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## Competitive Strategies for Wine Cooperatives in the German Wine Industry

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**Abstract.** The wine industry is significantly affected by globalization and changes in consumption habits and shifts in lifestyle, which lead to changes in the market environment and intensity of competition in the wine markets. Overall, wine cooperatives have a market share of more than 40 % in Europe. In Germany, they account for around one third of the total wine production. The decreasing number of wine cooperatives and their members leads to the assumption that wine cooperatives have difficulties adapting to the different market environment and though, need to select and implement competitive strategies. The aim of this paper is to identify and develop competitive strategies for wine cooperatives in the German wine industry. Therefore, the external forces affecting competitive rivalry in the wine industry are being evaluated for wine cooperatives in Germany. A qualitative approach has been applied including in-depth interviews with managing directors and chairmen of the board (n=15). Data were transcribed verbatim and content analysed. Results showed that the intensity of rivalry among existing competitors is high. Bargaining power of wine cooperatives towards buyers and suppliers strongly depends on their size. However, generally the bargaining power of retailers is high, although this depends on the retail channel (discounters, food retail, specialized retail, specialized wholesale, gastronomy). Five main strategy dimensions emerged: (1) the cost leadership and cost focus strategy, (2) the differentiation and differentiation focus strategy, (3) collaboration among producers, (4) offering additional services, and (5) options for improved membership relations and increased youth involvement.

**Keywords:** industry structure, competition, competitive strategies, cooperatives, wine, Germany.

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### 1 INTRODUCTION

The wine industry is significantly affected by globalization and changes in consumption habits and shifts in lifestyle, which lead to changes in the market environment. The total worldwide consumption amounts to around 244 million hectolitres, whereas production is much higher [1,2]. The intensity of competition in the global wine market is increasing [3]. The German

wine industry reflects this tendency. In Germany direct sales from wine producers to consumers are decreasing, and the proportion of wine sold via retail chains now adds up to 89 % of total wine sales [4]. One factor influencing this development is the fact that nowadays many consumers are used to one-stop-shopping in order to save time [5]. Five retailers are dominating the food retail in Germany [6]. Besides the market power of those retailers, the high/constant availability of products of foreign and domestic producers impacts the competitive intensity in the German wine market.

In the past, the process of retailer concentration in Germany has induced a similar development in German agriculture and viticulture [7,8]. As food retailers generally demand large quantities for low prices, wine producers had to grow in size, too, to be able to respond (to these demands) and to be in a position to negotiate with retailers at eye level.

However, in Germany, grape production is still dominated by small-scale producers. Cooperatives “continue to be indispensable for most vineyard owners with small holdings, because wine production and wine marketing (...) would not be possible without prior pooling of resources and cost-sharing arrangements.” [9] Similar to other European countries such as France (619 wine co-ops), Spain (551), Italy (493), Portugal (95) and Austria (15) [10], wine co-operatives play an important role in the German wine industry. In Europe, cooperatives are widespread in the agricultural sector. In the wine sector, cooperatives even have a market share of more than 40 % [11,12]. In Germany, around 41,000 grape growers are members of wine cooperatives [13]. For wine cooperatives, the changing market environment is challenging. The number of wine cooperatives in Germany has been decreasing from about 264 in 2000 to 159 cooperatives in 2016 [13]. Correspondingly, the number of members has decreased in the respective years from 61,000 to 41,000, and the acreage of vine cultivated by cooperatives has been decreased slowly for many years [13].

This development emphasizes the need for cooperatives to work customer oriented focusing on the market developments. However, this remains a very challenging task for wine cooperatives. Due to their business principles and characteristics as well as the strong heterogeneity within the groups of their members most cooperatives are still working member oriented, i.e. instead of market orientation they maintain a strong producer orientation [14,15]. Thus, the challenge for cooperatives is to find a competitive position within the industry by working market oriented and to foster the relationship with their members to retain members and vineyard areas. Focusing on just one of those areas will not be sufficient to

work successfully in the long-run. The main performance criteria of a cooperative is the amount of grape pay-outs. High grape pay-outs and member satisfaction can only be accomplished if the cooperative is working successfully in the market in the long-run.

So far, the analysis of the German wine market has addressed the wine market displaying the market structure [16–21]. However, an analysis of competition intensity has not been done from the perspective of wine cooperatives.

This paper aims to examine the competitive intensity in order to derive strategies for wine cooperatives. Therefore, semi-structured expert interviews had been conducted with management representatives of 15 cooperatives in different wine growing regions in Germany. Based on the results, competitive strategy implications for wine cooperatives in Germany will be provided. These implications can (partly) be applied to wine cooperatives in other European countries as well.

The paper is structured as follows. Section ‘The German wine market and cooperatives’ outlines the overall situation of the German wine market and underlines the importance of wine cooperatives in Germany. In the next section ‘Framework of competition intensity’ predictions for the empirical analysis of competition intensity are being formulated. Section ‘Empirical study’ details the approach of data collection and evaluation used in this study and presents the results of the study. Section ‘Discussion and implications’ provides recommendations for competitive strategies for wine cooperatives. In the last section ‘Summary’ summarizing comments are being provided.

## 2 THE GERMAN WINE MARKET AND COOPERATIVES

### 2.1 *The German Wine Market*

In 2018, the total of volume marketed in Germany was roughly 20 million hl, from which German wine production accounted for approximately 10 million hl of wine. Germany is leading worldwide in wine imports, with more than 14 million hl in 2018. At the same time Germany is (re-) exporting a total of 3.7 million hl. The three main distribution channels are discount retail chains (50 % market share), retailers (28 % market share), and direct sales (11 % market share). Seven percent of the total volume is marketed via specialized retail and four percent via online retail. [4,22]

Discounters have gained market share during the previous years, whereas retail sales by supermarkets have remained stable, and direct sales have decreased.

Accordingly, average prices have been decreasing. Consumers spent on average 3.39 €/l for a German wine, whereas the average price paid for any wine sold via retail in Germany was 3.09 €/l in 2018. This means that imported wines have a lower average price in German retail than wines from Germany. [4]

Regarding the wine quality, consumers have high expectations. Even cheap wine has to be of acceptable quality. Therefore, producers need to meet the demands of their customers, including consumers and retail customers. Working with discounters and supermarkets, producers often have to meet requirements regarding the terms of delivery and minimum quantities [21]. Due to these requirements only few large wineries, large cooperatives (including secondary cooperatives), and producer associations are able to supply such large retailers national-wide. However, recent developments show that there is an increasing number of independent retailers which are part of the retail cooperatives of Edeka and REWE group [23,24]. Because those independent retailers often offer a broad spectrum of wines from regional producers [23] and since the independent retailers source their goods directly from wine producers via direct deliveries, this represents an attractive sales channel for private wine estates, wineries, and smaller cooperatives. Hence, also smaller industry players can benefit from the opportunity to distribute smaller quantities via retail compared to the nationwide distribution in the case of discount retail chains and supermarkets. In order to ensure the quantities and grape qualities required for this distribution channel, wine estates and wineries are now increasingly dependent on the cooperation with grape producers, thus competing with cooperatives in this realm. An example of this are the wines of the Robert Weil Junior brand, which are marketed exclusively through the Edeka group [25,26].

The structure on the demand side of the market strongly influence recent developments on the supply side as well. In former times viticulture was often one of many different plantations in the farms and the cultivated vineyard area per farm was very small. Pursuant to the structural change in the agricultural sector, the average acreage and production per farm increased with the level of their specialization. Viticulture is attractive for full-time as well as for part-time farmers as a high intensity of labour hours is needed and small growers often have simple equipment for viticulture. [21]

In Germany grape production is dominated by small-scale producers. There are more than 43,300 wine businesses in Germany. Out of this number about two-thirds cultivate less than 1 ha. Only 7 % (around 2,900 businesses) own more than 10 ha [27]. These figures

show that viticulture in Germany is typically organized on small-scale plots. Corresponding to the structural change in the agricultural sector [28,29] the concentration process also continued in the wine sector. There is a tendency towards fewer estates with, on average, larger vineyard areas. Smaller farms are increasingly being pushed out of the market and forced to close down.

This concentration process is also reflected in the figures of the Federal Statistical Office [30]. There is a tendency to have fewer holdings with larger average vineyard areas. According to these figures, the number of agricultural holdings maintaining vineyards fell from 20,290 to 16,898 in the years 2010 to 2016. In particular, the number of smaller farms with an area under vines of less than 10 ha has declined. Since 2010 the average area per holding has risen from 4.8 to 5.9 hectares. [30]

## 2.2 Wine Cooperatives in Germany

The origin of wine cooperatives dates back to the 19th century, a century marked by far-reaching economic and political changes. With the beginning of the industrialization the proportion of cheap foreign wines and wine counterfeits increased. Additionally, grape producers were confronted with cultivation difficulties due to vine diseases and pests such as phylloxera and fungal infections (powdery and downy mildew). In response to this, grape and wine producers joined forces to improve their economically weak position. In 1868 the first wine cooperative was founded in the Ahr wine growing region, followed by the emergence of wine cooperatives in various wine growing regions in the subsequent years. [31]

Today, wine cooperatives are still of significant importance in terms of German wine production. In the financial year 2015/2016 wine cooperatives produced around 2.7 million hectolitres wine accounting for about 30 % the total German wine production. The number of wine cooperatives in Germany has been decreasing from about 264 in 2000 to 159 cooperatives in 2016<sup>1</sup>. By creating synergies and reducing costs an improvement of the economic situation should be attained. In 2016 the German cooperative sector could be classified into 157 primary and two secondary cooperatives. However, only 91 possessed their own vinification facilities. Around 41,000 grape growers are members of wine cooperatives in Germany. The acreage planted with vines by all members declined from about 37,000 hectares in 1990/1991 to 28,205 hectares in 2015/2016. Still, this vineyard area represents about 28 % of the total winegrowing area in Ger-

<sup>1</sup> 2016 is the last year for which comparable data are available. The most recent number is 150 Raiffeisen cooperatives in 2020 [32].

many. Most cooperatives are situated in the wine growing regions of Baden, Württemberg, and Palatinate. [13]

The size of wine cooperatives in Germany varies strongly. Especially minor cooperatives without own vinification facilities can be quite small, some only possess an acreage under cultivation of around 28 hectares, whereas other cooperatives (mostly with own vinification facilities) are larger and some even cultivate more than 1,400 hectares<sup>2</sup>.

According to their bye-laws, wine cooperatives are self-help organisations for grape producers. The business principles of wine cooperatives can be defined as “by the identity of users and owners, the democratic principle of voting, and the lack of entry barriers” [7]. Furthermore, the legally manifested business objective can be seen as a further characteristic [7]. The main aim is to improve the economic situation of their member businesses (GenG §1) [33] by enhancing the profitability and sustainability of their members [34,35]. In other terms, this refers to supporting the member businesses with highest possible pay-outs.

In cooperatives members and the management have a double function: they are both agents and principals at the same time (Double Principal-agent problem) [36–38]. Based on information asymmetries that arise due to the internal structure certain problems arise in cooperatives. Five general problem areas have been identified by Cook [39]: free-rider problem, horizon problem, portfolio problem, control problem (quantity and quality instabilities due to adverse selection and opportunistic behaviour as well as high agency costs), and influence cost problem (arising from different demands, interests, strategies, and goals of individual member businesses). Furthermore, Ringle [40] identified transaction cost problems and the problem of identification with the cooperative. Due to different interests and approaches to achieve cooperatives goals conflicts can occur [34]. Hanf and Schweickert [7] showed that member heterogeneity increases all challenges which were mentioned above. [35]

The business principles of (wine) cooperatives as well as the internal structure and consequent problems often lead to a strong member orientation [14]. Furthermore, cooperative members are of different size and some are full-time grape producers whereas others are only active part time in viticulture. There also often exists a strong heterogeneity among cooperative members, i.e. the business aim of the members can differ widely [15]. Members also differ in regard to their planning horizons and risk preferences [9]. The organizational form and member heterogeneity contribute to a

slow decision-making process, as it can be challenging to aggregate the different members’ preferences [9]. However, the key objective of all grape producers is to sell their grapes [15]. Consequently, members as well as cooperatives are often producer oriented [15]. In their article Hanf and Schweickert [15] aimed to disclose the area of conflict between member orientation and customer orientation for wine cooperatives.

### 3 FRAMEWORK OF COMPETITION INTENSITY

The structure of the German wine industry and degree of competition were analysed by using a framework based on the industry structure analysis. It offers the opportunity to analyse the competitive intensity within one industry as it investigates the industry conditions based on external factors. According to Porter [41], the following forces affect the competitiveness in an industry: (1) intensity of rivalry among existing competitors, (2) bargaining power of buyers, (3) bargaining power of suppliers, (4) threat of substitute products, and (5) threat of new entrants. To be able to derive strategic implications for the wine cooperatives each force is applied to the German wine industry from the perspective of wine cooperatives. The concluding predictions will be analysed in the empirical part of this study.

#### *Intensity of rivalry among existing competitors*

The German wine market is a saturated market. For many years the total volume of wine (incl. sparkling wine) traded in Germany varies between 19.5 and 20.2 million hl [22]. Hence, the market size is quite stable and consumption in Germany is not growing. After the large harvest in 2018 [42,43] it has been observed that high fixed (storage) costs could lead to price-cuts. To a certain extent product differentiation and branding can be achieved [44–47]. There are not many strong brands of German producers in the wine industry, though. Consumers and retailers have low switching costs as there exists a huge number of products of different producers in the market. Domestic producers are also in competition with both foreign producers and imported wines as Germany is leading the worldwide wine imports in respect to volume [1]. Production costs are high [48,49]. Exit barriers are high as well as high sunk costs occur when producers want to switch the production in favor of another product or exit the industry at all. Especially for those producers who are engaged in viticulture and wine production as their main source of income switching is not easy.

<sup>2</sup> Based on own interview results within this study.

*Prediction 1: The intra-industry competition is intense and rivalry among existing firms is high.*

#### *Bargaining power of buyers*

Both retailers and consumers are considered as customers. Most cooperatives with own vinification facilities produce large quantities and therefore need to distribute through supermarkets and/or discounters. Often, cooperatives also engage into direct sales to consumers. In Germany, five big store-based retail groups dominate the food retail market in Germany [6]. This shows that the concentration of food retailers is high. Compared to this the number of individual producers in Germany is high. Additionally, many foreign producers try to sell their products in the German market. This implies low switching costs for customers. During the past years the number of independent retailers that belong to the retail cooperatives Edeka and REWE group has been increasing [15,23,24,50]. They can partly decide about the offered product range [23] which makes it possible to work closely with regional producers. For wine producers forward integration is only possible through direct marketing but not through vertically integrating into the realm of food retail. For retailers, backward integration is not very common. The only existing example in Germany is Edeka group which has its own winery called Rheinberg Kellerei. Apart from this, retailers often have special contracts with wineries or other wine producers to secure the supply of certain products or to produce their own retail brands. Consumers also face low switching costs as they can choose from a broad band of different products.

*Prediction 2: Due to the low switching costs for customers and the availability of a large number of different products of domestic and foreign producers the bargaining power of buyers is high.*

#### *Bargaining power of suppliers*

The group of suppliers is divided into intra-cooperative suppliers (grape growers) and external suppliers which supply inputs other than grapes. Other suppliers include producers of glass bottles, barrels, tanks, corks, screwcaps, labels, cardboard, fining, additives, equipment, and machinery, etc. needed during the wine production process.

Due to the “one-member-one-vote”-principle, cooperative members have limited influence in the decision-making. That means that “irrespective of the amount of grapes or wine that members produce, all members

have the same voting power in assemblies” [51]. They always have the possibility to leave the cooperative but have to face switching costs. The grape prices are not negotiated with the grape growers but within the board of members and supervisory board. As these boards are being formed by their members the members that were selected into the boards have influence over grape prices. Information asymmetries can easily occur in the relationship of grape producers and the management of the cooperative [37] which can lead to opportunistic behaviour (e.g. free-riding on quality, partial delivery, ...) [52,53]. Up to now, only a few cooperatives in Germany seem to sanction their members when they are in breach of the contract [54,55]. Sanctions often remain low or have not been implemented [54,55] since cooperatives are threatened to lose members and vineyard area.

Suppliers of scarce or highly differentiated inputs have a high bargaining power. In the German wine industry this is especially true for suppliers of equipment and machinery. Strong suppliers exist in these fields which offer very specialized services for their products to their customers. Suppliers of other inputs such as glass, corks, screwcaps, labels, etc. are more frequent and are expected to have a lower bargaining power. All suppliers rely on a good reputation and customer satisfaction. There is neither a credible threat of forward integration from suppliers of other inputs nor a credible threat of backward integration from cooperatives. In the case of larger cooperatives, the bargaining power is expected to be higher than in the case of smaller cooperatives as large cooperatives supply large amounts of inputs.

*Prediction 3: Due to the specific structure of cooperatives and member-management relationship the bargaining power of grape suppliers is medium. For suppliers of other inputs than grapes bargaining power is expected to be medium as well.*

#### *Threat of substitute products*

Many substitutes for wine of German wine cooperatives exist in the market. These include wines from other national and international producers as well as all other alcoholic beverages such as beer and to a certain extent spirits, wine-based drinks, and cocktails [56]. There is also a recent trend emerging toward cannabis-based drinks [57]. Some big international beverage producers draw their attention to this market segment and launch products which contain THC-extracts [58]. As of today those products cannot be considered as a substitute yet but might be in future [57].

There is a high number of alcoholic beverages, but cooperatives often offer wines at a reasonable price-perfor-

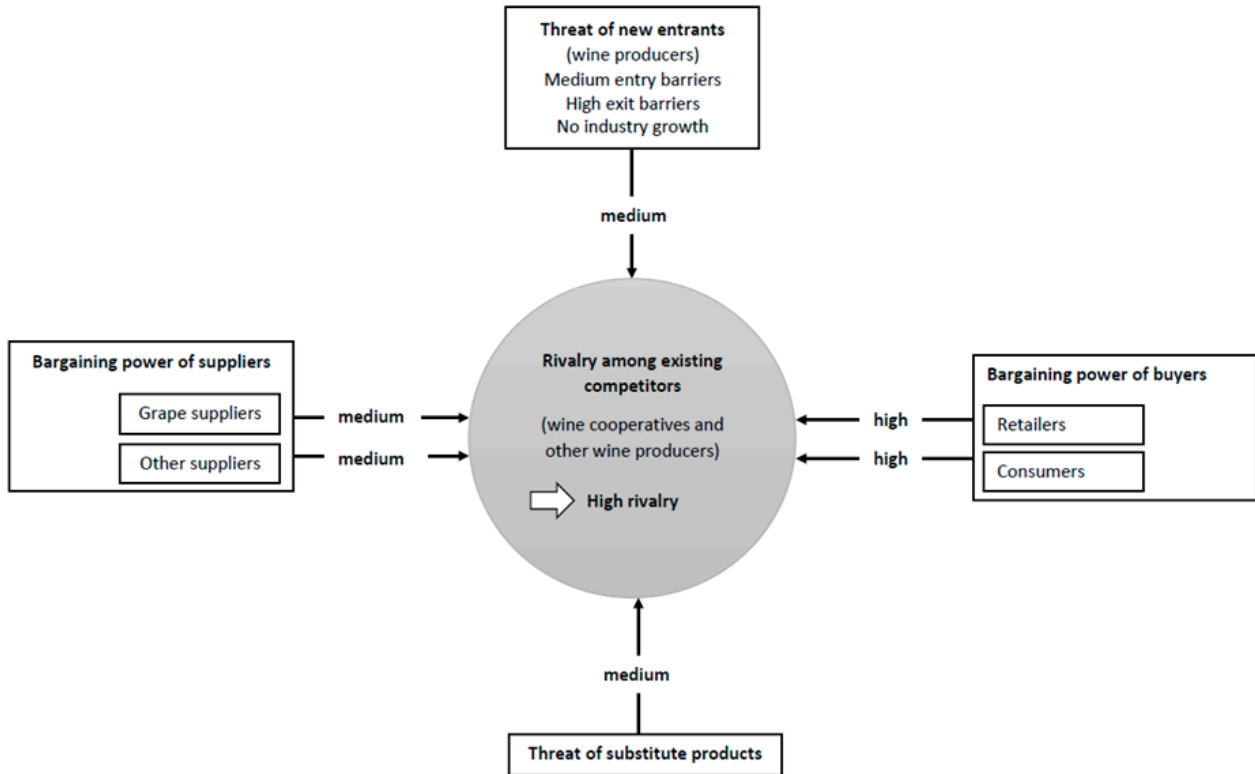


Figure 1. Framework of expected influence of each force.

mance ratio. Consumers can easily switch between products as there are many products to choose from. Wine producers and cooperatives might lose some consumers as they experiment with the introduction of new products.

*Prediction 4: The pressure from substitute products is medium.*

#### *Threat of new entrants*

All kind of new entrants which produce wine represent a threat to established wine cooperatives. These include newly founded cooperatives, wine producer associations, wine estates, and wineries. The most likely new entrants which represent a threat to established cooperatives are other wine producer associations and wine estates that purchase grapes. They both are dependent on grape producers like cooperatives, as they have a need for grapes as input for the production of large volumes and in order to gain market share.

Overall entry barriers to the German wine industry can be viewed as being medium. Factors that could deter potential entrants from entering the market are high capital requirements (e.g. for vineyards, equipment, machinery, production facilities) and high production

costs [48,49]. Also, high exit barriers occur for wine producers in the German market. They are high for both new entrants and established firms.

*Prediction 5: In the German wine industry barriers to entry are medium and barriers to exit are high. Thus, the threat of entrants is medium.*

Figure 1 shows a summary of the expected influence of each force.

## 4 EMPIRICAL STUDY

### *4.1 Sample and Interview Description*

So far, no research has been done explicitly on the structure and competitive intensity in the German wine market from the perspective of German wine cooperatives. Until now there has only been limited knowledge and an explorative study has been conducted. For this qualitative approach 15 in-depth interviews were conducted via telephone from July to September 2019<sup>3</sup>. The

<sup>3</sup> A total of 27 experts were initially contacted out of which 17 experts (including two pre-tests) agreed to be interviewed. Despite repeated attempts, no reply was received from seven of the contacted experts

interviews were done in German language, transcribed verbatim, and content analysed [59]. Then the main results were translated into English. In order to ensure a wide range of opinions and perspectives, interviewees from cooperatives were chosen which were located in different wine growing regions and different cooperatives of varying sizes. The cooperatives included in this study were all located in Baden, Württemberg, and Palatinate as these regions contain the highest numbers of cooperatives within Germany. Because cooperatives are not subject to publication requirements it was not possible to assemble information on the financial performance of the 15 cooperatives and to relate that information to the answers provided by the interviewees. In the case of wine cooperatives, the payments (grape money) members receive is the decisive performance criterion. This data is not available.

All interviewees of this study are actively working within the German wine industry. Managing directors and chairmen of the board were selected as interview partners as it is vital that all interview partners are involved in the day-to-day business of the cooperative and have in-depth information on structures, strategies, processes, and procedures.

Except for one, all interview partners agreed to the recording of the interview. In the case of the single exception, written minutes were produced. The length of the interviews varied; the shortest lasted 25 minutes while the longest lasted 55 minutes.

Different techniques were used during the interviews to minimize the social desirability bias. In the beginning of each interview details about the study were given including the purpose of the study and details on how the data would be used, how confidentiality would be guaranteed, and information about anonymity procedures. The interviewer also used techniques such as posing indirect questions about the behaviour of others, providing examples, assuring that there are no right or wrong opinions.

The applied research methodology is used to analyse the developed framework and to gain a deeper insight into the structure and competition in the German wine industry.

#### 4.2 Empirical Results

Regarding the *intensity of rivalry among existing firms*, results will be shown including the following

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and another three persons were not willing to give an interview. Two of which stated time constraints and the other one generally refuses to participate in interviews.

aspects: competitors, market size and evolution, storage and price-cuts, customers' switching costs, export activities, and approaches to face the situation of competition.

The interview partners are mainly considered as competitors, local competitors such as other successfully operating cooperatives or wineries in the same region, as well as foreign producers, that are able to produce wine at lower costs. All interview partners described the German wine market as a mature and stagnant market, without industry growth. The oversupply was mentioned several times<sup>4</sup>. The interviews, which had been conducted shortly before the harvest of 2019 indicated a severe situation of the market as the stocks were still well filled because of the large harvest in 2018 and producers felt the need to empty their storage for the new harvest. The interview partners highlighted the low switching costs their customers have. Both retailers and final consumers can choose between many different products. It was not confirmed that sunk costs are high as online platforms and newspaper advertisements exist to sell and buy second-hand equipment and machinery. In general, shelf space is limited and there is a fierce competition amongst wine producers.

The majority of the cooperatives included in this study is not engaged in export. Only one interviewee mentioned that the cooperative exports 35 % of total sales, another exports 5 %, and 13 interview partners mentioned small, irregular, or no export activities. Reasons cited for small export activities were the production of certain grape varieties or wine types (e.g. red wine), which are not demanded in potential import countries. Furthermore, the representatives stated the lack of financial resources for export. Six interview partners expressed interest in increasing their export activities.

To face the situation of competition, wine cooperatives follow different approaches depending on their size and managerial capabilities in pursuing a clear strategy. Seven interview partners spoke about optimising and reducing costs. Six of them were large cooperatives (> 500 ha under cultivation) and one was a medium-sized cooperative (100-499 ha). One manager stated as aim "to optimize costs and to keep costs permanently slim". With regard to the investment planning, another said that it is absolutely necessary to keep an eye on process optimisation and potential cost reductions. Several

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<sup>4</sup> A visible example of the struggle some German wine cooperatives face as a result of overproduction and a mature market is the cooperative Remstalkellerei eG, which had stopped grape pay-outs to its members because of financial difficulties and the lack of wine sales. In the newspaper article it was mentioned that there are still some quantities of the vintages 2014, 2015 and 2016, which the cooperative had not sold yet and the time has passed to sell those wines to the secondary cooperative at acceptable prices. [60].

cooperatives included in this study have already been part of a merger with the aim of creating synergies in terms of cost reductions. For cost optimisation, the technical facilities have to be up-to-date and the capacity utilisation has to be high, one interview partner specified. The high capacity utilisation contributes to lower the costs per unit (application of economies of scale). Another interview partner mentioned that the cooperative is filling all year in double-shift operations. The medium-sized cooperative also plans to build further collaboration to reduce costs. The manager wants the cooperative working together with other cooperatives or private businesses mainly from other wine growing regions to reduce costs. Such kind of collaboration also enables logistical advantages to customers as different wines from different producers from various wine growing regions can be offered “to get it all from one source”. Some interview partners mentioned being part of the WeinAllianz GmbH, which is a collaboration of 14 businesses from different wine-growing regions and of different type (cooperatives and wine estates) with the aim to reduce costs by sharing a joint sales force.

Besides optimising and reducing costs, cooperatives can use branding to differentiate from competitors. Some of the managers have a clear understanding of the meaning of branding. As one interview partner said: “Wine is a luxury good and hence there is a brand awareness and attachment to certain brands.” One manager spoke about strong competitors (mainly wineries) who produce wines of a certain brand where the brand concept behind is very similar to their own. Another cooperative offers different brands within the distribution channel depending on the retail chain. For Lidl, for example, they produce another brand than for Aldi or Netto. In order to be able to offer such cheap products in the discount, the cooperative even buys in cheap in order to be able to sell large quantities to the retailers. This business allows the cooperative to experiment with other things as there is a greater financial backup. Furthermore, the respective manager said: “This is not correlated with an enormous risk, as these are single brands, we can decide immediately to stop that.” He said: “The aim is to strengthen the brand and increase the demand for our brand, as this will also increase our negotiation power and then we will be able to also increase prices and revenues.” However, another interview partner highlighted: “You can’t establish brands from one day to another. You need to let a brand grow, and therefore you need time.”

Instead of using brands for differentiation others mentioned to use certain attributes in the communication with customers that are relevant to them. One man-

ager stated that the cooperative was even certified as sustainable producer and uses this attribute in marketing communications. Besides this one, others also highlighted that cooperatives live values that recently have gained importance such as joint production, co-working, solidarity, partnership, local production, transparency, and sustainability.

Regarding investments in tangible and intangible assets, the interviews showed that it is much easier to realize investments in tangible assets such as machinery or equipment. Investments in intangible assets are often more difficult to realize. One statement should be given exemplarily: “Investments in tangible assets, e.g. cellar, cellar equipment..., are always easier and better understood by the members, than investments in intangible assets, such as the marketing agency and sales topics. There we have to put more effort into the conviction.” Only one interview partner clearly disagreed and stated that there was no difference at all between such investments.

The prediction of a high intensity of rivalry among existing firms within the German wine market was confirmed.

On the subject of the bargaining power of buyers, the interviews showed that the market environment is as described before: the food retail (incl. discounters) in Germany is concentrated and demands minimum quantities for a nationwide supply. However, the increasing number of independent retailers of the Edeka and REWE group represent a new and attractive distribution channel for cooperatives, wineries, and wine estates. Often, they own several markets within one region. Hence, they demand smaller quantities compared to nationwide distributing food retailers, and are interested in working with regional producers. The interviews showed that the competition within such regional retailers is fierce as well. In most wine regions retailers can choose from numerous different producers. The interview partners mentioned that during negotiations with specialised wholesalers and gastronomy other factors vitally important, which influence the business relationship including long-term business relationships, mutual trust, and reliability. In negotiations with retailers, besides prices, conditions such as extra services or reimbursements depending on the sales performance are being negotiated. For German retailers it is not common to backward integrate.

In respect to the consumer all interviewed cooperatives stated that they have established direct sales to consumers. The share distributed via direct sales ranges from 8-50% of total sales in volume between the interviewed cooperatives. Direct marketing is attractive for wine producers as this entails the highest margins for



the cooperative without sharing margins with retailers. To increase direct sales, cooperatives conduct in-store wine tastings, offer wine touristic activities (e.g. guided walk through the vineyards with wine tastings; wine festivals; after-work get-togethers for young professionals). Some cooperatives also maintain an own online-shop for direct sales to consumers. Most interview partners desire to increase the percentage of direct sales to consumers.

The prediction of a high bargaining power of buyers was not confirmed as it strongly depends on the distribution channel and size of the cooperative as to which party has a greater influence in negotiations.

In terms of the *bargaining power of suppliers* the interviews revealed that in most cases the management of cooperatives is challenged regarding the relationship with grape suppliers, which are their members. Due to their potential influence in decision making as board members and interest in the highest-possible pay-outs the management of cooperatives is challenged to keep their members satisfied. Some cooperatives struggle with loosing members whereas other successfully operating cooperatives cannot or do not want to accept new members. Some have installed e.g. social mechanisms regarding incentives and control which help to give guidance and support to the members and work market oriented. Some cooperatives organize farmer reunions to inform members about ongoing projects. According to the interview partners, this also helps to raise the member's identification with the cooperative. As expected, the bargaining power of grape suppliers is medium.

In the relationship with their suppliers of inputs other than grapes, the cooperatives included in this study work in different ways. Cooperatives which are attached to the secondary cooperative<sup>5</sup> mostly order inputs of those suppliers with which the secondary cooperative works in order to obtain better conditions. Thus, those do not negotiate on prices and conditions. The bargaining power strongly depends on the size of the cooperative and the type of supplier. Large cooperatives that represent an important customer for the supplier, e.g. a regional supplier of etiquettes or closures, have the possibility to influence negotiations. Smaller cooperatives do not have many possibilities to negotiate on prices, but mostly prefer to work with their regional supplier and have a long-term and stable relationship instead of changing the supplier frequently. In the case

of suppliers of technology, equipment, and machinery, room for negotiation is very limited. As these suppliers offer certain services and are very specialized, they are the one in control. Overall, the representatives of the cooperatives mentioned that three factors are decisive for the business relationship with suppliers: the duration, reliability, and reasonable prices. The statements of the interview partners show a clear tendency: The smaller the cooperative, the less important is the price, and the more important is a stable relationship with regional suppliers; the larger the cooperative, the more important is the price, as this is more cost-driven. No information was provided regarding the potential threat of forward integration by suppliers. Regarding the threat of backward integration of wine cooperatives, the interview partners did not show interest in producing their own inputs (except for grapes). The prediction about the medium bargaining power of suppliers (both grape suppliers and other suppliers) was confirmed.

To estimate the *pressure from substitute products* interview partners were asked about the kind of products considered as substitutes they compete with as well as consumer preferences and developments in this field. For most cooperatives especially regional competitors with products at the same quality level, price range, and grape variety are rated excessively high in the assessment. These competitors are mainly private-owned wine estates or wineries close by but also other wine cooperatives in the same region. Furthermore, some interview partners mentioned low-cost products from abroad as strong substitutes. Especially for producers from the wine growing region Württemberg that is mainly producing red wines, wines from producers from countries such as Italy, France, and Spain, are evaluated to be strong substitutes. However, other product categories of alcoholic beverages, such as beer, spirits, or wine-based drinks were not considered to be strong substitutes. New product developments such as cannabis-based drinks were not mentioned explicitly by any of the interview partners. One interview partner highlighted the importance of being attentive to market developments: "You try to analyse your market environment and decide, where you could sell more. It is also essential to analyse the wine types and grape varieties (such as Pinot Gris, Blanc de Noir, Rosé) which are demanded at the moment. It is important to discuss about this frequently with the ones who are responsible, thinking about innovations and about which products to cut off." Five interview partners spoke about the importance of product innovations. One interview partner mentioned to have invented a new product that was not known on the German market so far. It is an aromatised wine-based

<sup>5</sup> According to the interview partners, cooperatives that are attached to the secondary cooperative are cooperatives without own vinification facilities as well as cooperatives that have a contract with the secondary cooperative for partial delivery. The latter have own vinification facilities but deliver a fixed amount of the harvest directly to the secondary cooperative for further vinification.

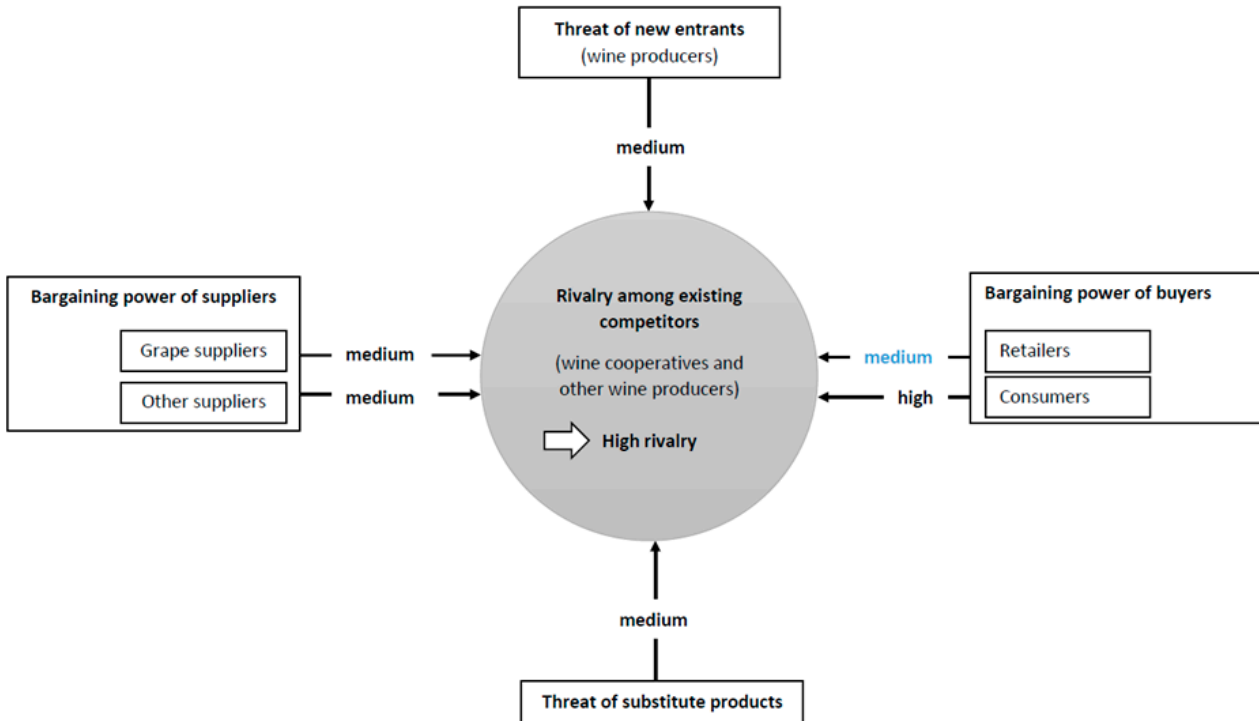


Figure 2. Framework of actual competition in the German wine industry.

drink, more specifically a red-wine aged in whiskey barrels. One also noticed: “Product innovations also require investments: time and money, in order to push the product into the market.” The threat of substitutes is medium, hence, the prediction was confirmed.

Regarding the *threat of new entrants* the experts stated that economies of scale and scope apply in the wine industry which might retain new entrants from actually entering the industry. Switching suppliers is not always easy, especially in the case of suppliers of equipment and machinery. Working in viticulture and wine production requires high investments, which lowers the threat of new entrants. Also, production costs for wine are high. Product differentiation in terms of branding and product innovation is still possible in the German wine market which makes it more attractive for producers to enter the wine industry. It could not be confirmed that switching costs to produce other products (such as juices, spirits, or wine-based drinks) are high. Several interview partners mentioned the new emerging competition in terms of private-owned wine estates that buy-in grapes from grape producers. In order to be able to guarantee the quantities and grape qualities required for the distribution channel of the independent retailers, wine estates are now increasingly dependent on cooperations/cooperating with grape producers. Due to these developments grape producers

have more alternatives for the sale of their grapes, which results in the migration of members. Besides, nearly all interview partners mentioned to struggle with succession. According to the interview partners full-time grape producers often have a successor, as full-time viticulture offers the basis for making a living. One interview partner stated: “It is a challenge to motivate the young generation for the cooperative system. Also finding young people who are willing to work voluntarily in the committees is difficult.” Overall, the prediction about a medium threat of new entrants was confirmed.

Figure 2 shows the framework of actual competition in the German wine industry.

## 5 DISCUSSION AND IMPLICATIONS

The following implications do not only apply to the German wine cooperatives but also partly to wine cooperatives in other European countries. In other European countries which traditionally produce wine differences in production and consumption is increasing and the markets are saturated as well [61]. Furthermore, cooperatives play an important role in countries like Spain, France or Italy. In Spain, for example, cooperatives account for 60 to 65 % of the total Spanish wine production [62]. Due to

the saturated market, cooperatives in Germany and other European countries face the same challenge: to pursue a clear strategy in order to gain a competitive advantage. However, to a certain extent, the derived strategies can only be applied to German wine cooperatives as the market structure differs from some of its neighbouring countries due to the high wine imports from other countries.

#### *Need for market orientation and competitive strategy*

The results showed that wine cooperatives in Germany face the situation of intense competition. With the high number of imported products and a wide availability of products with a good price-quality ratio, German consumers have the choice. Besides, the increasing share of wine distributed via discounters and food retail emphasizes the need for cooperatives to work market oriented. The narrow focus on the level of pay-outs and internal structure of cooperatives leads to a strong production and member orientation in many cooperatives, and prevents them from following a more market-oriented approach. This result is consistent with the findings of Hanf and Schweickert (2014) who state “customer orientation is the key to success” [15]. Certainly, the pursuit of a clear strategy is necessary to tackle the intense competition.

On one hand cooperatives have to find a competitive position within the industry and on the other hand they have to foster the relationship with their members to retain members and vineyard areas. The focus on just one of those aspects will not be sufficient to compete successfully in the long-run. High grape pay-outs and member satisfaction can only be achieved if the cooperative is working successfully in the market and generating a surplus. Schamel [63] found that the success of wine cooperatives also depends on particular social factors (e.g. member commitment and trust) as well as on organizational control variables (e.g. training activities).

In terms of means of achieving a competitive advantage and determine the respective strategy (and based on the scale of the enterprise and scope of the line), cooperatives can follow the strategy of cost leadership, cost focus, differentiation, or differentiation focus. Cost leadership as a generic strategy to become the industry’s low cost producer can only be chosen by a few players in the German wine industry [64]. Alternatively, producers can choose differentiation.

#### *Cost leadership and cost focus strategy*

Of the interviewed cooperatives, mainly large cooperatives implement the cost focus strategy for a nation-wide

distribution. As shown in the results, managers pay attention to keeping the technological equipment and facilities up-to-date and having a high capacity utilisation. Furthermore, collaboration among producers is seen as a possibility to lower costs in terms of joint sales activities. For the cost focus strategy, the application of economies of scale and scope are vital. The decreasing number of wine cooperatives in Germany and recurring news about mergers of cooperatives show that this is one of the measures cooperatives take to lower the production costs.

Small and medium-sized cooperatives can aim for regional cost leadership. Apart from the secondary cooperatives it is difficult for wine cooperatives to strive for an industry-wide cost leadership as wineries produce low-cost wines of German and international origin.

#### *Differentiation and differentiation focus strategy*

Results have shown that the bargaining power of retailers in the German wine industry is often high depending on the distribution channel. In some cooperatives, direct sales to consumers account for up to 50 % of their total sales volume. Direct marketing is attractive for most cooperatives as avoiding retail channels provides them for a better margin. Thus, most of the interview partners aim to increase the share of direct marketing. Options for cooperatives in the wine sector to lower the bargaining power of retailers are: (1) establishment of strong brands, (2) development of new products, (3) market development, and (4) using attributes in the communication with customers that are relevant to them. These options are also applicable to wine cooperatives in other countries.

- (1) The establishment of strong brands will allow to differentiate from other wine producers. This will help to increase sales. Brands give orientation to the consumer. E.g. consumers that have had a positive experience with the cooperative (e.g. during a wine touristic activity, wine fest, tasting) are more likely to choose the wine when to decide which wine to buy at the point of sale at the retailer. However, as shown in the interviews, the establishment of brands is costly and needs a long-term plan. Besides, in most cases the investment in intangible assets is difficult for wine cooperatives due to their internal structure and the horizon problem (cf. results and [31]). Krieger et al. (2014) [31] suggest that these problems can, however, be solved by an explicit definition of competences and greater budgetary authority for the brand managers of a cooperative.
- (2) Another possibility is the development of new products. As shown in the results, five of the interview

partners have already identified product innovations as important tool to increase or stabilise sales. Innovations such as aromatised wine-based drinks diversify the product portfolio. This is in line with Grashuis (2018) who found that some cooperatives respond to the ongoing segmentation of consumers with product and process innovation in order to diversify the product portfolios [65].

- (3) The results showed that export activities of the interviewed cooperatives remain - in most cases - still at a low level. Several interview partners demonstrated their interest in increasing exports. Based on sound market research, the identification of new export markets and investment into export activities contribute to the development of new markets.
- (4) As shown in the results interview partners mentioned positive effects of using attributes in the communication with customers that are relevant to them. An example is the usage of the characteristic of being a sustainable producer which can be used as differentiation focus strategy. One interview partner mentioned the certification of the cooperative as sustainable producer which was assessed as competitive advantage by the manager. Cooperatives which follow the approach of sustainable production should use this as an outstanding feature in communication with customers. Furthermore, the usage of the "farmer-owned" attribute can provide a marketing advantage over non-cooperatives [14]. Consumers might associate the cooperative with certain social values such as democracy, equality, or solidarity, which can also provide a marketing advantage [14,66]. Cooperatives could use these values for differentiation [67].

#### *Collaboration among producers*

As mentioned in the interviews, another option to lower the bargaining power of retailers is the establishment of inter-firm collaboration. The results show that in Germany so far apart from the collaboration of some interviewed cooperatives with the secondary cooperatives (joint production and distribution of wine) or joint marketing efforts of certain wine-growing regions (e.g. Weinheimat Württemberg) only few collaborate with other producers (e.g. being part of the WeinAllianz GmbH). Especially small and medium-sized cooperatives should develop a collaboration with other producers, e.g. with other cooperatives or wine estates from different wine-growing regions in Germany. This can be implemented as a collaboration between two or more German cooperatives with the objective to join forces

and lower costs for joint participation in trade fairs or joint marketing and sales efforts. Such type of collaboration among producers could also be applied in other countries where market structures, common goals and joint interests allow building strategic alliances.

#### *Offering additional services for B2B and B2C customers*

Another option to lower the bargaining power of retailers is to expand and improve additional services. As retailers can be considered to be gatekeepers to consumers, the requests of retailers have to be fulfilled. Requests can include a professional supply chain management, including a prompt and timely delivery as well as minimum delivery volumes [15]. For products of retail brands, a high product quality is a prerequisite [15]. Furthermore, medium and large cooperatives could offer consultancy for food retailers in terms of category management. This in turn emphasizes the need for market orientation and hence, customer orientation which is essential for building a professional relationship with the customer. Cooperatives can also offer additional services for gastronomy and specialized wholesalers to create added value and by this to enhance their competitive position. Another promising approach for cooperatives not yet in direct contact with the Edeka and REWE group is to offer their wine range to independent retailers who are able to shape their product portfolio. In this study it was shown that independent retailers gain importance in the German market. Bitsch et al. (2020) [23] have shown that this distribution channel offers a good possibility to market wines for those players who are not able to supply the nation-wide market. By offering concepts closely oriented to specialized retail, consumers also often have the chance to ask for advice of special sales staff and to taste wines at the point of sale, which influences their willingness to pay.

Besides the expansion and improvement of additional services for retailers cooperatives should also pay attention to the increase of services offered to consumers. This can include for instance the intensification of wine-touristic activities. Especially small and medium-sized cooperatives should build on regionality, customer relations, and innovative events.

#### *Options for improved membership relations and increased youth involvement*

This study showed that wine cooperatives in Germany have to deal with member fluctuation and the question of succession. In order to counter this, coopera-

tives should improve membership relations by increasing the flexibility of membership and terms of delivery (e.g. permitting partial delivery). Based on the principles laid down in the cooperatives bye-laws members of some cooperatives are allowed to deliver their grapes either to the cooperative or to sell them to wineries or wine estates at better conditions [37,54,55,68]. Research has shown that the permission of partial delivery in wine cooperatives in Germany can contribute to retain members and support member businesses<sup>6</sup> [54,55,70].

A different activity to improve membership relations and increase youth involvement is the promotion of intergenerational exchange in line with peer-to-peer learning. Cooperatives can implement a mentor-system where old and young grape producers can learn from each other not only on technical issues but of equal importance for the cooperatives topics on the rights, duties, opportunities, and long-term vision of being a cooperative member and board member. Adapting this approach older members get in touch with younger members and potential successors who want to take over vineyard areas. This includes also the promotion of interaction among members and with the board and the management of the cooperative.

Another form of peer-to-peer learning a cooperative can offer is the support for young grape producers to acquire practical skills and know-how for working in viticulture by offering demonstration plots where young members can try new techniques and share experiences. The interviews show that some cooperatives already have such groups for young members.

Moreover, the cooperative can establish an internship programme for young talented persons with interest in viticulture. Such a programme could include a mix of internships at the organising wine cooperative, partner cooperatives (in Germany and abroad), wine estates, retailers, research institutes, the German Wine Institute (DWI), or the European and overseas information offices

of the DWI, high-end gastronomy, and (wine) trade fair organisers. By this, the whole sector would be covered, and first-hand experiences could be offered in viticulture, oenology, marketing, the cooperative system and applied research.

However, there is not “one strategy for all” but the results of this study demonstrate that there are many options and approaches for wine cooperatives to develop an adequate strategy for their specific situation to meet intense competition and to compete successfully in the (German) wine market.

## 6 SUMMARY

Changes in consumption and market developments affect the opportunities for wine cooperatives to compete successfully in the wine market. In Germany, today about 50 % of the total wine volume is sold through discounters, 28 % via retailers, and 11 % via direct sales. Seven percent of the total volume is marketed via specialized retail, and four percent via online retail.

The number of wine cooperatives in Germany has decreased from about 264 in 2000 to 159 cooperatives in 2016. Correspondingly, the number of members has declined. The concentration of wine cooperatives is ongoing and reflects the struggle cooperatives face with the recent situation on the German wine market.

To be able to give recommendations for wine cooperatives on how to strengthen their position within the industry, the German wine industry was analysed by using the model of the five forces that affect the competitiveness in an industry. For this, and based on a wine market description, predictions for each force were formulated. In-depth interviews with 15 representatives of German wine cooperatives were conducted. The results show a high intensity of rivalry among existing competitors. Bargaining power of buyers and suppliers is medium, constrained by the actual size of the cooperative. The threat of substitute products is medium, as well as the threat of new entrants.

The results of the interviews which have been conducted permit to derive strategic implications for wine cooperatives in Germany as well as in other European countries with saturated markets. Recommendations which address the competitive position of cooperatives in the wine industry include (1) the cost leadership and cost focus strategy, (2) the differentiation and differentiation focus strategy, (3) collaboration among producers, (4) offering additional services, and (5) options for improved membership relations and increased youth involvement. In the end, it is a difficult task for coopera-

<sup>6</sup> To find out to what extent partial delivery is applied in practice and what significance it has in the German cooperative system the authors [55] conducted 20 expert interviews with managing directors, cooperative members and other experts of the German cooperative system. The authors showed that partial delivery is officially applied in practice on a small scale and unofficially on a larger scale. The official partial delivery applies if the cooperative allows the partial delivery. Cooperative members are then obliged to sell their grapes to market participants other than wine cooperatives or producer associations [69]. Unofficial partial delivery means that the full delivery obligation is circumvented by splitting the members business or by using lease and cultivation contracts. Once the entire vineyard area has been divided, new sites are created and registered to family members. This means that only a part of the vineyard area remains in the cooperative. The area belonging to the newly established business can be freely marketed through other sales channels.

tives to develop an adequate strategy to meet the intense competition but many possibilities to strengthen the position and work future-oriented exist.

Arguably the most important limitation of the empirical study is the exclusive consideration of wine cooperatives from Germany. It is difficult, if not impossible, to apply the findings and conclusions to wine cooperatives in Europe or even apply them on a worldwide level. Another limitation is the limited selection of cooperatives included in this study (from only three out of 13 of the German wine growing regions).

#### REFERENCES

- [1] OIV, State of the vitiviculture world market: State of the sector in 2018. April 2019, 2019, <http://www.oiv.int/public/medias/6679/en-oiv-state-of-the-vitiviculture-world-market-2019.pdf>, accessed 10 April 2020.
- [2] OIV, State of the vitivicultural sector in 2019. April 2020, 2020, <http://www.oiv.int/js/lib/pdfjs/web/viewer.html?file=/public/medias/7256/oiv-state-of-the-vitivicultural-sector-in-2019.pdf>, accessed 27 April 2020.
- [3] E. Pomarici, Recent trends in the international wine market and arising research questions, *Wine Economics and Policy* 5 (2016) 1–3. <https://doi.org/10.1016/j.wep.2016.06.001>.
- [4] Deutsches Weininstitut, Weinumsatz in Deutschland gestiegen. Pressemeldung, 2019, <https://www.deutscheweine.de/presse/pressemeldungen/details/news/detail/News/weinumsatz-in-deutschland-gestiegen-1/>, accessed 9 April 2020.
- [5] Nielsen, Die Deutschen setzen auf effizientes Einkaufen - Nielsen App zeigt die Trends zu Verbrauchern, Handel und Werbung: Märkte und Finanzen, 2019, <https://www.nielsen.com/de/de/insights/article/2019/consumers-app/>, accessed 10 April 2020.
- [6] Bundeskartellamt, Sektoruntersuchung Lebensmitteleinzelhandel: Darstellung und Analyse der Strukturen und des Beschaffungsverhaltens auf den Märkten des Lebensmitteleinzelhandels in Deutschland. Bericht gemäß § 32 e GWB - September 2014, 2014, [http://www.bundeskartellamt.de/Sektoruntersuchung\\_LEH.pdf%3F\\_\\_blob%3DpublicationFile%26v%3D7](http://www.bundeskartellamt.de/Sektoruntersuchung_LEH.pdf%3F__blob%3DpublicationFile%26v%3D7), accessed 10 April 2020.
- [7] J.H. Hanf, E. Schweickert, Changes in the wine chain-Managerial challenges and threats for German wine co-ops: AAWE Working Paper No. 7. American Association of Wine Economics (2007).
- [8] K. Herrmann, W. Engelhard, Schlüssel für die Zukunft: Deutsche Winzergenossenschaften, *Wein+Markt* (2019) 24–28.
- [9] B. Frick, Some Cooperatives Produce Great Wines, but the Majority Does Not: Complementary Institutional Mechanisms to Improve the Performance of an Indispensable Organizational Form, *J Wine Econ* 12 (2017) 386–394. <https://doi.org/10.1017/jwe.2017.33>.
- [10] Meiningers Weinwelt, Premium-Markenweine 2018 | [meininger.de](http://meininger.de) (2018).
- [11] J. Bijman, C. Iliopoulos, Farmers' Cooperatives in the EU: Policies, Strategies, and Organization. *Annals of Public and Cooperative Economics*, 85(4), 497-508, *Annals of Public and Cooperative Economics* 85 (2014) 497–508. <https://doi.org/10.1111/APCE.12048>.
- [12] J. Bijman, C. Iliopoulos, K.J. Poppe, C. Gijssels, K. Hagedorn, M. Hanisch, G.W.J. Hendrikse, R. Kühl, P. Ollila, P. Pyykkönen, G. van der Slangen, Support for Farmers' Cooperatives: Final Report., 2012.
- [13] Deutscher Raiffeisenverband e.V., Statistischer Bericht 2017 (2017).
- [14] J. Grashuis, The impact of brand equity on the financial performance of marketing cooperatives, *Agribusiness* 35 (2018) 234–248. <https://doi.org/10.1002/agr.21574>.
- [15] J.H. Hanf, E. Schweickert, Cooperatives in the balance between retail and member interests: the challenges of the German cooperative sector, *Journal of Wine Research* 25 (2014) 32–44. <https://doi.org/10.1080/09571264.2014.871122>.
- [16] E. Schweickert, Unternehmensstrategien in der Weinwirtschaft im Rahmen der EU-Weinmarktordnungspolitik: Gießener Schriften zur Agrar- und Ernährungswirtschaft; 33, DLG-Verlag, Frankfurt, M., 2007.
- [17] D. Hoffmann, Weinmarkt, *German Journal of Agricultural Economics* 61 (2012) 83–92.
- [18] CBI, Competition for Wine in Germany, 2016, [https://www.cbi.eu/sites/default/files/market\\_information/researches/competition-germany-wine-2016.pdf](https://www.cbi.eu/sites/default/files/market_information/researches/competition-germany-wine-2016.pdf), accessed 9 April 2020.
- [19] M. Dressler, The German Wine Market: A Comprehensive Strategic and Economic Analysis, *Beverages* 4 (2018) 92. <https://doi.org/10.3390/beverages4040092>.
- [20] S. Loose, E. Pabst, Current State of the German and International Wine Markets, *German Journal of Agricultural Economics* 67 (2018) 92–101.
- [21] J. Hanf, E. Schweickert, V. Belaya, Power asymmetries in the wine chain: Implications for the management of the chain, *Enometrika* 2 (2009) 29–46.

- [22] Deutsches Weininstitut, Deutscher Wein: Statistik 2019/2020 (2020).
- [23] L. Bitsch, E. Volzer, B. Richter, J.H. Hanf, Der selbstständige Einzelhandel - Ein neuer Vertriebskanal für Weingüter, *Berichte über Landwirtschaft-Zeitschrift für Agrarpolitik und Landwirtschaft* 98 (2020).
- [24] L. Bitsch, E. Volzer, J.H. Hanf, Struktur im Wandel, *Der Deutsche Weinbau* (2019) 48–51.
- [25] Edeka, Robert Weil Junior Burgunder-Weine - exklusiv bei EDEKA, 2020, <https://www.edeka.de/unsere-marken/eigenmarken-lebensmittel/edeka-weine/robert-weil-junior.jsp>, accessed 10 April 2020.
- [26] Weinwirtschaft, Weil startet rheinhessische Marke, 2017, <https://www.meininger.de/de/weinwirtschaft/news/weil-startet-rheinhessische-marke>.
- [27] BMEL, Ertragslage Garten- und Weinbau 2019: Statistik und Berichte des Bundesministeriums für Ernährung und Landwirtschaft (2019).
- [28] Deutscher Bauernverband e.V., Strukturwandel, 2020, <https://www.bauernverband.de/themendossiers/strukturwandel>, accessed 9 April 2020.
- [29] Deutscher Bauernverband e.V., Strukturwandel: Betriebe und Betriebsgrößenstrukturen im Wandel, 2020, <https://www.bauernverband.de/themendossiers/strukturwandel/themendossier/betriebe-und-betriebsgroessenstrukturen-im-wandel>, accessed 9 April 2020.
- [30] Statistisches Bundesamt, Landwirtschaftliche Betriebe mit Rebfläche 2016, 2013 und 2010 nach landwirtschaftlich genutzter Fläche (LF) und Rebfläche sowie nach Größenklassen der Rebfläche, 2017, <https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Wein/Tabelle/betriebe-rebflaechen-qualitaetsweinbau-groessenklassen.html>, accessed 9 April 2020.
- [31] C. Krieger, J.H. Hanf, V. Belaya, Markenbildung und -führung bei Winzergenossenschaften: Ergebnisse einer Unternehmensbefragung, *Berichte über Landwirtschaft - Zeitschrift für Agrarpolitik und Landwirtschaft*, Band 92, Heft 3, Dezember 2014 (2014) 1–23. <https://doi.org/10.12767/BUEL.V92I3.56>.
- [32] Deutscher Raiffeisenverband e.V., Anzahl der Winzergenossenschaften in Deutschland, Auskunft Herr Paulun, 2020.
- [33] Bundesamt für Justiz, Gesetz betreffend die Erwerbs- und Wirtschaftsgenossenschaften (Genossenschaftsgesetz - GenG) § 1 Wesen der Genossenschaft: GenG, no date.
- [34] J. Bijman, Cooperatives and heterogeneous membership: eight propositions for improving organizational efficiency: Paper presented at the EMNet-Conference, Budapest, Hungary, 2005.
- [35] L. Bitsch, J.H. Hanf, Are wine co-ops too oldschool?: Paper presented at the ICA-CCR European Research Conference, Berlin, Germany, 2019.
- [36] C. Eilers, C.H. Hanf, Contracts between Farmers and Farmers – Processing Co-operatives: A Principal-Agent Approach for the Potato Starch Industry, in: G. Galizzi, L. Venturini (Eds.), *Vertical Relationships and Coordination in the Food System*, Physica-Verlag HD, Heidelberg, 1999, pp. 267–284.
- [37] L. Ingenwerth, P. Sparer, A. Thein, J. Hanf, M. Iselborn, Analyse der Rollenverteilung in Winzergenossenschaften im Kontext des Qualitätsmanagements: Schriftlicher Beitrag anlässlich der 55. Jahrestagung der Gesellschaft für Wirtschafts- und Sozialwissenschaften des des Landbaues e.V. „Perspektiven für die Agrar- und Ernährungswirtschaft nach der Liberalisierung“ (2015).
- [38] M. Iselborn, J.H. Hanf, Organisation, Rollenverteilung und Produktqualität deutscher Winzergenossenschaften. *Berichte über Landwirtschaft - Zeitschrift für Agrarpolitik und Landwirtschaft*, Band 95, Heft 2, August 2017 (2017). <https://doi.org/10.12767/BUEL.V95I2.162>.
- [39] M.L. Cook, The Future of U.S. Agricultural Cooperatives: A Neo-Institutional Approach, *American Journal of Agricultural Economics* 77 (1995) 1153–1159. <https://doi.org/10.2307/1243338>.
- [40] G. Ringle, *Genossenschaftliche Prinzipien im Spannungsfeld zwischen Traditionen und Modernität*, Hochsch., Fachbereich Wirtschaft; HWS-Hochsch.-Wismar-Service, Wismar, 2007.
- [41] M.E. Porter, *Competitive strategy: Techniques for analyzing industries and competitors*, 1st ed., Free Press, New York, 2004.
- [42] Weinwirtschaft, Deutsche Ernte kleiner als erwartet, 2019, <https://www.meininger.de/de/weinwirtschaft/news/deutsche-ernte-kleiner-als-erwartet>, accessed 10 April 2020.
- [43] Weinwirtschaft, Ins andere Extrem, 2018, <https://www.meininger.de/de/weinwirtschaft/news/ins-andere-extrem>, accessed 10 April 2020.
- [44] M. Ortner, J.H. Hanf, Marken-Macher: Handelsmarken bieten eine Möglichkeit für Weingüter, sich neue Absatzwege zu erschließen, *Der Deutsche Weinbau* (2020) 39–41.
- [45] GetränkeZeitung, Aldi Süd stärkt Premium-Wein-Sortiment, 2019, <https://www.meininger.de/de/getraenke-zeitung/news/aldi-sued-staerkt-premium-wein-sortiment>, accessed 10 April 2020.
- [46] Weinwirtschaft, Eigenmarke bei Aldi Süd, 2019, <https://www.meininger.de/de/weinwirtschaft/news/eigenmarke-bei-aldi-sued>, accessed 10 April 2020.

- [47] Weinwirtschaft, Casillero del Diablo bei Aldi, 2019, <https://www.meininger.de/de/weinwirtschaft/news/casillero-del-diablo-bei-aldi>, accessed 10 April 2020.
- [48] M. Stelzig, Was kostet ein Wein?, *Meiningers Weinwelt* (2019).
- [49] A.F. Geyrhofer, Die Kosten heben ab: Rationalisierung, *Der Deutsche Weinbau* (2019) 27–32.
- [50] J. Mende, J. Busche, Kaufleute stärken Rewe: Privatisierung im Fokus, 2019, <https://www.lebensmittelzeitung.net/handel/Privatisierung-im-Fokus-Kaufleute-staerken-Rewe-142096?crefresh=1>, accessed 10 April 2020.
- [51] E. Montaigne, A. Coelho, Structure of the producing side of the wine industry: Firm typologies, networks of firms and clusters, *Wine Economics and Policy* (2012) 41–53. <https://doi.org/10.1016/j.wep.2012.12.002>.
- [52] D. Pennerstorfer, C.R. Weiss, Product quality in the agri-food chain: do cooperatives offer high-quality wine?, *European Review of Agricultural Economics* 40 (2013) 143–162. <https://doi.org/10.1093/erae/jbs008>.
- [53] G.H. Schamel, Can German wine cooperatives compete on quality?, *BIO Web Conf.* 5 (2015) 3003. <https://doi.org/10.1051/bioconf/20150503003>.
- [54] J.H. Hanf, L. Bitsch, U. Schilling, Partial delivery: Opportunity or threat for wine cooperatives, *BIO Web Conf.* 12 (2019) 3011. <https://doi.org/10.1051/bioconf/20191203011>.
- [55] U. Schilling, L. Bitsch, J.H. Hanf, Das Konzept Teilsablieferung in Winzergenossenschaften – Herausforderungen für Winzergenossenschaften. *Berichte über Landwirtschaft - Zeitschrift für Agrarpolitik und Landwirtschaft, Aktuelle Beiträge* 97 (2019). <https://doi.org/10.12767/buel.v97i2.240>.
- [56] S. Loose, G. Szolnoki, Anstatt oder Zusatz: Weinhaltige Getränke – welche anderen alkoholischen Getränke werden verdrängt (2016) 44–47.
- [57] S. MacGuill, Legal Cannabis: The Billion Dollar Market Set to Disrupt Consumer Goods, 2019, <https://blog.euromonitor.com/legal-cannabis-the-billion-dollar-market-set-to-disrupt-consumer-goods/>, accessed 10 April 2020.
- [58] GetränkeZeitung, Oettinger probiert's mit Hanf-Bier, 2019, <https://www.meininger.de/de/getraenke-zeitung/news/oettinger-probierts-mit-hanf-bier>.
- [59] P. Mayring, *Qualitative Inhaltsanalyse: Grundlagen und Techniken*, 12th ed., Beltz, Weinheim/Basel, 2015.
- [60] M. Winterling, Wirtschaftlich desaströse Lage: Genossenschaft stoppt Auszahlung des Traubengelds, des Lohns der Wengerter, *Rems-Murr-Rundschau* (4 December 2018).
- [61] J.R.F. Lorenzo, M.T.M. Rubio, S.A. Garcés, The competitive advantage in business, capabilities and strategy. What general performance factors are found in the Spanish wine industry?, *Wine Economics and Policy* 7 (2018) 94–108. <https://doi.org/10.1016/j.wep.2018.04.001>.
- [62] Meininger's Wine Business International, The Wine Co-operative: Co-operatives are the backbone of wine production in many European regions., *Meininger's Wine Business International* (2018) 22–25.
- [63] G.H. Schamel, Structure, organization and a vision: Reasons for the success of wine cooperatives?, *BIO Web Conf.* 12 (2019) 3018. <https://doi.org/10.1051/bioconf/20191203018>.
- [64] M. Dressler, Innovation management of German wineries: from activity to capacity—an explorative multi-case survey, *Wine Economics and Policy* 2 (2013) 19–26. <https://doi.org/10.1016/j.wep.2013.05.002>.
- [65] J. Grashuis, An Exploratory Study of Cooperative Survival: Strategic Adaptation to External Developments, *Sustainability* 10 (2018) 652. <https://doi.org/10.3390/su10030652>.
- [66] G. Ringle, Genossenschaftliche Werte und deren Nutzen, *Zeitschrift für das gesamte Genossenschaftswesen* 63 (2013). <https://doi.org/10.1515/zfgg-2013-0201>.
- [67] S. Breuning, R. Doluschitz, Societal Values in Germany – an Aspect of Cooperative Management?, *IJCAM* 2 (2019) 19. <https://doi.org/10.36830/IJCAM.20192>.
- [68] B. Frick, Does Ownership Matter? Empirical Evidence from the German Wine Industry, *Kyklos* 57 (2004) 357–386. <https://doi.org/10.1111/j.0023-5962.2004.00258.x>.
- [69] Deutscher Raiffeisenverband e.V., *Mustersatzung für Winzergenossenschaften*, Berlin, 2014.
- [70] L. Bitsch, U. Schilling, J.H. Hanf, Teils Teils: Teilsablieferung hat früher häufig zu Qualitätseinbußen geführt, sorgt heute aber oftmals für Flexibilität bei den Mitgliedsbetrieben (2019) 28–30.