Аграрен университет – Пловдив, Научни трудове, т. LVII, 2013 г.
Втора българо-полска научнопрактическа конференция
София–Крапец–Добруджа, 9-14 септември, 2013
Agricultural University – Plovdiv, Scientific Works, vol. LVII, 2013
Second Bulgarian-Polish Scientific and Practical Conference
Sofia–Krapets–Dobrudzha, 9-14 September, 2013

АНАЛИЗ НА ИЗТОЧНИЦИТЕ НА КОНКУРЕНТНИ ПРЕДИМСТВА НА ЛОЗАРО-ВИНАРСКИЯ КЛЪСТЕР
EVALUATION OF COPMETITIVE ADVANTAGES OF WINE CLUSTER

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Abstract

In an environment of heightened competition between national economies in production and marketing of wine, a leading approach to achieve sustainable competitive advantage is the cluster approach. Within this approach, the production and marketing of wine is seen as a cluster in which the participants form a better economic result, unlike others who are not part of the cluster. The aim of this study is to determine spatial location and sources of competitive advantage in the wine cluster in the country. To determine the location of the wine cluster indicators are used size and structure of areas under vines, volume production of grapes and wine. Territorial location of the cluster is defined at the planning regions of Bulgaria (NUT2). To identify the sources of competitive advantage we use the concept of "diamond determinants of national advantage." Within this concept, we provide expert evaluation of the determinants and factors determining the competitive advantage of the cluster. Analysis of expert opinion suggests that the determinants that most strongly determine the competitive advantages of the wine cluster are demand conditions, competition and management strategies of the participants in the cluster.

Key words: wine cluster, competitive advantages, expertise, determinants

INTRODUCTION

Availability of suitable natural and climatic conditions of the potential of local and introduced varieties and distinct wine regions were real prerequisite for the competitiveness of Bulgarian wine in the international market (Vachevska, 2010). In recent years there is a trend of intensification of competition in this type of market. The reason for this is the proliferation of so-called "new countries" in the production of wines that have large vineyards and large-scale processing facilities, enabling them to realize economies of scale (Radev, 2008). This defines the integration processes of viticulture and wine industries in the EU Member States that want to maintain their market position through effective chain value control. This sectoral integration imposes the necessity of applying a cluster approach to the management of the sector's competitiveness. Within this approach the wine sector is seen as a cluster of interrelated industries, whose links define the competitive advantages of the cluster as a whole. Location of a competitive cluster of latitudes and a factor of economic development of the regional economy. The aim of this study is to be identified the territorial location and the sources of competitive advantage in the wine cluster in marketing of wine in the domestic and international market. Clear identification of the sources of competitive advantage in the wine cluster, will help to effectively manage it in the future in terms of the keen competition in the market.

MATERIALS AND METHODS

To establish the location of the wine cluster we use the indicator called production of wine. To identify the sources of competitive advantage in the wine cluster we use approach developed by Michael Porter. This approach is based on the concept of "the diamond of the determinants of national advantage" (Porter, 1990). Lack of statistics at regional level as well as a system monitor and generating statistical information on the formation and development of clusters within the country justifies the use of the method of expert evaluation. According to several authors as (Velev, 2007), (Atanasov, 2009) using this method is suitable for the analysis of clusters composed of a minimum number of industries, one of which is the wine cluster. Expert evaluation is conducted by the following approach: advantages of the wine cluster is defined by five key determinants which are: *factor conditions, demand conditions associated with the presence of related and supporting industries, implemented business strategies and competition, and government intervention.* Each determinant is seen as a combination of a few factors that determine the path of expertise. Each factor was assessed by N number of indicators which are also defined through expert. Expert assessment is realized through the following stages:

1) Establishment of expert board. This board consists of representatives of all participants /stakeholders/ in the wine cluster;

2) The Expert Board based on their knowledge and experience developed a preliminary list of factors and indicators that determine the competitive advantages of the cluster;

3) Mapping of expert opinion. It reflects the expert assessment of the importance of each indicator within a factor of competitive advantage in the model of Porter;

4) Determination of the scoreboard indicators in the map of expertise. For each indicator is defined a grade used 4-point rating scale. The scale is as follows: 0 - no difference, 1 - slightly important, 2 – important and 3 - highly important.

5) Perform own research. Specially designed map of expertise is completed by focus group comprised of stakeholders involved in the wine cluster. The aim is to cover more representatives of the stakeholders involved in the cluster;

6) Aggregation of expertise of each expert (respondent) in a general map of expertise. It reflects the general expert opinion on the sources of competitive advantage of the cluster;

7) Analysis of the expertise and formulating conclusions. In the aggregate map with expertise determine the mean value of each indicator. Much higher value of the indicator, the greater the importance of the factor in the determinant forming competitive advantages of the cluster. By thus setting the weight of each indicator, and a determinant factor in the model of Porter.

Under the expert assessment of the sources of competitive advantages we involved 32 participants representing the interests of all stakeholders in the wine cluster.

RESULTS AND DISCUSSION

Analysis of the spatial location of industries

Table 1 shows the territorial location of winemaking in areas of planning. The majority of wine production is within the South East region respectively - 35% and Saouth Western Region respectively - 28.4%. The main factors determining these areas as leaders in the wine industry have their proximity to the largest market (the capital), landlocked, which allows to export products to other major markets - Russia. Specializing in the production of red wines are the South East region by 35% and South Western Region with 28.4%. These two regions have established themselves as leaders in the production of white wines, respectively Southeast region produces 40.4% of this type of fault and the South-west Region 16.2%. Combining sectors viticulture and winemaking is carried out within the Southeastern Region. It can be concluded that the spatial arrangement of the wine cluster comprises mainly South-east, South Central and South-west region, which determines the importance of cluster development of the regional economy.

Table 1

Territorial localization of the wine production

Regions of planning	**Total**		**Red wines**		**White wines**	
	thousands hl	%	thousands hl	%	thousands hl	%
North-west	169,9	20,3	110,9	15,1	59	9,2
North-central	107,4	12,9	94,5	12,9	85,3	13,2
North-east	29,4	3,5	25,9	3,5	100,8	15,7
South-east	**292,2**	**35**	**257,2**	**35**	**260,15**	**40,4**
South-central	42,4	5,1	37,3	5,1	34,6	5,4
South-west	**237,4**	**28,4**	**209**	**28,4**	**104,19**	**16,2**
total	834,9	100	734,9	100	644,07	100

Source: Ministry of food and agriculture, Department "Agricultural Statistics", 2010.

Analysis of the structure of the cluster

The core of the cluster is the wine companies and the vinegrowing holdings. These are the main players in the wine cluster, and all other auxiliary backing the production of raw material and finished product. There is a variety of vineyards with different size and management strategy, which proves that there are no significant barriers to entry in the cluster through viticulture industry. Viticulture is defined as a highly competitive industry due to the large number of participants who are highly individual in developing and pursuing its development strategy. The sector si dominated by small -sized farms. The main reasons for this is the fragmentation of agricultural land in the country and the scarcity of funds available to harvesters. It should be noted that the majority of the risk of the activity of the wine cluster is assumed by the vinegrowing holdings. This defines the lower innovation and investment activity compared to the other participants in the cluster. Commercial intermediaries for distribution of the raw material - a product of the viticulture industry determine the relationship of this sector with wine. At this point in the chain of values not exist a clear competition - there are few players who have a significant impact on the market price. This is one reason for the low level of market orientation of viticulture. In the wine sector also experienced a large number of private companies (enterprises registered in the Commercial Register, which is engaged in production and marketing of wine is 165). Mostly these are small and medium enterprises.

One of them (30%), according to the report of Executive Agency on Vine and Wine, have created their own vineyards, which defines them as a major factor in the integration of viticulture and winemaking industries in the cluster. Distributors of wine are one of the important factors in the chain of values. There is no reliable source of information with which to determine the number and size of these participants in the cluster. Direct government intervention in the wine cluster is done by the Executive Agency on Vine and Wine (EAVW) and the Ministry of Agriculture and Food. EAVW and MAF exercise control over the observance of the legal framework in which it operates wine cluster. National Vine and Wine Chamber (NVWC) is a nonprofit organization that deals with the protection of the interests of participants in the wine cluster to government authorities, competitors and other related clusters in the national economy. It should be noted that in practice NVWC is a structure whose members mostly wine, so that the interests of harvesters is not a priority of protection by that organization.

Other participants in the cluster are suppliers of machinery, equipment, technology, raw materials and services for the viticulture and winemaking. Overall development of the cluster is realized by means of logistics, which has links to all the participants. R & D is carried out mainly by universities, research institutes and consulting firms.

Analysis of the determinants of competitive advantage of the cluster

Expert evaluation shows that within the model of Porter M. determinants most strongly determine the competitive advantages of the wine cluster are *demand conditions, competition and the strategies of the participants in the cluster* (see Figure 1). To the above mentioned determinants should be noted that the related and supporting industries are also important for the competitive advantage of the cluster. Government intervention is the least important of the studied determinants. This proves that the wine cluster evolve through entrepreneurial factor in developing its business model through a strategy in line with market requirements.

Factor conditions

The importance of various factors such as conditions of the source competitive advantages for the cluster shown in Figure 2. Preserved the diversity of natural resources is a major determinant of the competitive advantages of the wine cluster (respectively, the average value of the indicator used for this factor is 6.0) . Easy access for participants to natural resources in the cluster, determined leadership of this source of competitive advantage. Availability of skilled labor is another important source of competitive advantage of the cluster (the value of this indicator is 5.4).

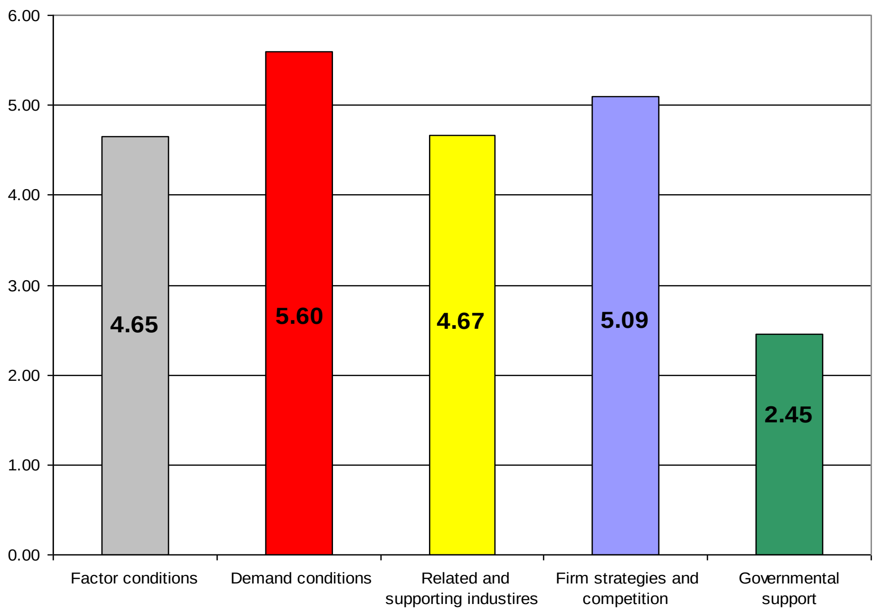

Figure 1. Importance of individual determinants on the competitive advantages of the wine cluster

Source: Expert evaluation, own survey, 2013.

On the other hand respondents consider that skilled labor is less mobile and this determines the difficult process of selection and retention of staff holding and wine companies. Thanks to its established tradition of winemaking, members of the cluster have gained experience and knowledge base. This is a prerequisite for the existence of organizations engaged in research and development, which is another major source of competitive advantage in the cluster. R & D is carried out mainly by organizations that are subsidized by the state - these are universities and research institutes.

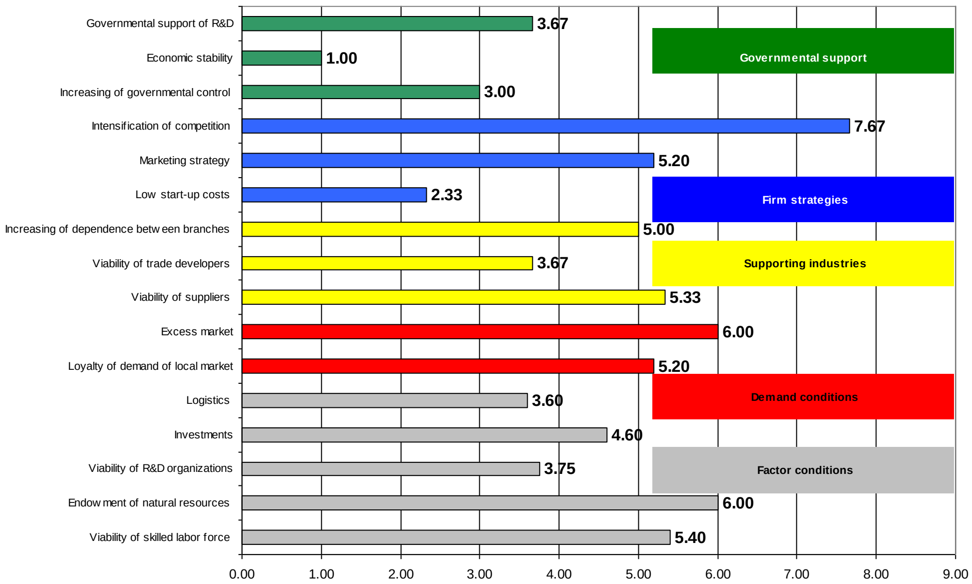

Figure 2. Importance of factors determining the competitive advantage of the wine cluster

Source: Expert evaluation, own survey, 2013.

Private sector has little interest in this kind of activity. Main reasons for this are the slow recovery of the costs of R & D and weak intellectual property protection in the country. Another important element of factor conditions is the investment activity of the participants in the cluster. This factor is the third highest level of influence (the average value of the indicator is 4.6). According to experts interviewed major part of the investments in the cluster are made by wine companies to create vineyards and purchase of buildings, equipment and machinery.

They absorb the bulk of the funds allocated by national and EU financial funds. The main factors limiting investment in the cluster is the slow return on investment because of poor financial performance of the participants in the cluster, and aspired to the banking sector lending to wine industry. Expert evaluation indicates established logistical base as another significant source of competitive advantage in the wine cluster. It is defined as a leading factor in facilitating the work of the participants in the chain of value. The main problems to strengthen the competitive advantages of clusters are weak technology transfer between R & D organizations and industry - growers and winemakers. Missing and strategic alliances between science and practice in the process of creating innovation. These are some of the most important sources for sustainable competitive advantages.

Demand conditions

Studied the conditions of demand both in domestic and foreign markets for wine. Key factors determining the competitive advantage of the cluster in these markets are loyalty of demand (indicator has a value of 5.2) and the presence of excess. Achieving genuine demand for the cluster is through the established brand that is the result of traditions preserved in production. The presence of excess of supply over demand in the international wine market, determined increased competition. Members of the cluster determined that the existence of such competition causes a disciplining effect in pursuing a marketing strategy. According to them, this is a major source of competitive advantage in the marketing of wine.

Supporting industries

The main sources of competitive advantage in this group of factors in the research model are suppliers of raw materials and know-how (an average of 5.33 meter) strengthening inter-branches links (indicator value 5.00) and commercial firms in the distribution of wine (indicator value 3.67). It should be noted that the integration of the branches is achieved with more investment from the wine producing enterprises. According to expert estimates major problem hampering the growing influence of this determinant in the model of the competitive advantages of the cluster is the low resistance connections grape growers and wine salesmen.

Firm strategies and competition

The presence of the keen competition in the wine market determines the competitive advantages of the cluster (the average is 7.67 meter). Achieving competitive advantage in the market place with the development and pursuit of adequate marketing strategy (the average of the indicator is 5.2). According to the respondents involved in this cluster are the two most important factors for success in the production and marketing of wine. Another important factor is the relatively low initial costs of starting a business. Major problems, according to the owners of the vineyard holdings existence of secret cartels for buying grapes and according to wine companies of considerable administrative barriers in the industry. The poll revealed that producers and wine merchants do not require a strategy for human resources management. Invest more money in the purchase of machinery and equipment and reduce costs in times of crisis, under " Personnel expenses " . Thus the contribution of the cluster to the economic and social development of the region is relatively low.

Government support

The analysis of this determinant of competitive advantage of the cluster stand following significant factors - government support in research and development (average indicator value is 3.67), and increased supervision of institutions (3.00) governing the sectors. Experts have given a very low score of macroeconomic stability as a factor determining the competitive advantage of the wine cluster.

CONCLUSIONS

Wine cluster is still in the initial phase of its development. In this phase there is a combination of factors of production in different sectors that form the cluster. This process is carried out using a variety of sources to form a competitive advantage. Creating links between the building blocks of clusters are formed institutions managing its development. The cluster is not sustainable and highly dependent on the relationship of participants. To strengthen the competitive advantages of the cluster in the future is necessary to be done the following steps:

- The governemt should encourage technology transfer from R & D organizations to the other participants in the cluster. As a result, it will increase its innovativeness. Innovation is one of the main competitive advantages of clusters operating in the market with strong competition;

- The establishment of strategic alliances between research and development organizations and other stakeholders in the cluster. This will increase the effectiveness of the application of innovation in the cluster;

- Vinegrowing holdings to cooperate or to draw its cluster organization protecting their interests in the development of the cluster. They take the majority of the risk of natural and climatic conditions under which the function cluster;

- Construction of a short chain of values in winemaking. Due to the strong influence of monopolistic middlemen between holding and wine companies both units in the chain of value have adequate specialization in line with market requirements;

- Strengthening of inter-branch relations. This will be achieved by increasing the members of the cluster that integrate viticulture with winemaking. They will be the core of the cluster in the future.

- Establishment of a special fund by all stakeholders in cluster branding wines. It will be used to fund an adequate marketing strategy to strengthen the competitive position of the cluster in the international wine market.

In conclusion, it should be noted that in order to achieve the above features, government would have a major role in the cluster developers. This requires the government to conduct an adequate policy on entrepreneurial factor for the development of the wine cluster. In this way, the cluster will be recognized as a major factor contributing to the development of the regions in which it is located.

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