EVALUATION CRITERIA OF THE COMPETITIVE POTENTIAL IN VITICULTURE

CRITERII DE EVALUARE A POTENȚIALULUI COMPETITIV ÎN VITICULTURĂ

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Abstract: *This approach intends to develop an analysis and evaluation model of the competitive potential of viticulture. The competitive potential model is an evaluation benchmark that integrates the sectoral indicators and it is put into evidence mainly by the development of a composite index, named the competitive potential index. In this sense, a set of evaluation criteria was selected, in which relevant structural indicators were found. The application consists in measuring the competitive potential at national level and across regions.*

Key words: *viticulture, competitiveness*

INTRODUCTION

The development in good conditions of any economic activity at the level of each region makes is necessary to measure the sectoral performance. For the consolidation and development of the economic environment on long-term, the analysis of the competitive potential of resources is of first importance, based on the development of a set of quantifying indicators.

MATERIALS AND METHODS

In order to select the relevant indicators, we made a diagnosis analysis of the wine market. As data and information sources, the official

statistics, as well as certain studies specific to the approached thematic were used.

The established evaluation criteria give the spatial dimension of the sectoral potential to ensure the raw material for vinification, under a desirable form for the domestic market, as well as in close connection with the foreign market tendencies. For this purpose, the set of competitiveness-related criteria is represented by: I. Viticultural patrimony, II. Production organization, III. Productivity-quality, IV. Processors. For each criterion the characterization indicators were identified (Figure 1).

In the establishment of indicators, the quantitative and qualitative elements were highlighted, meant to ensure a most complex measurement, as well as to make accurate comparisons at inter-regional level. The main elements that lay at the basis of indicators selection consisted in the indicator relevance, the indicator measurement and the availability of data at regional level.

Figure1.

Indicators used for estimating the competitive potential

1.Viticultural patrimony	⇔	1.1.Structure of vine plantations 1.2.Age of vine plantations 1.3.Plantation replacement rate 1.4.Availablity of planting stock
2.Production organization on holdings	⇔	2.1.Size classes 2.2.Specialization level
3.Productivity – quality	⇔	3.1. Share of plantations for controlled designation of origin (CDO) 3.2.Yield classes for CDO 3.3.Yield classes for other wines
4.Processors	⇔	4.1.Density of processors

The competitive potential level is an evaluation benchmark that integrates the sectoral indicators and it is mainly put into evidence by constructing a composite indicator, named competitive potential indicator.

For each indicator, an optimum value was established, and according to this value size intervals were established and the score related to each interval. For the system of criteria, the importance coefficients were established, and the synthesis of results is marked out by the global competitiveness index. The global competitiveness index was hierarchized on a 5-step evaluation scale: very low, low, medium, good, very good.

RESULTS AND DISCUSSIONS

From the perspective of the first analyzed criterion, i.e. indicator 1.1. Structure of vine plantations, it is relevant that at sectoral level, the share of grafted wines is only 51%, the remaining 49% being hybrid vines; this indicator reaches a maximum value in the region West, with almost 95% grafted wines, followed by the regions Center and South-East, with 76% and 70% respectively; in the remaining regions, the ratio is less favourable: Region Bucharest - Ilfov is the most deficient, with more than 99% hybrid vines; a low competitiveness is also characteristic to the regions North - West, with almost 83% hybrid vines, South – Muntenia (71%), South – West Oltenia (68.6%), North - East (56%).

From the production potential point of view, expressed by indicator 1.2. Age of vine plantations, the share of young plantations is 29.4% at national level. The share of plantations with full production potential (up to 20 years) is higher in South-Muntenia (44.8%), Bucharest Ilfov (42.2%), Center (39.1%) and West (36.8%). No region has an optimum structure. However, better scores are obtained by the regions South-Muntenia (44.8%), Bucharest Ilfov (42.2%), Center (39.1%) and West (36.8%), while the region North West has the lowest score, with a share of only 12.9%.

At national level, more than 50% of plantations are older than 30 years, which means a much lower production capacity. As extreme negative value, the region North – West stands out, where more than 71% of plantations practically went out of competition on the market. The plantations from the Regions South - East, North - East (53%), South - West Oltenia (51%) are closer to the country average. A better structure by age groups is specific to the regions Center and West, with only 40% old-aged vine plantations.

Another important indicator in the evaluation of the competitive potential is represented by 1.3. Plantation replacement rate. In order to obtain significant values, the indicator was calculated under two variants: 1) by calculating the share of young plantations (under 3 years old) in total viticultural area * 100 and 2) by calculating the share of young plantations in total viticultural area older than 30 years *100; significant values are obtained in the second case, and we opted for this calculation modality opted for.

Compared to the average replacement rate at national level (9%), the regions West and Center stand out with a replacement rate of old-aged plantations of 51% and 47% respectively. Results that exceed the country average, but which are not similar with those from the above-mentioned regions, can be also found in the Region South-East (11%); in the other regions the replacement rate is below the country average.

From the perspective of meeting the regional demand of planting stock for the replacement of plantations that went out of the economic circuit, the potential demand can be net to a higher extent in the Region North-East, with an area under planting stock of 524 hectares, representing 3.53 % of the area under vine plantations older than 30 years.

The second evaluation criterion, i.e. the organization modality of the wine grape production, is a factor that influences the quantity, homogeneity and finally the quality of grape production. Under this criterion, indicator 2.1. Size of holding, is important in the evaluation of the potential to supply the market with grapes as raw material, the larger-sized holdings being the main suppliers of grapes that go into the market circuit. At national level, only 27.4% of areas belong to the holdings larger than 5 hectares; an optimum situation can be found only in the Region West, followed by the Region Center (more than 70% of area on holdings larger than 5 ha). The viticultural area of the Region South-East, the most important grape supplier, is quite scattered in the territory, only 36% of plantations belong to farms larger than 5 ha. In the Region North-East, its share is only 2.7%.

The specialization level of holdings (2.2) was calculated as share of land areas under vineyards in the utilized agricultural area of the holding. There is a positive correlation between the specialization level of holding and its physical size (Pearson = 0.63). Only the holdings larger than 5 hectares were considered for the calculation of this indicator.

Per total country and total holdings, the average specialization level is 7.2%, and on the holdings larger than 5 hectares its values become significant (36.8%).

In the group of holdings larger than 5 hectares, the optimum specialization level is considered to be higher than 60%, but this situation is met only in the Region Center (61.2%). Compared to the national average, a higher specialization level is also found in the Region South - East (44.6%).

The third evaluation criterion consists in the analysis of the qualitative supply, the production quality being a key factor of competitiveness on the market. From this point of view, at national level, the CDO areas (3.1.) accounted for 15.1% of the area under wine grapes. By regions, a higher share was noticed in North - West (35.8%) and in the Region Center (24.7%). For the regions South - East and South-West Oltenia, with 16.8% and 15.2% respectively, the values are close to the country average; the regions North - East and South Muntenia are under the national average, with slightly above 10%. In the Region Bucharest – Ilfov, no CDO grapes are obtained, while in the Region West, their share reaches only 0.6%.

The distribution of CDO areas by yield classes (3.2) indicates that by regions, most vineyards are in the potential yield class ranging from 30 to 70 hl. Only two regions have a higher productive potential, namely North– East and South - East, the latter being the only region with plantations with maximum potential, of over 110 hl/hectare (0.7%).

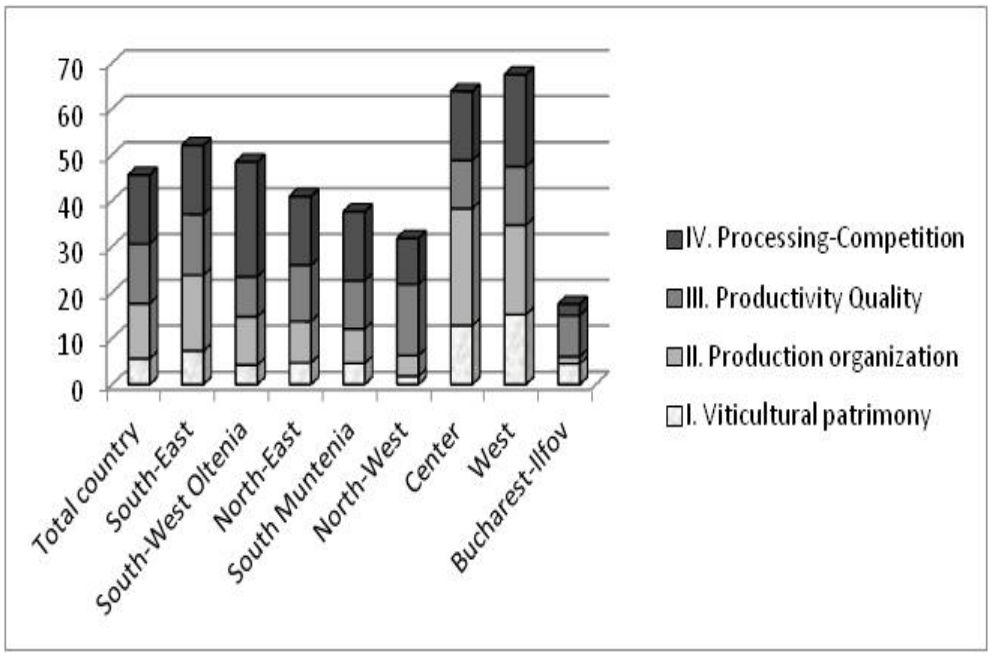
In the evaluation of the indicator, the maximum score is obtained if two conditions are complied with, on a cumulated basis: more than 90% of plantations have a yield higher than 30 hl/ha, out of which over 40% with a yield higher than 70 hl/ha. From this perspective, the best productive potential is in the Region North – East.

Almost 59% of the plantations under table wines, including those with Geographical Indication (GI) have a productive potential under 40 hl/hectare. From the point of view of yield classes for the plantations for other wines (3.3), the evaluation was made according to two conditions: share of areas with a potential higher than 40 hl/hectare, out of which areas that produce more than 70 hl/hectare. The Region West stands out from the productive potential point of view: 79.6% of plantations can produce more

than 40 hl /hectare, and in this category, 53.6% of plantations have a potential higher than 70 hl/hectare.

Under the fourth evaluation criterion, the availability of data limited the analysis to only one indicator, namely the number of processors in 100 hectares noble vineyards. The obtained results by regions reveal a higher competition in the Region North – West. The Region Bucharest - Ilfov obtained the maximum score, a score distorted by the fact that the grapes from neighbouring regions are processed here, the plantations under noble vines totalling only 9 hectares in this region.

The competitive potential, measured by the Global Competitiveness Index, has a medium level at country level.



Graph1. Competitive potential of viticulture at national level and across regions

Source: own calculations

The hierarchy of regions according to this index reveals a medium level of competitiveness in South-East, mainly due to a better production organization. A very low competitiveness is present in four regions: South–West Oltenia, North – East, South Muntenia and North – West. This level results from the poor quality of the viticultural patrimony in the first place. The Region Bucharest – Ilfov has a low-to-medium potential, mainly due to the processing sector. Only two regions have a good competitive potential, which is given to a large extent by the production organization modality in the Region Center, while in the Region West, the competitive potential is given, on a balanced basis, by all the groups of indicators.

CONCLUSIONS

The data on the production capacities used by processors would have been useful in the evaluation process; in their absence, the available data made it possible only an estimation of competition on the processing segment.

The competitive potential of viticulture at country level is medium to low. The identification of the competitiveness level across regions reveals the regional competitive advantages, as well as the disparities, by each group of indicators. There is no region with a high competitive potential. The only regions with a good competitive potential are Center and West, regions with limited viticultural resources, which are appropriately managed. A greater attention should be paid to the region South – East, whose viticultural area under noble varieties account for 56% of Romania's vineyards: more than half of plantations (53%) reached the final stage of the productive period, and the replacement rate is low. The regions less important as viticultural area, yet with a well-defined role in supply diversification (South - West Oltenia, North - East, South Muntenia) are also facing more critical problems.

The competitive potential evaluation methodology can be improved, if other data are also available.

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