New strategic alliances of wine producers in the Czech Republic

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Abstract: The paper describes the main reasons for the formation of new regional association of wineries, based on a different origin of wines in the wine region of Moravia in the southeast part of the Czech Republic. This research aim is to create a plan for a new development of such strategic alliances on the basis of results of the localization factors. The coefficient of localization is used for the identification of the cluster. The results are compared with the already operating associations for the appellation in Austria (DAC). There were traced changes in the consumer preferences in the Czech wine market. Consumers are placing more emphasis on the selection of wine on its descent from a particular area, the growing community and the individual grower. The dynamic development of the wine category, major changes in the market and the consumer demand are the main causes for the formation of associations of small and medium-sized wineries. This paper specifically introduces new associations for the appellation system VOC. This alliance is described in the context of the establishment, operation, development and expansion, respectively the possibility of the involvement of additional organizations suppliers and research institutions. The application of the results of research was a plan for the establishment of a new alliance VOC Modré Hory, where there are associated 30 wine producers of wine in 5 villages around the centre Velké Pavlovice. Based on the experience of the newly emerging VOC system of appellations, there was set up a plan of formation of the association with the proposed methodological approach. Open cooperation between the associations VOC appellation and other entities involving suppliers, customers, research institutions and universities has the possibility of creating an institutionalized wine cluster. The plan to create a wine cluster was proposed to establish the cooperation between the newly emerging associations of the VOC at three sub-regions of South Moravia, in order to achieve a competitive advantage.

Key words: appellation, association, cluster, DAC, strategic alliances, VOC, wine origin

Viticulture and wine industry in the Czech Republic has undergone an extensive reform over the last twenty years and it has experienced a significant shift from the quantitative orientation of production towards a high quality. The cooperation of winemakers and wineries has significantly contributed to over the last twenty years positive changes and the overall transformation. In over the last twenty years recent years, there is a whole new kind of regional associations, based on the guarantee of origin of a particular wine in a region.

The research project is to propose a plan for the formation of regional strategic alliances of over the last twenty years system for appellations *Vína Originální Certifikace* (VOC) with the methodological process of formation. Research work was also conducted to determine whether the newly founded alliances and cooperating associated companies may create a potential for the establishment of the cluster. There are

successful forms of cooperation among wine-growers and winemakers in the world, which can serve as a source of inspiration for the growing cluster initiatives in the Czech Republic. The operation of regional strategic alliances, which are based on the certification and appellation system, will be described in more detail based on a research in the appellation alliance *Districtus Austriae Controlatus* (DAC) Weinviertel in Austria.

The formation of a regional association of wine producers is a strategic business decisions, leading to a strengthening effect on the negotiating dynamics in the industry. The value and the theory of planning for strategic decision was researched by Armstrong (1982). Strategic decisions in teamwork are described by Korsgaard et al (1995).

The analysis of the wine industry is made according to the structure of vineyards, grape production, wine production and consumption. The tool to achieve the

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goals of this work lays in the research on the causes of the new regional alliances of wine producers in the Czech Republic and the cooperation processes.

The aim for the conclusions of this research project is the expression of specific practical recommendations that are useful for wine producers and a proposal for a methodological procedure for the formation of new regional strategic alliances of wine producers.

Research studies dealing with the theory of agglomeration of economic activity appear as early as in the works of the authors from Marshall (1890) to Porter (1990, 1998) and subsequently by others. The institutional theory and the resource based-theory of clusters in wine-tourism industry researched Grimstad (2011).

To understand the concept of cluster, it is necessary to clarify the theory of agglomeration of economic activity, which was gradually shaped by the findings that the overall global economic performance, involving a limited number of highly concentrated industrial regions. Another empirical finding is that the firms in related industries will also be placed in these regions, creating natural clusters. Both are permanent if it is followed by the institutionalization of the agglomerations (Malmberg et al. 1996). Porter (1998) defines a cluster as a regional group of interconnected companies and associated institutions and organizations in a particular sector. Links between businesses and other organizations have the potential to consolidate and increase their competitiveness. It depends on the possible resolution of clusters based on the value chain and clusters based on competence. The first one is created based on the supplier links, built around the backbone of the value chain linking the manufacturer with its suppliers. Then the competency-built clusters focus on a specific area of technical expertise or competence in the region, such as research or teaching skills. That means the applications themselves as knowledge and expertise across diverse business activities.

The dynamic development of the wine industry in the so-called new wine world has brought many scientific studies on wine clusters. Porter (1990) was the first in the work using the concept of cluster in the context of wine production, namely on the basis of the research work related to wine producers in California, specifically in the Napa and Sonoma Valley. Until the sixties of the twentieth century, wine producers in California were focused on the production of brandy and dessert wines. Big changes were subsequently conducted with the transformation of the relationship between vine growers and wine producers, as well as the relations between the wine producers themselves in order to improve the production quality. There

were started regional research activities to study winemaking. Before the wine from California in the eighties of the last century broke into the export all over the world, the wine production has undergone a great development in quality and quantity. This development has attracted some new producers to enter this industry and it also caused the development of other related industries such as wine tourism. It is not only newcomers to follow the other producers in the production of relatively standardized and widely available wines for everyday drinking, but there also began the production of wines with a high added value which have to compete with the wines from the traditional wine countries. The California wine cluster was given by Porter (1998) as an excellent example to explain the notion of cluster. Two basic pillars of the cluster described here are 680 wineries and several thousand independent wine grape growers. The internal structure of the related industries, supplying and supporting both vine-growing and wine production, including growers and suppliers of grape seedlings, fertilizers and suppliers for plant protection equipment supplier for grape harvesting and irrigation technology. In part, directly linked to the producers involved, there are suppliers of technological products and manufacturing facilities, suppliers of drums and containers, suppliers of bottles, suppliers, caps, suppliers of labels, as well as the specialized company engaged in public relations and advertising, and many publishers of scientific publications (as examples, there are named the Wine Spectator and the Wine Trade Journal) who are directly addressing the customers and merchants.

A further research of clusters uniting producers of vine and wine was published by Müller and Summer (2005). The formation of wine cluster in New Zealand was researched by Dana and Winstone (2008), in the South Africa by Davidson (2009) and in Chile by Visser (2004).

Ditter (2005) indicates that the impact of globalization in the wine category in the nineties meant a major crisis for the traditional model of production and labelling wines based on the guarantee of origin (AOC). These wines have a high added value in a typical product in limited quantities through a combination of a defined area of origin, the so-called terroir and yield, which is due to restrictive requirements and regulations. On the other hand, French wine growers face competition from New World wine, whose model simply marks the most preferred varieties, and only the zone or country of origin. Their model of production and trade is based on a combination of industrialized mass production and intensive marketing of relatively standardized products that are very easily identifi-

able. Bélis-Bergouignan et al. (2010) indicates that wine cluster initiatives in France revived in 2009, but already the main focus of cooperation towards the cluster's potential research and development, based on the experience and inspiration taken from the countries of the new wine world.

In recent years, there have been many researchers who focused on wine production and wine consumption in the Czech Republic, e.g. Tomšík et al. (2006), Gurská and Chládková (2009), Janda et al. (2010). There are also publishing researchers, who engaged in the initiatives of local and regional farmers which joint together to market, e.g. Lošťák et al. (2006).

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MATERIAL AND METHODS

The paper is based on data on the cultivation of grapes and wine production together in the Czech Republic. In defining the categories of wine on the labour market comes from the fact that the group is composed of wines, both from domestic production, as well as wines imported from the European Union and third countries. There is needed as for its main objective to gather available information on the details of vine production and the wine market on this basis to analyze the sector. Analysis of the sources can be divided according to Porter (1994) into two types of data: published data and data gathered through interviews with operators and industry observers. The paper describes the basic indicators of the sector within Australian wine which is now at the forefront of the changing global wine market with the tradition dedicated to intensive research and innovation. The success of the organization and development of the Australian viticulture and winemaking, as the literary sources suggest, is currently associated with that cluster. The development of the Australian wine industry is described by Beeston (1994). Ditter (2005) even uses the entire overview of the rapid development of Australian winery concept of meta-cluster or supercluster. Australia is too large, so there can be not only one cluster of wine producers, but wine industry as a whole has successfully cooperated with a common strategy for the sole purpose of export-quality wines. Aylward and Glynn (2006) describe the differences in the two types of Australian wine cluster. The South Australian Cluster, which can be described as innovative, and organizational type cluster in Victoria and New South Wales.

The trend analysis is made by determining the function of time using the method of least squares. The researched time points are usually equidistant. Before collecting the data, there was compiled from the practice the schedule (based on the model by Porter, 1994) of the possible and available resources.

For the analysis of the newly established regional growers associations, there was used the structured interview, in which the required information is obtained in a direct interaction with the respondent. The interviews were done directly with the respondent. The selection of respondents was focused on the initiators and founding members of the regional association of wine producers in the Czech Republic, the association of wine with the original certification Znojmo (VOC Znojmo). In Austria, a survey was conducted using a structured interview with the founding members of the association of wine producers producing the brand Districtus Austriae Controllatus (DAC Weinviertel and DAC Burgenland). The research agenda was to find out what were the original motives for establishing the association, it was trying to describe the principles and management of cooperation in this association. The research results should provide conclusions on whether the association is open for further development. Directly there were calculated the concentration factors for the emergence of the cluster, which should answer the question whether there is a scope for a cluster or clusters.

Based on the calculation and comparison of the concentration coefficients of vineyards in the DAC associations in Austria and the VOC emissions in the Czech Republic, we can make possible recommendations for the selection of a region with a number of vineyards and producers to create a cluster.

In order to identify the cluster, we can use the following macro-analytical tool that is recommended by Porter (1998):

Localization quotient
$$(LQ) = \frac{x/X}{y/Y}$$

LQ = location quotient of employment in the region

x = number of employees working in the sector in the region

X =total number of employees in the region

y = number of employees working in the sector in the state

Y =total number of employees in the state

The potential for regional clusters is where there are groups of related industries with the LQ greater than 1.

Table 1. Vineyards in VOC potential

Wine region	Potential VOC (ha)	Vineyards in region (ha)	Share VOC potential (%)
VOC Znojmo	392	552	71
VOC Modré Hory	129	1 138	11
Southern Moravia (3 VOCs)	3 241	12 376	26

Source: Ministry of Agriculture Czech Republic (2010)

To achieve the goals of this research, there is designed the concentration quotient, which is indicating the proportion of vineyards in the region and the total area of vineyards. This concentration factor is calculated for the association of the VOCs in the Czech Republic and also for the DAC appellation system in Austria.

Concetration quotient
$$(LQ) = \frac{a/A}{b/B}$$

CQ = concentration factor area of vineyards in the region/ in a certain area for the establishment of an association of wine growers or cluster

 a = number of vineyards in the region certified by the association rules (ha)

A = total number of vineyards across the region (ha)

b = number of vineyards of the all associations (ha)

B = total area of vineyards in the country (ha)

RESULTS

The Wine Producers Association in the Znojmo wine region introduced the first appellation system, the VOC Znojmo wine original certification. The approval system for granting the VOC Znojmo has been completed and the certification of wines according to the specified conditions are possible since 2009. For this newly formed association of growers, there is a

competitive advantage that appeals to entering the first name. The appellation system applies only to the wines made of three of the most typical varieties: Sauvignon Blanc, Riesling and Grüner Veltliner, or cuvée, which show a typical uniform flavour profile of the region. The origin of grapes must be selected and they can come only from the certified vineyards. The area of the certified vineyards and the size of the proposed new association VOC are listed in Table 1.

The primary motive for establishing a new regional association was the effective cooperation in communication highlighting the uniqueness of the primary origin of wine. Specifically, it defines the originality of the founding members of the three selected varieties Grüner Veltliner, Riesling and Sauvignon Blanc. The main objective of the association is to create a system for maintaining the originality of their products is guaranteed by maintaining the quality standards according to the association and the certification of the origin of wine, which is the guaranteed quality from "Soil to the Glass". To determine the above-mentioned goals, the decisive drives were to grow and strengthen the competitiveness of the participating companies.

In each of the possible areas of cooperation, there is carried out most of the common forms of communication and the promotion of joint participation in trade fairs and organizing joint sales presentations. The association has a registered logo and it implemented

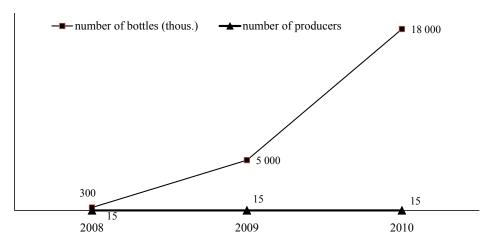


Figure 1. Number of bottles and number of producers VOC Znojmo

Source: VOC, Znojmo (2011)

Table 2. Vineyards DAC

Wine region	Potential DAC (ha)	Vineyards in region (ha)	Share DAC potential (%)
Weinviertel	7 377	13 389	55
Mittelburgenland	1 164	2 121	55
Südburgenland	177	499	35
Kremstal	1 502	2 246	66
Kamptal	2 301	3 803	60
Traisental	463	790	59
Neusiedlersee-Hügelland	2 575	3 756	69

Source: Ministry of Life Science Austria (2010)

joint purchasing of labels for the VOC. Each member of organization buys and pays for the number of labels according to the number of bottles of the certified wine, the price of one bottle is set at the amount of two Czech crowns. The selected resources that are the difference between the purchase and the price are used to further promote the common branding VOC Znojmo, such as the joint purchasing of printed promotional publications, joint operations online www.vocznojmo.cz presentation and publication of a common catalogue of wines and service members. In a further development of cooperation, there is the possibility of extending the joint purchase of materials for bottles, cork stoppers, caps, packaging material, technical preparation and possibly other production inputs. The participating businesses are also looking into the possibility of the joint logistics management, marketing research and an e-shop. In the research and development, the members have so far adopted specific targets. The first form of cooperation with educational institutions lies in the organization of presentations and sensory certification examinations, in which the partner of the Association is the Secondary School in Znojmo. In other areas of possible cooperation in research and development, there is the possibility to cooperate with partners like the universities or research institutions. There is a great interest in the future to actively participate in this cooperation and research institutions are interested to address specific projects.

In cooperation with the member communications companies, there was established a common database of contacts to reach customers and professionals in the industry, which is used for the communication within the association as a common web portal and regular meetings of all members.

The research was further analyzed by the regional association of the DAC appellation system. Austria is a typical wine-variety oriented country, where it will be much more important to recognize the origin of the wine than its variety, because the wine with a guaranteed origin cannot be so easily confused in the market. The area of certified vineyards of the association DAC is listed in Table 2.

The cooperation within the certification label wines Districtus Austriae Controlatus (DAC) takes the form

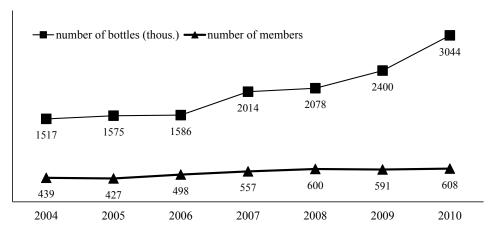


Figure 2. Number of bottles and number of producers

Source: Weinkomitee Weinviertel (2011)

Table 3. Localization (LQ) and Concentration Quotients (CQ) DAC

Wine region	LQ	CQ
DAC Weinviertel	1.61	3.62
DAC Mittelburgenland	1.61	4.91
DAC Südburgenland	1.04	2.46

Source: own work

of an inter-professional association, which includes the regionally syndicated wine-growers, wine-producers and regional chambers of commerce. The management of the Association is the responsibility of the regional and national committees of the DAC. The members of the Regional Committees and the National Wine Committee are nominated by the Agrarian Chamber and Chamber of Commerce in the rate fifty to fifty, and they are appointed by the Minister of Agriculture for 5 years. Each committee elects a president and votes with the two third majority. The Regional Committee may decide, but it is not the obligation, that it will fix the price for the wine sold as certified according to the rules of the association. The fees for a certified wine are used for the marketing support of the specific DAC brand. Based on the results of collaboration of wine producers is building of the common brand Weinviertel DAC, which can be monitored since 2004, when there were certified approximately 1517 bottles from 439 producers. In 2010, there were certified 3044 thousand bottles from 608 producers (see Figure 2).

When comparing these results, the quotients were observed in approximately similar values for both the DAC associations in Austria (Table 3 for research in three DACs), as well as the associations of VOCs in the Czech Republic (Table 4). Based on the experience of newly emerging VOC system of appellations, there was set up a plan of the formation of an association with the proposed methodological approach.

CONCLUSION

Based on the results, it can be concluded that the inter-professional association DAC Weinviertel Austria and the VOC Czech Republic meet the conditions for a cluster. The localization quotient was calculated on the value well above the minimum value. A new alliance of wine producers of the VOCs in the Czech Republic also has a concentration quotient larger than the minimum value, and thus it fulfils the opportunity for the emergence of the cluster.

The application of the results of localization and concentration factors was a plan for the establishment

Table 4. Localization (LQ) and Concentration Quotients (CQ) VOC

Wine region	LQ	CQ
VOC Znojmo	1.02	1.51
VOC Modré Hory	1.30	2.46
Southern Moravia (3 VOC)	2.26	2.81

Source: own work

of various alliances of the VOC. Specifically, there is proposed the alliance VOC Modré Hory, which is established by 30 wine producers in 5 villages around the centre Velké Pavlovice. It was selected as a unique selling position of the certified production of red and rosé wines. The plan to create a wine cluster proposes to establish the cooperation between the newly emerging associations of the VOC at three sub-regions of South Moravia, in order to achieve competitive advantage.

The research conducted in the fully functioning associations of wine producers of the DAC Weinviertel showed positive results of cooperation, which can be expressed in the annual increase in the sales of bottles of wine with a certified value-added and a higher price than the uncertified products. The cooperation of this association includes also the joint education and research collaboration with the universities and the joint marketing.

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