

# Formation of Regional Wine Producers Associations in the Czech Republic

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## Abstract

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

**JEL classification:** Q54, Q10, C38.

**Keywords:** appellation, association, cluster, DAC, strategic alliances, VOC, wine origin.

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## **1 Introduction**

Viticulture and wine industry in the Czech Republic has undergone over the last twenty years extensive reform and has experienced a significant shift from the quantitative orientation of production towards high quality. Cooperation wine-makers and wineries, significantly contributed to positive changes and the overall transformation. In 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 system for appellations *Vína Originální Certifikace (VOC)* with the methodical process of formation. Research work was also conducted to determine whether the newly founded alliances and cooperation associated companies may create a potential for the establishment of the cluster. There are successful forms of cooperation in wine-growers and winemakers in the world, which can serve as a source of inspiration for the growing cluster initiatives in the Czech Republic. Operation of regional strategic alliances, which are based on certification and appellation system, will be described in more detail based on a research in appellation alliance *Districtus Austriae Controlatus (DAC) Weinviertel* in Austria.

Analysis of the wine industry is made in structure by vineyards, grape production, wine production and consumption. The tool to achieve the goals of this work is needed in research on the causes of the new regional alliances of wine producers in the Czech Republic and 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 formation new regional strategic alliances of wine producers.

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

To understand the concept of cluster is necessary to clarify the theory of agglomeration of economic activity, which was gradually shaped by the findings that the overall global economic performance is largely, involved a limited number of highly concentrated industrial regions. Another empirical finding is that 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. Depending 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. While 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 their work using the concept of cluster in the context of wine production, namely on the basis of 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 are focused on the production of brandy and dessert wines. Big changes were subsequently conducted with transformation how the relationship between vine growers and wine producers, as well as relations between the wine producers themselves in order to improve production quality. There was started a regional research activities to study winemaking. Before wine from California in the eighties of the last century broke on the export to all over the world, wine production has undergone great development in quality and quantity. This development has attracted some new producers to enter into this industry and 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 also began to produce wine with high added value which have to compete with wines from traditional wine countries. California wine cluster is Porter (1998) given 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 a 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 are suppliers of technological products and manufacturing facilities, suppliers, drums and containers, suppliers of bottles, suppliers, caps, suppliers of labels, as well as specialized company engaged in production of public relations and advertising, and many publishers of scientific publications (such examples are named *Wine Spectator* and *Wine Trade Journal*) who are directly addressed to customers and merchants.

Furthermore research of clusters uniting producers of vine and wine published by Müller and Summer (2005). Formation of wine cluster in New Zealand is

researched by Dana and Winstone (2008), in the South Africa by Davidson (2009) and in Chile by Visser (2004). Australian wine is now at the forefront of a changing global wine market with a 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. Development of Australian wine industry describes Beeston (1994). Ditter (2005) even uses the entire walkthrough of the rapid development of Australian winery concept of meta-cluster or super-cluster.

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. South Australian Cluster, which can be described as innovative and organizational type cluster in Victoria and New South Wales.

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 labeling 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, the model simply by marking 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 identifiable. 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, Chládková (2009); Janda, Mikolášek, Netuka (2010). There are also publishing researchers, who engaged in the initiatives of local and regional farmers which joint together to market, e.g. Lošťák, Kučerová, Zagata (2006).

## **2 Material and methods**

To determine the work is based on data from the cultivation of grapes and wine production together in the Czech Republic. In defining the categories of wine on the labor 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) for 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 the last ten years. Trend analysis is made by determining the function of time using the method of least squares. Researched time points are usually equidistant. Before collecting the data was compiled from the practice schedule (based on the model by Porter, 1994) possible and available resources.

For the analysis of the newly established regional growers associations was used the structured interview, in which the required information is obtained in a direct interaction with the respondent. Interviews were done directly with the respondent. Selection of respondents focused on the initiators and founding members of the regional association of wine producers in the Czech Republic, an 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 brand Districtus Austriae Controllatus (DAC Weinviertel and DAC Burgenland). The research agenda was to find out what the original motives for establishing the association, 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 were calculated concentration factors for the emergence of the cluster, which should answer the question whether there is 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 VOC emissions in the Czech Republic 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 can use the following macro-analytical tool that recommends Porter (1998):

$$Localizationquotient \quad (LQ) = \frac{\frac{x}{X}}{\frac{y}{Y}}$$

LQ - location quotient of employment in the region x - the number of employees working in the sector in the region X - total number of employees in the region y - the number of employees working in the sector in the state Y - total number of employees in the state

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

To achieve the goals of this research is designed 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 VOCs in the Czech Republic and also for the DAC appellation system in Austria.

$$\text{Concentrationquotient } (CQ) = \frac{\frac{a}{A}}{\frac{b}{B}}$$

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 - the number of vineyards in the region certified by the association rules (ha) A - total number of vineyards across the region (ha) b - the number of vineyards of the all associations (ha) B - the total area of vineyards in the country (ha)

### 3 Results

Wine Producers Association in the Znojmo wine region introduced the first appellation system VOC Znojmo wine original certification. The approval system for granting the VOC Znojmo has been completed and certification of wines according to the specified conditions are possible from 2009. For this newly formed association of growers is a competitive advantage that appeals to enter the first name. The appellation system applies only to wines from three districts of the most typical varieties: Sauvignon Blanc, Riesling and Grüner Veltliner, or cuvée, regions that show typical uniform flavor profile. The origin of grapes must be selected and only from certified vineyards. The area of certified vineyards and size of the proposed new association VOC are listed in table 1.

The primary motive for establishing a new regional association was effective cooperation in communication highlighting the uniqueness of the primary origin of wine. Specifically, define 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 originality of their products is guaranteed by maintaining quality standards according to the association and the certification of origin of the wine, which is guaranteed quality from "Soil to the glass." To determine the above-mentioned goals were decisive motive grow and strengthen the competitiveness of participating companies.

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

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

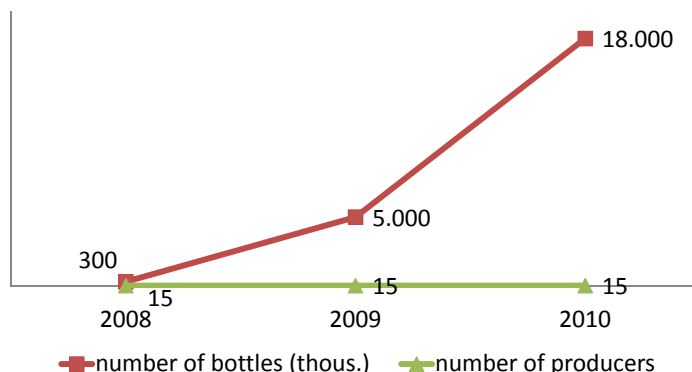
implemented joint purchasing of labels for the VOC. Each Member of organization buys and pays for the number of labels according to the number of bottles of wine only is certified, the price of one bottle is set on the amount of two Czech crowns. Selected resources that are the difference between the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

In cooperation with the Member communications companies have a common database of contacts to reach customers and professionals in the industry. Used for 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-varietal oriented countries to recognize the origin of the future will be much more important than variety, because the wine with guaranteed origin cannot be so easily confused in the market. The area of certified vineyards of association DAC is listed in table 2.

Cooperation on the certification label wines Districtus Austriae Controlatus (DAC) takes the form interprofessional association, which includes regionally syndicated wine-growers, wine-producers and regional chambers of commerce. Man-

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

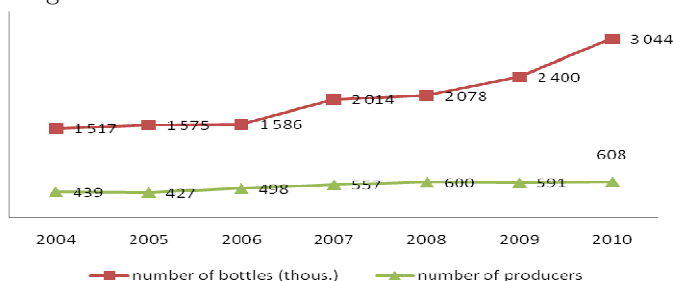
Source: Ministry of Life Science Austria, 2010

agement Association is the responsibility of regional and national committees of DAC. Members of the Regional Committees and National Wine Committee are nominated by the Agrarian Chamber of Commerce and Development in rate fifty to fifty, and appointed minister of agriculture for 5 years. Each committee shall elect a president and vote with two third majority. The Regional Committee may decide, but is not the obligation, it will be fixed price for wine sold certified according to the rules of the association. The fees for a certified wine used for marketing support the brand specific association of the DAC. The results of collaboration Wine Producers to build a common brand Weinviertel DAC can be monitored since 2004, when certified by approximately 1 517 000 439 bottles in 2010, was certified in 3044 from 608 thousand bottles (see figure 1).

When comparing these results, quotients were observed in approximately sim-



Figure 2: Number of bottles and number of Proucers



Source: Weinkomitee Weinviertel, 2011

ilar values for both the DAC associations in Austria (see table 3 for research in three DACs), as well as associations of VOCs in the Czech Republic (see table 4). Based on the experience of newly emerging VOC system of appellations was setting up a plan of formation association with the proposed methodological approach.

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

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

## 4 Conclusion

Based on the results it can be concluded that the interprofessional association DAC Weinviertel Austria and VOC Czech Republic meets the conditions for a cluster. Localization quotient was calculated on the value well above the minimum

value. A new alliance of wine producers of VOCs in the Czech Republic also has a concentration quotient larger than a minimum value, and thus fulfills the opportunity for the emergence of the cluster.

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

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

## References

- Aylward D.K., Glynn J. (2006). SME Innovation within the Australian Wine Industry: A Cluster Analysis. Ithaca: Ryan Publications
- Beeston J. (1994). A Concise history of Australian wine. St.Leonards, NSW, Australia. Allen & Unwin. 338 p.
- Bélis-Bergouignan M.C., Corade N., Pesme J.O. (2010). Strategic operations and concentration in the Bordeaux-Aquitaine region. *International Journal of Wine Business Research*. Vol. 22 Iss: 3: 308 - 324
- Dana L.P., Winstone K.E. (2008). Wine cluster formation in New Zealand: operation, evolution and impact. *International Journal of Food Science & Technology*, 43: 2177-2190.
- Davidson N. (2009). The South African Wine Cluster. Boston: Institute for Strategy and Competitiveness.
- Ditter J.D. (2005). Reforming the French Wine Industry: Could Clusters Work? Available at <http://www.escdijon.com> 2005.
- Grimstad S. (2011). Developing a framework for examining business-driven sustainability initiatives with relevance to wine tourism clusters. *International Journal of Wine Business Research*, Vol. 23 Iss: 1: 62 - 82.
- Gurská S., Chladková H., Tomšík P. (2009). Demand development of wine market of Czech Republic. In *Enometrics XVI*. Collioure. VDQS: 22-32.

Janda K., Mikolášek J., Netuka M. (2010). Complete almost ideal demand system approach to the Czech alcohol demand. *Agricultural Economics* 56, (9): 421-434.

Lošt'ák M., Kučerová E., Zagata L. (2006). Encouraging Collective Farmers Marketing Initiatives (COFAMI). Available at <http://www.cofami.org>.

Marshall A. (1890). Principles of Economics. Vol. 1. London: 1890, Macmillan.

Malmberg A., Sölvell O., Zander I. (1996). Spatial clustering, local accumulation of knowledge and firm competitiveness. *Geografiska Annaler B*.

Müller R.A.E., Summer D.A. (2005). Clusters Of Grapes And Wine. American Agricultural Economics Association: Providence.

Porter E.M. (1990). The Competitive Advantage of Nations. New York: Free Press.

Porter E.M. (1994). Konkurenční strategie. Praha: Victoria Publishing.

Porter E.M. (1998). Clusters and the New Economics of Competition. Harvard Business Review.

Swaminathan A. (2001). Resource partitioning and the evolution of specialist organizations: The role of location and identity in the US wine industry. *Academy of Management Journal*.

Sölvell Ö., Lindquist G., Ketels Ch. (2003). The Cluster Initiative Greenbook. Stockholm: Brommatryck AB.

Tomšík P., Žufa P., Sedlo J. (2006). Atraktivita odvětví vinohradnictví a vinařství v České republice ve fázi adaptace na jednotný trh Evropské unie. In *Acta universitatis agriculturae et silviculturae mendelianae brunensis*. Brno: Ediční středisko MZLU v Brně: 101-113.

Visser E.J. (2004). A Chilean wine cluster? Governance and upgrading in the phase of internationalization. Santiago: United Nations.