared to 2017), as against only 2.4% in the case of exports. In the context of the above, we consider that significant support measures are still needed, not only in primary production but mainly for a higher valorisation of wine production.

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