Impediments in cluster development: the case of Târnave valley

Liane TANCELOV

*Bucharest University of Economic Studies, Bucharest/Romania
liane.tancelov@gmail.com*

Valentin COJANU

*Bucharest University of Economic Studies, Bucharest/Romania
sw.economics@yahoo.com*

Abstract. *Many years after the fall of communism, the Romanian wine industry has been still struggling to overcome lot of challenges such as erratic weather, unfair competition, lack of investments or the need for a clear vision of the future path of growth. The industry has reached eventually a level of maturity although there is still much to be done in terms of, among others, network-oriented management skills and the acknowledgement of the importance of the role of location for upgrading competitive advantages. Cluster development initiatives have become lately an important direction of economic policy, building on earlier macroeconomic stabilization efforts, opening up markets and reducing business costs. Companies that operate within a cluster, as opposed to those that are not integrated in such agglomerations, benefit from externalities thanks to their location, have better access to specialized suppliers, technological improvements and skilled labor, as well as direct connections to specialized knowledge flows. Is cluster formation and development a driver for the revival of the Romanian wine industry? What are the impediments that delay further progress? To answer these questions, a qualitative research was conducted with support of statistical data collected mainly from the Global Competitiveness Report, the Romanian Ministry of Agriculture and Rural Development, the National Institute of Statistics, and the International Organization of Vine and Wine. The paper focuses on the case of the vine and wine region of the Târnave Valley to understand the impediments for cluster development.*

Keywords: cluster, wine industry, development, challenges, competitive advantage.

Introduction

The global wine industry has become very dynamic. To keep up with the constant pressure companies within the industry must face new challenges in order to remain competitive.

Since the EU accession in 2007, the Romanian wine industry experienced consistent growth. Investments in technology, replanting of vineyards with better genetic material and the constant emergence of small-medium size wine producers, focused on quality rather than quantity, brought Romanian wines on the world map again. The face of the Romanian wine industry changed, making way to profitable and honourable businesses. The article aims to analyse the nature and the impediments of the Romanian wine industry in terms of cluster development and economic agglomerations. According to Michael E. Porter, considered to be the father of modern management theory, „competition is one of society's most powerful forces for making things better in many fields of human endeavour.” „Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region. Clusters arise because they increase the productivity with which companies can compete. The development and upgrading of clusters is an important agenda for governments, companies, and other institutions.” (Ketels, C., 2003) Cluster development initiatives are an important direction in economic policy, building on earlier macroeconomic stabilization efforts, opening up markets and reducing business costs.

Companies that operate within a cluster, as opposed to those that are isolated, benefit from externalities due to their location; they have better access to specialized suppliers, technological improvements and skilled labour, not to mention the possibility of having better knowledge flows as an effect of industrial concentration. To have better access to these externalities increase the sustainable competitive advantage of companies over time. The article also makes an analysis of the overall situation of the Romanian wine industry, and points out the fact that important improvements have been made throughout recent years, that can be observed in terms of production, area under vine and technology. Romania has secured a good position in 2018 in terms of production, the 12th place world-wide and the 5th in Europe, also it has expanded its area under vine, and it occupies the 10th position world-wide, but in terms of exports still cannot find its place on the world market.

For the case study research the example of the Târnave valley wine cluster was used, which is one of the most competitive wine regions in the country, to enhance the importance of cluster initiatives, a process that builds on macroeconomic stabilization, market opening and innovation. The competition in the Târnave valley wine cluster, which is one of the most appreciated vine growing areas in the country, especially recognised for the production of quality white wines, brought technological improvements which eventually led to qualitative results and innovation to cluster companies.

The article brings together an analysis of the cluster's attributes with the help of statistical data collected from the Ministry of Agriculture and Rural Development, The Romanian Funding Agency for Investments in Agriculture, National Institute of Statistics, International Organization of Vine and Wine and also interviews conducted with important representatives of the industry in order to enhance the importance of collaboration and development within the concentration and also to highlight the impediments that delay further progress. Although the Romanian wine industry transformed its image and substance and wine producers learned from past mistakes and seems to understand the importance of collaboration in their particular industry it seems that obstacles remain in the path of sustainable development.

Literature review

Porter (1998) provides one of the most cited definitions of clusters: „Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Clusters often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs. Finally, many clusters include governmental and other institutions – such as universities, standard-setting agencies, think tanks, vocational training providers, and trade associations – that provide specialized training, education, information, research, and technical support” (Porter 1998). The first paragraph starts exactly at the left margin – indentation none.

Wolman, Hincapie (2010), Garcia-Lillo, Claver-Cortes, Marco-Lajara (2017) Porter (2000), support the idea that a lot of research and initiatives regarding cluster development is available nowadays. Enright (2001) explains the increased interest in regional clusters and their role in economic development and the main reason for it being the intensity of interregional and international competition in the world economy. Studies such Petersen (2010) or Konstantynova

and Lehmann, (2017) show the types of activities and services that cluster associations may launch in order to increase competitiveness, innovation and productivity of their members and beyond. Cojanu, Pîslaru(2011) made an analysis of the importance of economic agglomerations by conducting a case study of the Romanian industrial clusters. The analysis led to a mapping of economic agglomerations in accordance with their geographical position, and also to a cluster evaluation, based on different indicators, such as: size, specialization and concentration. The authors state the importance of geographical localization suggests that competitive advantage is not exclusively created within the company or even within the industry, but it is a consequence of the fact that the industry is located in a favourable region for its development, a self-sustaining process.

In spite of the rich scholarship, not so much attention has been paid to clusters in the agricultural sector.

Agriculture has to deal with market pressure over constant productivity and is always in search for new tools to boost its competitiveness and innovation capacity. Gálvez-Nogales (2010), Sharma & Anupam (2014) consider that one of these tools is the promotion of cluster development. The existing literature shows that challenges still exist in the formation of clusters, especially in the agricultural sector in developing countries. They all tend to have common features like small-scale firms, weak linkages among actors, a lack of a strong educational system, informal organisation (Gálvez-Nogales, 2010). In order to better understand the process of formation of an agricultural cluster in a developing country, the research will focus on the study of the emergence and impact on local development of the wine clusters in Romania.

Several works point (e.g. Porter and Bond 1999, Gilby 2018) to the important role the wine clusters may play in the local economy and in the industry competitiveness in general. A FAO study, which analysed clusters of Latin America, in particular wine clusters, concluded: „The Latin American wine clusters have been extensively studied in the past years, coinciding with the “wine revolution” of the 1990s. Such a revolution has been led mainly by southern hemisphere countries, such as Chile, Argentina, Australia and South Africa.”(Gálvez-Nogales, 2010). This research shows that the wine clusters of Latin America, by tradition were formed of small vine growers and family run wineries. Their production was extensively that of bulk wine and was sold mainly on their domestic market. In the 1990s there was a major change in the wine industry, and a switch from quantity to quality took place, which also meant a switch from bulk to quality bottled wine, probably because of the increasing foreign demand. The wine clusters also saw a change in management and marketing styles, which led to the development of state-of-the-art products; an improved quality control; they developed new systems of keeping practices and products documented, after which they shared information and evaluate all results. They also put an emphasis on regional and national branding and identity, they even set up joint marketing campaigns. (MacDermott, 2005).

One key motivation for writing this article is that it may help Romanian policy makers in understanding and applying policies in support of clusters, especially by providing evidence on how Romanian wine clusters bring innovation to the sector and contribute to higher productivity, better products and overall regional and national economic development.

Cojanu (2000) provides an overview of the Romanian wine sector, making a passage from its historic beginnings to recent times. The sector benefits of favourable conditions, like excellent natural endowments: climate, weather, soil; which help Romanian wine producers to make a diversified range of wines. According to the author, the factor that truly sets the Romanian wines

apart is the long lasting tradition and practices of Romanian wine producers. Cojanu, also provides a map of the Romanian wine growing regions, taking into account the specificity and particularities of each of them. This helps to the geographic delimitation of the Romanian wine clusters.

The wine sector has an enormous growing potential, and this potential can be fully achieved through cluster development. Different actors from the industry should be able to better understand the principles of economic agglomeration and its advantages in order to take the necessary steps to create inter-firm cooperation, synergies between public and private institutions, which will eventually bring innovation to the sector and economic development.

Methodology

The questions the article is trying to answer, are the following: Is cluster formation and development the engine of the revival of the Romanian wine industry? What are the impediments in cluster development that delay further progress of the Romanian wine industry? To answer these questions and develop this article a quantitative research was conducted, with support of statistical data.

An analysis of the current situation of the Romanian wine sector was conducted. As a matter of fact, Romania is by tradition a grape growing country and is widely recognised for its potential in producing wine. A result of the constant investments in vine-growing areas led to high productivity, according to the International Organisation of Vine and Wine, in 2018 we have the following data: Romania is the 5th country in Europe in terms of hectares of vineyard planted, and the 13th in the world, in that respect. As for wine production, in 2018, Romania is the 6th country in Europe and the 13th in the world.

Although there is an ascending trend regarding Romanian wine exports, and also an increase of added value, the industry clearly needs a united strategy to develop a brand name for Romanian wines in order to conquer new markets.

An analysis of the Romanian wine sector, based on data collected from the Romanian Ministry of Agriculture and Rural Development, will show that from the total production of wine in 2017, which was, 4264.1 thousands hl, only 2798.6 thousands hl was noble wine, the rest of the production was made from hybrids interspecies. According to the Romanian National Institute of Statistics, only 14,7 thousands hl went to exports. There is a potential to increase exports both on short and medium term. On short term we could talk about a better marketing strategy and the enhancement of future contracts, but there has to be willingness from the producers to invest in modern technologies that will help to improve their product. On medium long term, a strategy would be to reduce the hybrid grapevine area and to replace them with noble variety, in order to introduce them in the commercial tour. "Evaluation of the CAP measures applicable to the wine sector, Case Study: Romania" (Agrosynergie, 2018) was consulted in order to conclude a proper description of the wine sector in Romania. In order to gain insights about the competitiveness of the Târnave valley wine cluster a questionnaire was sent to important local producers, representatives of the public sector, associations of producers, standard certification authorities. The results of the questionnaire show that they all agree that Târnave valley wine region has known constant growth since the foundation of SME's in the region. Foreign investments, European funds and the dedication to produce quality driven wines are the most important ingredients in the development of the wine region. However there are still some challenges that SME's face at regional level, and these challenges come from both sides of the sector, public and private. The private sector has to overcome the reluctance of forming regional wine associations, giving the fact

that they could find more easily solutions to common challenges and could set the path for a common strategy that could include an integrated promotion of their products, knowledge spill-overs and technological expertise. A management strategy oriented towards a supportive business environment in the region could improve SME's performances. On the other hand, the public sector does not simplify its procedures, producers still find it a lengthy process to access European funds, and the national legislation is not considered to be supportive and fully transparent, by some producers. There is still a major challenge regarding the qualified workforce in the Târnave region, and the Universities that do cover this area are considered to be too theoretical and less practical in the process of forming specialists for the wine industry. Also a qualitative research was conducted in the form of interviews with the same representatives that completed the questionnaires. The purpose of the interviews was to gain further insights of the impediments that target cluster development in the Târnave valley wine region. Discussions with local producers and representatives of the public sector highlighted the fact that the growing number of SME's in the region brought competition in the local wine industry which led to the production of quality wines. Small and medium sized wineries like La Salina Winery, Liliac Winery or Villa Vinea Winery are a combination of foreign investments, European funds and a desire to make quality wines. Some of the producers talked about the challenges that SME's are confronted with in the Târnave region. One would be the lack of qualified work force, the lack of local suppliers, and an urgent need for a common strategy for all the SME's that shall include further development directives for the sector and a common promotion strategy of their products.

Results and discussions

According to the data collected, Târnave wine region lies in EU growing zone B, it is the only wine region in Romania with this classification. Due to its relatively cool temperatures and famous terroir the area is mostly known for the production of quality white wines. In recent years many investors saw the potential of this area and decided to invest in the wine business but for a long period of time, during the communist era and shortly after the revolution, the only important producer in the area was Jidvei. Jidvei is a former IAS (state owned enterprise), which was privatised in 1999, at that time it owned 700 hectares, since then it reached 2,400 hectares of vineyard in one location, becoming the biggest winery in Romania and maybe one of the largest single vineyards in Europe. For many years, the company concentrated its resources on acquiring land and focused less on the quality of its wines. The growing number of SME's in the region brought competition in the local wine industry which led to the production of quality wines. Small and medium sized wineries like La Salina Winery, Liliac Winery or Villa Vinea Winery are a combination of foreign investments, European funds and a desire to make quality wines. Mister Licurici Cornel, representative of Villa Vinea Winery, highlights the fact that the natural resources of the area and the particular brown alluvial soil, rich in calcium and iron convinced the Italian Heiner Oberrauch, to invest in the winery. To target a high end market they focused on the quality of their wines and invested in the latest technologies. Mister Licurici remembers the difficult beginning of the business, and besides the private initial investment a lot more resources were needed to make quality products. European funds were part of the process. Although the wine business takes time to develop, they are confident of the future of the wine sector in Romania, taking into consideration the strong domestic market and the fact that the consumer is becoming more and more quality oriented. Still, mister Licurici talked about the challenges that SME's are confronted with in the Târnave region. One would be the lack of qualified work force, the lack of

local suppliers, and an urgent need for a common strategy for all the SME's that shall include further development directives for the sector and a common promotion strategy of their products. Villa Vinea winery is not part of a regional wine association, is part of an association formed by producers from all over the country. Although they see the benefits of belonging to a regional wine association they confessed that they tried this option but did not come on common grounds with the rest of the local producers. Mister Miron Radic, CEO Liliac winery, shares the opinion of Villa Vinea representative, about the difficulty of forming an association with the rest of the local producers. He confirms that there is a knowledge spill over and collaboration in terms of finding common solutions to different challenges but with other producers at national level. Mister Radic sees the benefits of a common strategy with local producers, especially in the idea of forming a regional wine tourism strategy that involves visits to some of the most important wineries in the region. Liliac Winery, owned by Austrian Alfred Beck, has an innovative approach to winemaking, besides the good quality of its white wines it also produces the country's first orange wine and the first ice wine too. The company values the quality of all its products, from wine to bottles, corks and packaging. Most of the suppliers are of foreign origin, mainly because they do not exist locally. Liliac winery CEO believes that there is a major need of specialised work force in the sector. Another challenge that Liliac Winery faces at the moment is the complicated bureaucratic burden of obtaining European funds. Another challenge that the small and medium size producers encounter is ambiguous legislation.

For a better explanation of the research results, a table is presented below taking into consideration the perspectives on impediments to progress in the Romanian wine sector by the national authorities, national inter-branch organization and industry union, producers.

Figures and tables

Table 1. Perspectives on impediments to progress in the wine sector

Perspectives of	<i>Industry environment</i>	<i>Authorities level</i>	<i>Demand</i>
National authorities	Poor absorption rate of the EU funds Vineyards' fragmentation Dysfunctional trade associations Lack of capability on behalf of wine producers to penetrate foreign markets	Delay of legal harmonization in accordance to the EU legislation	Lack of consumers' education for consumption of quality wine
National inter-branch organization and industry union	Lack of managerial and negotiating skills of producers for negotiations with distribution chains (supermarkets)	Excessive bureaucracy Lack of timely information on European funds and fiscal modifications	Unfair commercial practices of retailers

	Dysfunctional trade associations most visible in matters of promotion, marketing, selling, distribution, sharing resources and know-how	Incapacity of authorities to understand the real problems of the wine sector and discuss them with the European authorities Distribution of low-quality wines from third countries through not-inspected distribution channels	Very high tax levels imposed by supermarkets Lack of consumers' education for consumption of quality wine
Producers	Lack of reputation in foreign markets, especially for premium wines Dysfunctional trade associations most visible in matters of accessing new foreign markets	Market presence of counterfeit wines of unknown origin Absence of statistics at national level regarding the wine sector evolution Lax attitude as regards respecting the standards for commercialization (including labeling)	Very high tax levels imposed by supermarkets Lack of consumers' education for consumption of quality wine

Source: Agrosynergie, 2018,p. 19-20.

Conclusion

The article is based on the fact that competitiveness plays a major role in creating prosperity and economic development at regional and national level. The level of competitiveness of a country, an industry or that of companies, brings not only wealth itself but also a system that constantly generates wealth and creates improvements to the lives of its citizens. It takes more than the natural resources of a country to create a competitive environment; competitiveness is mainly created by a thriving business environment, skilled labour force, the proper institutional support and constant attention given to innovation. The Romanian wine industry may benefit from a large number of advantages such as: land, soil, climate and a large number of grape varieties, but those are not the only ingredients needed to become truly competitive on a world market that is constantly upgrading in terms of productivity and quality.

Romanian wine clusters do not guarantee to deliver the factors that are necessary for sustainable economic development. Impediments in cluster development arise from the statistical data collected and also from interviews with representatives of the Romanian wine industry. A joint effort is needed, both from the public and private sector to overcome these obstacles and achieve proper development. The public sector can contribute to a better inter-firm collaboration by constantly organizing seminars and focus groups with representatives of the industry. Another example can be the creation of research laboratories than can be used both by universities and by

SME's which do not have the necessary resources to develop new products. Public authority can furthermore give assistance in marketing in the form of subsidizing the participation of SME's at international fairs, or could create the proper logistics for SME's to participate jointly and have a single stand otherwise individually overshadowed by the major companies. Taking into account the labour shortage, better labour market policies must be a priority for authorities, especially those that are designed to create an inclusive and competitive labour market. Another incentive that can help industries, especially the wine industry, is to create better educational programmes in accordance with market necessities. Research and development centres lag behind innovation in the industry. In order to be competitive in the modern era of wine making producers must keep up with the latest technologies. Clearly a weak innovation performance has a negative impact on growth prospects. As for the private sector, there are impediments in creating proper synergies among producers which can lead to un-functional trade associations especially visible in matters of accessing foreign markets or very high tax levels imposed by supermarkets. The lack of a common strategy to face challenges or to promote Romanian wine is visible in term of exports and also in advancing cluster development.

In regards to the limitations of this research, I could mention the absence of statistics and studies regarding the industries real evolution and needs. General statistics regarding area under vine or production in one year should be backed up by statistics and studies regarding the exact number of specialists needed in the industry or the number of producers that encounter difficulties and exactly what are those.

References

- Agrosynergie EEIG (2018). Evaluation of the CAP measures applicable to the wine sector. Case study report: *Romania*. European Commission, Directorate-General for Agriculture and Rural Development Directorate. *Luxembourg: Publications Office of the European Union*;
- Cojanu, V. (2000) *Le Paysage vinicole roumain*, Ambassade du Roumanie en Suisse, p. 1-4;
- Cojanu, V., Pîslaru, D. (2011), *How important is agglomeration economies: a case study of the Romanian industrial clusters*; Review of Economic & Business Studies, p.39
- Enright, M. 2001, Regional Clusters: What we know and what we should know, University of Hong Kong, p.2
- Gálvez-Nogales, E. et. al. (2010). Agro-based clusters in developing countries: staying competitive in a globalized economy; *Rome: FAO*, p.15;
- Gilby M.W. (2018). The wines of Bulgaria, Romania and Moldova, *Infinite Ideas Limited*, p.126-127, p.132, p.137;
- Ketels, C. (2003) Cluster-based Economic Development, Presentation at Economic Development Administration Annual Conference, Washington p.3-8;
- Konstantynova, A., et al., (2017) Cluster Activities in Different Institutional Environments. Case Studies of ICT-Clusters from Austria, Germany, Ukraine and Serbia,
- McDermott, G.A. (2005). The Politics of Institutional Renovation and Economic Upgrading: Lessons from the Argentine Wine Industry. The Wharton School, University of Pennsylvania, USA;
- Petersen, K. (2010), Clusters and Clustering Policy_A guide, E.U.;
- Porter, M. (1998), On competition, Harvard Business School Press; p.226;
- Porter, M. (2000), Location, Competition, and Economic Development: Local Cluster in a Global Economy, p. 2;

- Romanian Ministry of Agriculture and Rural Development. (2012). *Wine Regions of Romania*. Retrieved from: https://ec.europa.eu/agriculture/sites/agriculture/files/wine/high-level-group/docs/meeting-1/romania_en.pdf (11.12.2019)
- Romanian National Institute of Statistics. (2017). *Labour Force in Romania*. Retrieved from: http://www.insse.ro/old/sites/default/files/field/publicatii/labour_force_in_romania_2017.pdf (10.11.2019)
- The Romanian Wine Exporters and Producers Association. (2018). *The Romanian Wine Industry Outlook 2018*. Retrieved from: https://drive.google.com/file/d/1KsEvjASTV8vOL84CJXZ2Xo-eZ618iAb_/view (10.12.2019)
- International Organisation of Vine and Wine. (2018). *Statistical Report on World Viticulture*. Retrieved from: <http://www.oiv.int/public/medias/6782/oiv-2019-statistical-report-on-world-vitiviniculture.pdf> (09.12.2019)