

Can Co-operative Success be gained by Forming Strategic Member Groups – The Case of German Wine Co-operatives

1 Introduction

Wine production in Germany has a tradition of more than 200 years in each of the 13 German quality wine-growing regions along the rivers Rhine, Neckar, Main, Mosel, Saar, Ruwer, Ahr, Saale and Unstrut. The quality and type of wine as well as the quantity depends on different factors, wherein the grape variety plays an important role. Therefore breeding new varieties and selecting traditional varieties took place in order to develop better wines with good quality and yields. The structure of the firms within the wine industry has an important impact on the technological practices, equipment and costs. It has to be considered that in Germany traditionally viticulture was one of different plantations on most farms, and the farms as well as the vineyards were very small. Corresponding with the structural change in the agricultural sector, the farms increased their acreage and production in combination with specialisation.

The necessity for high intensity of labour hours on the one hand and the simple equipment for small growers on the other, makes viticulture economically attractive for full-time as well as part-time farmers. Nowadays the structure of grape growers is dominated by small wine-growers. More than 34.375 wine-growers are producing grapes. 45 % of these wine-growers are cultivating less than 1 ha vineyard. Only about 2.000 wine-growers own more than 10 ha land planted with vines. More than 41,8 % process their own grapes. About 4.400 are producing and marketing bulk wines mainly, while about 10.000 estates are producing and marketing bottled wines. Therefore most of the viticulturists are members of co-operatives. Those co-operatives process the grapes, produce must, vinificate (fermentation, fining, clearing and other oenological practices in the cellar for winemaking) and bottle and market the wine. The membership of co-operatives is widely spread under viticulturists in Baden, Württemberg, and Franken. In those regions, the grape-production is dominated by part-time viticulturists. Today, there are 246 wine co-operatives ((WG)147 with own vinification) with 64.000 members (see Fig. 1): The acreage planted with vines from members of WG increased up to 31.342 ha, more than 31 % of all German vineyards. The total production of the WG depends on usual vintage alternation. In the financial year 2001/2002 the WG produced 3,1 Million hectolitre wine, an amount of nearly 35 % of the total wine-production in Germany. Traditionally in Baden-Württemberg the importance of WG is very high (75 % market share). However, especially in the regions where co-operatives have been traditional underrepresented (Rheinhessen, Pfalz and Mosel) the winegrowers turn towards the WG. Hence, the increase in member and vineyards might indicate that die WG are successful and an alternative to the bulk-wine market.

The aim of our paper is twofold. Firstly, we want to analyse the structure of this complex sector and the managerial construct strategic member groups. A strategic member group is group that is a co-operative itself or is being part of a co-operative. Additionally, a strategic member group is homogeneous within itself but is heterogeneous against other strategic member groups. Whereas, in Germany normally co-operatives are a melting point of different interests such homogeneous groups have the advantage of having a common goal. We assume that having a common goal like producing a high quality wines e.g. the new profile wine concept will enhance the overall performance of these groups. Consequently, secondly we want to empirically test whether the formation of strategic groups is a driver of co-operative success.

2 Wine co-operatives

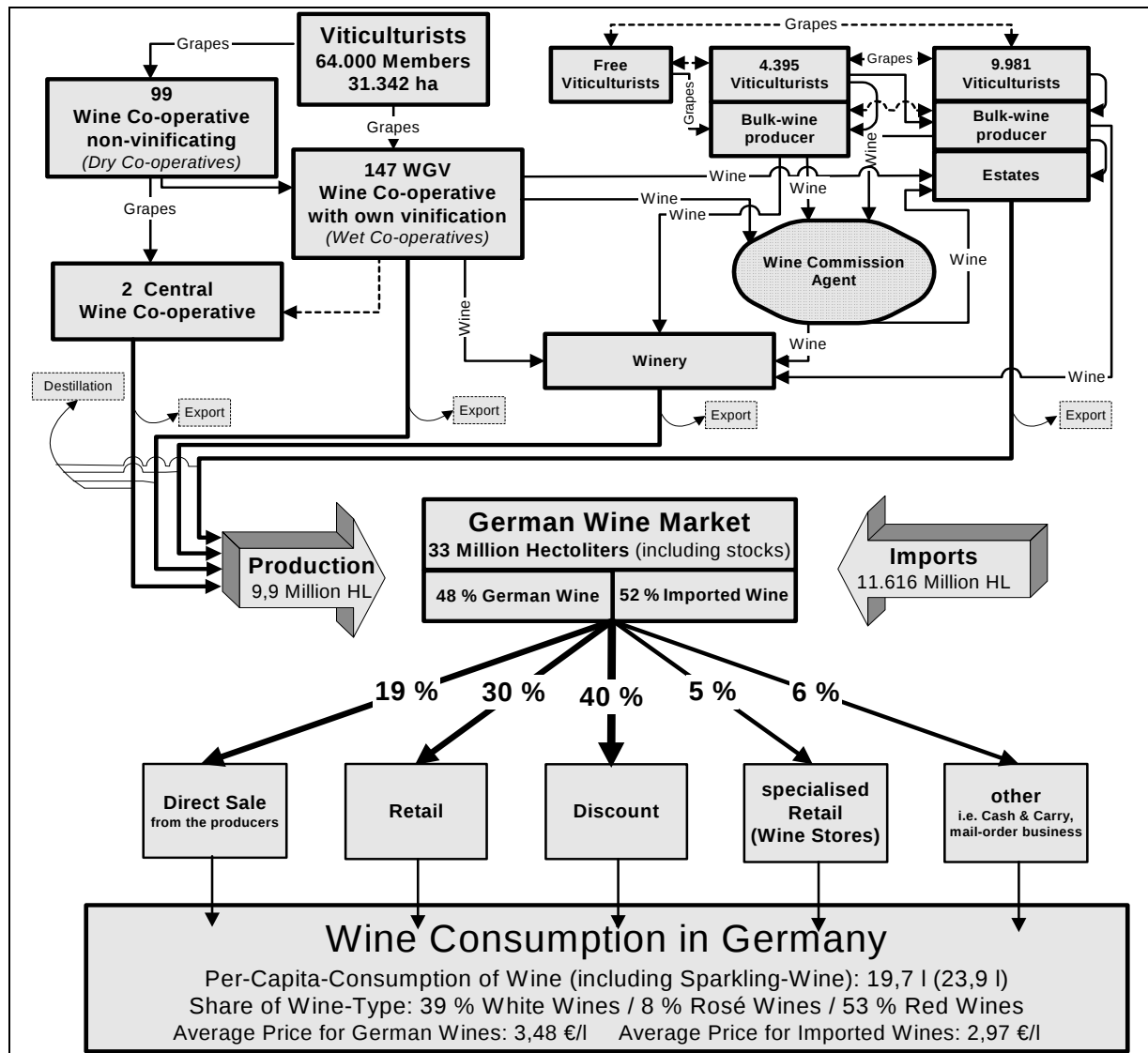
2.1 *The structure of the sector*

According to their statutes “Winzer Genossenschaften” (wine co-operatives) are self-helping organisations for wine-growers. The aim of the co-operative legal form is to improve the economic situation of the members by co-operation in vinification and marketing of the grapes or respectively their processed products. In many communities the WG are common institutions with a social impact like a local government or a religious community (Hoffmann 2000). For predominant part-time wine-growers the WG are indispensable.

Although “Raiffeisen Genossenschaften” in Germany are going through a far-reaching structural change, with over 762 Million € turnaround per year the WG business performs this change slower. It can be estimated that the reason is the product “wine” and its emotional background. The connection of the members to their WG is tighter in the rural regions. The honorary board and supervisory-board members absorb the dynamics of change. The closing down of a local WG is often perceived as a loss of own identity, so the readiness to change is low (Pilz 2002).

Having more than 68 non-vinificating-WG (dry-WG) in the wine-growing regions of Baden and Württemberg a Central-WG was established in each of these two wine-growing regions. Most of the dry-WG are linked to the Central-WG by delivering the grapes of the whole vintage. It is also the business of the Central-WG to stabilise the supply. Therefore a lot of the WG with own vinification (WGV, wet co-operation) deliver a contractual share of bulk-wine from their vintage to the Central-WG. (see also Fig. 1)

Fig. 1: The German Wine Market and the Role of the Co-operatives



In Württemberg the Central-WG processes the grapes from the dry-WG and collects a defined amount of bulk-wines from some WGV. In the sense of a vertical supply chain the Central-WG sells the bottled wines from most of the WGV nation-wide to retailers. Hence, not every single WGV needs to build up and maintain a distribution force for retailers. The WGV can focus with their marketing on specialised retailers (special wine stores) as well as the restaurant branch and direct selling.

In principle it is possible to divide the WGV in three different groups. First, there are very successful WGV, which are active on a limited local or regional market called “Local Heroes”, because they have built up a very high consumer preference for their products in their local market. Also they often control the predominant part of the local vineyards. The second category are also successful WGV, but they have built with the name of their community a brand. The products of the WGV are sub-brands in a wide quality spectrum, which are often positioned in the middle and upper quality segment in the national specialised retail and the restaurant branch. Third, there are less successful bigger local or district WGV positioned in the middle and upper quality segments as well as in the price-dominated retail and bulk-wine competition (Hoffmann 2000). The share of the marketing

channels (see also Fig. 1) and the concentration in the retail sector as well as in the specialised wine stores makes the sales development more difficult for the WGV, especially for WGV of the second and third category.

But how can the WGV manage to adjust to these dynamic market changes considering that the WGV are contractually obligated to sell exclusively products of their members? In contrast to other wineries they are not allowed to buy other 'in'-products. And wine is a long lasting plant, i.e. the change to a new, very high demanded variety needs about five years until the first vintage can be sold. To adjust to the market change the WGV needs a differentiated concept. They must have a concept, that allows the WGV to react to variations in demand through a corresponding modification in their wine-range.

2.2 *The profile-wine concept*

The traditional labelled wine-terminology in Germany is very complex and the people in Germany were often baffled by the jargon on wine labels (Johnson 1995). Therefore especially younger customers chose imported wines with an easily understandable and asymmetric information reducing label (Schweickert 2001). Taking a look on different sales in Fig. 1 we see that only 19 % of the wine-sales are realised as a direct sale between consumer and WGV. These customers perceive the costs of information as positive. They are driving to the WGV and recognise the buying as an event. However no bilateral contact exists in the retail stores. The wines are bought out of the shelves and the customers are usually occasional wine drinkers. This segment has a quantitative sales share of 30 to 70 %. The consumers are looking for uncomplicated signals, reputation or brands, to generate qualitative safety. Missing financial potential it is for the WGV not possible to build up their own brand with a typical sensorial profile. In Germany therefore a new wine-labelling-law was established to compress a lot of (quality and sensorial) information in the category-terms 'Classic' and 'Selection'. These two terms of the so called 'profile-wine-concept' should provide the needed signalling effect for the consumers (Schweickert 2001).

The German quality wine system has its focus on the bottled quality. In contrast origin and sensorial profile play the most important role in the Romance system of quality in France. Knowing the problems with the traditional wine labelling law the Germans wanted to give their wines more profile without changing the actual law. Therefore the new profile-wine concept realised a revaluation of the single product combined with stricter conditions concerning viticulture and vinification, which must be recognised in the taste of the wine in the bottle. Core of the profile-wine concept was on one hand to enforce the production of classic-styled wines with an easily recognisable origin type. On the other hand, the winemakers should get an alternative to the common wine-labelling in Germany. (Schweickert 2002)

If the winemakers want to produce Classic wines, they have to produce wines above average quality, harmoniously dry in taste, and made from one of the traditional grape varieties, such as Riesling, Silvaner or Spätburgunder. In addition they need to have a higher specific must gravity (+ 1 % vol.). The concept is designed to impart a clear profile regarding a wine's quality and taste. Therefore only wines that meet these criteria can be labelled Classic.

In 2001 the representatives of the Wine-Growers Association of the 13 German wine-growing regions decided a few traditional varieties for the production of Classic and Selection wines. Selection wines are considered the jewels of the wineries and WGV. Under long run quality aspects of the last vintages the winemaker chooses the vineyards producing the grapes for the Selection wines. Already in the vineyard special quality security and control measures have to be introduced. Further on the chosen vineyards must be registered with the Federal Wine Authorities and the vineyard-plots have to be marked. Harvesting machines are not allowed. The specific must gravity has to be over 90° Oechsle (sugar content) and the grapes have to be hand harvested. The yield is reduced to a maximum 60 hectolitre per hectare. At last, the typical characteristics (variety, origin, etc.) are sensorial examined by a tighten up official assessment before the Selection wines can be sold from 1st September of the following year. They are sold by specialised retailers, wine-compartments in high-end retail store and direct from the producing WGV or estate.

3 Strategic member groups in WGV

3.1 “Strategic member groups”

The thoughts of the concept of the “strategic group” are based on the work of Michael Porter. His theories can be subsumed under the conception of the market based view of a firm. Wherein the competitiveness of a firm is determined by its ability to react on its environment. Other relevant constructs are the value chain and the generic strategies of cost leadership, differentiation market-wide and in niche markets (Porter 1980). The concept of “strategic groups” is correlated to the model of the five forces. An analysis of the branch might help to gain an overview over a certain branch but it is not useful to gain a detailed picture on the competitiveness of the companies (Kotler/Bliemel 1999). This can be gained by analysing “strategic groups” within the branch. A “strategic group” is defined as the a cluster of enterprises which have similar strategies within the same branch. This implies that within the “strategic” group firms are homogenous but they are heterogeneous towards firms of other “strategic groups”. As a result the main competitors are the firms within the strategic group (Müller-Stevens/Lercher 2001). For example in the branch of restaurants luxury restaurants do not face competition of the fast food industry. When the strategies of firms in the branch are getting more similar, the “strategic groups” themselves will approach. As nearer they are the competition between the groups will increase and the group boundaries will be crossed (Homburg/Krohmer 2003). Long term success of boundary crossing is mainly determined by the barriers of mobility.

These barriers are all characteristics hindering firms to enter a different “strategic group”. Being also used for segmentation these characteristics are for example: vertical and horizontal integration, market segments, cost structure, distribution channels and size of organisation.

While “strategic groups” are used to detect the main rivals of a firm the concept of “strategic member groups” has a different aim. Hanf/Schweicker (2003) have defined a “strategic member group” as a cluster of firms which have a similar strategy, aiming at the same market, having homogeneous interests and being a co-operative themselves or being a part of a co-operative. Therefore a strategic member group can be described as being homogeneous within itself and being heterogeneous against other strategic member groups. Even though there is a major difference in the intention of the concepts of strategic groups and strategic member groups there are also some similarities between the concepts. 1. the market based view is used as the underlying theory, 2. the segmentation approach can be used to find the relevant cluster and 3. the clustered firms have the same strategy. By implementing the concept of strategic member groups “Genossenschaften” are able to discuss the following topics: open membership vs. closed membership, member selection by quality differentiation and marketing channel choices. (Hanf/Schweicker 2003)

A typical problem of German “Raiffeisen Genossenschaften” derives from the traditional open membership policy. Inviting everybody to join the “Genossenschaft” the interests are very heterogeneous. The management has to serve too many different interests causing non optimal business results. The member themselves do not feel bound to their own “Genossenschaft” resulting in trading with other firms (Nüssel 2002). Another problem is that German co-operatives have to accept every quantity delivered by a member no matter of the quality. As a result the member sell commodities of better quality to other mostly private owned enterprises.

But if the traditional “Genossenschaft” would segment its members according to strategic member groups forming co-operatives within the “Genossenschaft” this groups would share the same strategies and business interests. By this way the open system could survive on an higher level, but a segmentation of the members could be performed leading to better results. An additional benefit could be an increase of the foundation of “Genossenschaften”. The strategic member group thoughts could re-attract this organisational form. Because strategic member groups aim to increase the efficiency of “Genossenschaften” there are no conflicts with the anti-trust laws allowing co-operation to increase efficiency.

3.2 Strategic member groups in WGV

Through the possibility of producing profile wines the big advantage of the WGV have taken effect. In contrast to most wineries buying bulk-wines the WGV have direct contact to the producers of the grapes. But until now, only a few WGV benefit from this advantage. Still today the WGV usually

pays the same price for the same grape, graded to 6 predicate-levels which are determined by a minimum degree °Oechsle. Thus every viticulturist of the WGV can produce grapes for every wine he wants. No matter if the grapes match the quality criteria in taste. But in sense of a goal-directed quality management it is not enough to wait what the vintage will bring and make the best with the raw material in vinification. Therefore the wine-growers need to know already in the vineyard which care and attention measures must be done for the optimum grape quality for a special type of profile-wine. Appropriate vine-cutting, adjusted green cover and fertilisation, special vine protection, desuckering and thinning out surplus grapes. During vintage the WGV knows the quality levels to be expect by the documentation, therefore being a kind of planning security.

These mentioned criteria determine the success of a wine in the market. This is the reason why these criteria should be part of the payment system for the grapes. The viticulturists of a WGV should get a surcharge if they comply with these measures and less payment if they do not.

To produce profile-wines the WGV have to go one step further. For Classic they must rate the grapes before the press and divide their viticulturist in the strategic member groups 'normal' and 'Classic'. So only the grapes of the members of the Classic group can be vinified as profile-wine type Classic. Getting a higher price in account of the higher quality the WGV pays more for the grapes. For the profile-wine type Selection the WGV has not only to rate the grapes, also it has to rate vines itself. The oenologist of the WGV must choose the best vineyards of the members and define the criteria of the 'strategic member group Selection'. Viticulturist of this strategic member group have to keep to the decided measures for the vines. Therefore the vines are rated and documented through the year at different degrees of vine development.

4 Empirical Analyses

In the empirical study the 147 WGV in Germany were asked by questionnaire. Over 40% of the WGV responded and were analysed. The composition of the analysed WGV is representative for the German WGV. The wine-growing regions are fully represented, only the 4 small wine-growing regions with only 1 or 2 small WGV are underrepresented. Usually (78,3 %) the WGV are between 51 and 100 years old. It can be observed that 36,7 % of the WGV have a red wine share between 26 – 41 % because of their predominant position in the wine-growing regions of Baden and Württemberg having a traditionally high share of red vines. $\frac{1}{3}$ of the WGV have between 100 – 200 ha vineyards and the number of members differs for this WGV between 100 – 300. 15 % of the WGV are less than 50 ha and 10 % are more than 500 ha. Further on, less than 5 % of sales in retail is done by more than 30 % of the WGV. Only 10 % of the WGV (especially the Central-WG and big WGV over 500 ha) sell more than 50 % of their products through retail. In contrast predominantly WGV between 100 – 200 ha as well as between 300 – 400 ha sell most of their products through the specialised retail (wine stores). Small WGV (less than 50 ha) are the typical local heroes.

The research had its focus on the possibilities of the WGV to create a competitive advantage. Because of the statutes this advantage can only be located on the product wine, because the WGV are not allowed to buy and sell other goods. The success of a wine is determined by various influences, however the type and taste of wine are mainly dominated by the grapes and the work at the vines (Troost, 1988.). Therefore the study examined the measures of the WGV to create this competitive advantage.

71,7 % of the WGV pay the viticulturist corresponding to their “yield per hectare”. Through this payment-measure they want the wine-growers not to exaggerate the potential of the vines resulting in a better wine-quality. On a scale from 1-5 they rated the measure 2,22 (see Fig. 2).

This value is higher than the value of the measure “Average Oechsle” with 1,82. Meaning that the WGV (80 %) apply this measure more often. One reason the majority of the WGV uses the procedure is its self-financing character. The WGV are waiting with the payment until the vintage is over. Afterwards they analyze the average degree Oechsle for every variety. Based on this results, they pay a surcharge for those viticulturists delivering grapes above the average-degree, depending how much the grapes are above the average. Respectively viticulturist delivering grapes under the average get depending on the a smaller amount of sugar content less money.

The highest value on the scale with 3,00, and therefore the least used procedure, was the system of rating the grapes before they are pressed. As shown in Fig. 2 the modus for grape rating is 5, so ‘no we do not’ was the most mentioned value on the scale. 45 % of the WGV did not apply this procedure of negative-selection where grapes not matching the minimum quality-level are picked out. It can be estimated that one reason why the WGV hesitate to implement this procedure is the missing positive incentive and the resulting negative mood, if the grapes are not accepted after one year of hard work.

Fig. 2: Empirical Results of the WGV measures to create competitive advantage

		Yield per hectare	Average Oechsle	Grape Rating	Open Strategic Member Group	Closed Strategic Member Group
N	Valid	60	60	60	60	60
	Missing	0	0	0	0	0
Mean		2,22	1,82	3,00	2,08	1,97
Modus		1	1	5	1	1
Std.-Deviation		1,606	1,408	1,657	1,565	1,507
Range ^a		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

a) No WGV chose the value 3 = indifferent; they all took position.

The concept of building an open strategic member group is opposite to the negative-selection. We consider the concept of an open strategic member group as a weaker form of the above described concept of building a strategic member group. 73,3 % of the WGV offer their viticulturists the possibility to rate the grapes for the production of higher quality profile-wine. The viticulturists get

through a positive-selection more money, if their grapes match the criteria. Corresponding to the demand for this type of wine every member has the chance to join this open strategic member group. The value 2,08 (2 = yes we do) on the scale shows the agreement of the WGV to this system.

One step further is the system of the closed strategic member group implemented by 78,3 % of the WGV. The value 1,97 on the scale confirms the important role of this strategic member group. The membership of this strategic group among the members of the WGV has to be closed, because a rating of the vines, defined labour-measures in the vineyards over the year and special harvesting requests have to be done. If the strategic member group should not only produce the best grapes of the WGV but also the profile-wine Selection, than the vines have to be additionally registered by the Federal Wine Authorities. Therefore the strategic member group is closed by law.

But strategic member groups are not only implemented because of the production of the profile-wines Classic and Selection. On top of 48,3 % of the WGV really producing Classic some additional 25% of the WGV produce according to the matching standards, but they market these wines differently. Therefore in total 73,3% of the WGV have open strategic member groups producing on a high standard. The same is true for Selection: 78,3 % have closed strategic member groups, but only 38,3 % produce Selection or the corresponding '1.Gewächs' (grand cru). This fact is necessary to keep in mind and proofs the important role of building strategic member groups as a competitive advantage. The introducing of the profile-wine concept indeed enforced the building of strategic member groups to some extent, but first attempts in member-dividing measures came up in 1999 before the profile-wine concept.

Fig. 3: Connection Between Success and Open Strategic Member Group

Number of WGV per Success-Category that Build an Open Strategic Member Group					
Success-Category	Extend of an Open Strategic Member Group				
	we do this measure fully	yes we do	indifferent	we do not really do	no we don't
very successful	5	0	0	0	2
successful	28	6	0	5	3
don't know	2	0	0	1	1
not successful	5	0	0	0	0
very unsuccessful	0	1	0	0	0
no statement	1	0	0	0	0

Also the study analyses the connection between the success of the WGV and the implementation of strategic member groups. Taking a look on the building of an open strategic member group in Fig. 3 we can see, especially the successful (28 times) and very successful (5 times) WGV built an open strategic member group. Even 6 WGV somehow building an open strategic member group are successfully producing.

Looking to the graphs in Fig. 4 we can see an even more precise picture. Every very successful WGV implemented either a closed strategic member group (5 times) or somehow introduced a closed strategic member group. In part of the “only” successful WGV we have 24 really and 7 somehow introducing a closed strategic member group. Therefore 63,4 % of the WGV that built a closed strategic member group are successful or very successful. Only 6,7 % of the WGV introducing a closed strategic member group are not successful, no more than 1,7 % are very unsuccessful.

Fig. 4: Connection Between Success and Closed Strategic Member Group

Number of WGV per Success-Category that Build a Closed Strategic Member Group					
Success-Category	Extend of a Closed Strategic Member Group				
	we do this measure fully	yes we do	indifferent	we do not really do	no we don't
very successful	5	2	0	0	0
successful	24	7	0	4	7
don't know	2	1	0	0	1
not successful	4	0	0	0	1
very unsuccessful	1	0	0	0	0
no statement	1	0	0	0	0

Even though in the sample dry-WG (non-vinificating WG) have not been representatively taken into account first results are giving some hints to us that the dry-WG can be considered as well as a strategic member group. Focussing on their ability to collect the grapes during vintage they unite a homogeneous aim of the viticulturists: to gain the highest payment for their grapes without any further investment in processing equipment. And it seems as if they are successful, too.

5 Conclusion

Traditionally most of the agricultural goods were considered to be commodities. For this reason, suppliers could easily be substituted. As a reaction in order to create countervailing power horizontal co-operations (Raiffeisen-Genossenschaften) have been established in the agribusiness for more than 100 years. Thus, “Winzer Genossenschaften” (wine co-operatives) are according to their statutes self-helping organisations for wine-growers. The aim of the co-operative legal form is to improve the economic situation of the members by co-operation in vinification and marketing of the grapes or respectively their processed products. However, times have changed and “Winzer Genossenschaften” have to compete on the market as any other enterprise. On account of this, question of the functioning of the traditional co-operative are risen.

As we have shown empirically a successful way to compete is to form “strategic member groups”. A “strategic member groups” can be characterized ” as a cluster of firms which have a similar strategy, aiming at the same market, having homogeneous interests and being a co-operative themselves or being a part of a co-operative. Therefore a strategic member group can be described as being homogeneous within itself and being heterogeneous against other strategic member groups. Within

such groups the open membership policy as well as the acceptance of any kind of quantities has to be questioned. Additionally, such groups ought to have incentives – pecuniary or non-pecuniary – for the producing higher quality. Examples of strategic member groups are these groups within the co-operatives producing wine according to the new profile-wine concept. For these groups we could observe a rise in the quality. In our empirically study we found that this increase of quality due to belonging to a strategic member group was correlated with a better performance. We have the opinion that for co-operatives adopting relatively early to the new requirements the chances are good to survive in this high competitive market. But for the ones not willing or able to take the chance a withdraw from the market is expected.

Literature:

Hanf, J.H./Schweickert, E. 2003: “Co-operative Success by Forming a Strategic Member Group”
Paper presented at the conference Vertical Markets and Co-operative Hierarchies, Bad
Herrenalb, Germany

Hoffmann, D. (2000): “Winzergenossenschaften - Mehr Marktorientierung gefordert“. In:
Weinwirtschaft, Nr. 3, 2000, S. 20 – 26.

Homburg, C. / Krohmer, H. (2003): “Marketingmanagement“, Gabler Verlag, 2003

Johnson, H. (1995): “Der große Johnson – Die neue Enzyklopädie der Weine, Weinbaugebiete und
Weinerzeuger der Welt“, 9. Aufl., Hallwag: Bern, 1995.

Kotler, P. / Bliemel, F. (1999): “Marketing-Management“, 9. Aufl., Schäffer Poeschel Verlag, 1999

Nüssel, M. (2002): “Genossenschaften als Teil der Wertschöpfungskette – Neue Perspektiven für die
Mitglieder“, in Theurl, T. / Nüssel, M. (Hrsg.): “Genossenschaften und Landwirtschaft – Ein Sektor in
Umbruch“, Band 55, Münsterische Schriften zur Kooperation, Shaker Verlag, 2002

Pilz, H. (2002): “Struktur der Genossenschaften – Im Interesse aller“. In: Weinwirtschaft, Nr. 3,
2002, S. 20 – 23.

Porter, M.E. (1980): Competitive Strategy: Technique for Analyzing Industries and Competitors“,
1980, Free Press, New

Schweickert, E. (2001): "Classic und Selection". In: Der Oenologe, 29. Jg., Nr. 4, 2001, S. 3 – 4.

Schweickert, E. (2002): "Informationsstandardisierung oder –differenzierung bei Profilweinen". In: der Oenologe, 30. Jg., Nr. 1, 2002, S. 3 – 5.