

The country-of-origin effect of sparkling wine

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Abstract

The Common Market Organisation for wine contains the protection of products of defined origin. This emphasis of protected origins is considered as a potential mean of differentiation against products of international competitors. By now there exist only limited empirical examinations if consumers honour a specified origin of wine or sparkling wine with a price mark-up.

The impact strength and effectiveness of the origin of base wine in sparkling wine was analysed within a comprehensive survey of n=1.029 consumers. The German sparkling wine production differs as so far from European wine growing countries as there are used more than 85 percent of imported base wines, mainly from Italy, Spain, and France. Therefore it is of particular interest to what extent the origin of the base wine can be used for the commercialisation of sparkling wine beside the dominant use of branding. Especially the questions which consumer segments do have a sufficient willingness to pay for German base wine is of particular relevance for the German viticultural sector.

As a result of the empirical analysis six consumer segments can be distinguished by their relevance of characteristics of sparkling wine within the purchase decision: the Undemanding, the Brand-conscious, the Ambitious, the Region-of-origin-conscious, the Vine variety-conscious and the Experts. Within these six consumer segments a Conjoint-Analysis could only measure a sufficient willingness to pay for German base wine for the last two groups of Vine-variety-conscious and Experts. The analysis allows strategic marketing recommendations for the origin-relevant groups.

1. Relevance

Germans are world champions in the consumption of sparkling wine. Despite the per capita volume declined by more than one litre from its peak in 1994 to 3,7 litre in 2005 no other country drinks so much sparkling wine per person (for a more detailed analysis of demand and supply see MÜLLER 2006, p. 23ff.). Another record is held by the Germans – there is no wine producing country in the world that uses so much imported wine for the production of sparkling wine. Last extensive census data by BOCK (1999) estimate that 80 to 85 percent of base wines of in Germany produced sparkling wine are imported from European wine growing countries, mainly Spain, Italy and France, and used as European cuvees. Here Germany plays an exceptional role as sparkling wines with defined origin dominate the market in all other wine growing countries, like Champagner, Crémant, or Cava.

The country-of-origin of the base wine of sparkling wine is not compulsory declared to consumers as the legislator classifies sparkling wine as an industrial product and not an originate product. Therefore the consumer can only reconstruct the origin of the used base

wines of in Germany produced sparkling wine by facultative declaration the applies to at maximum five percent of the market supply (for an detailed analysis see MÜLLER 2006 p. 32ff.). This only facultative declaration of origin does not result in a problem of consumer misguidance if the consumer makes the knowledge and competency of the producer and not the origin of the raw material responsible for the quality of the final product (see argumentation of German wine producers in KOCH 2002, p. 91). But empirical explorations of NÖLL/HOFFMANN (2001) show that consumers reason from the origin of the brand of sparkling wine to the origin of the used base wine. For sounding brands the absolute majority of the interviewed consumers assumed that German wines were used for production. When the true origin was disclosed consumers felt disappointed and misguided. For misguidance to be a juridical matter of fact is has to be shown that the country-of-origin of the base wine is purchase decision relevant for a not insubstantial part of consumers (HEFERMEHL 2001, p. 965). The aim of the study of MÜLLER (2006) was therefore to develop an objective theoretical approach prove the hypothesis of consumer misguidance.

2. Theoretical approach

Müller (2006) generates an extensive theoretical approach that comprises

- 1) the development of a scale of the *country-of-origin image* of base wine in sparkling wine (content analysis and confirmatory factorial analysis, for more details see MÜLLER (2006, p. 163ff.)) to measure the consumer beliefs about the images of different countries of origin,
- 2) a decompositional *Conjoint-Analysis* to measure the individual implicit willingness to pay for and the individual attribute weight of the country-of-origin of the base wine (see MÜLLER 2006, p. 78ff.),
- 3) the finding of six homogeneous *consumer segments* relating to the stated relevance of product attributes for the purchase decision based on a non-hierarchical cluster analysis (see MÜLLER 2006, p. 256ff.)
- 4) a compositional structural equation analysis of a modified Theory of Reasoned Action-Model by AJZEN/FISHBEIN (1980) to examine the *causal* effect of the country-of-origin-image on the purchase decision on a segment-level (see MÜLLER 2006, p. 111ff.).

Because of the coverage limitation and the applied focus of the OIV conference this paper will mainly focus on the empirical and marketing-relevant results for the six consumer segments derived by the application of these theoretical concepts.

3. Empirical survey

The main empirical survey of the study was conducted as a combined internet survey and written interview in of a survey studio in Berlin and comprised in total n=1.029 persons. The composition of the sample is as in most voluntary surveys not representative for the German population. Young, educated and wine interested persons are over-represented within the sample (for a more detailed descriptive analysis of demographic and socio-demographic characteristics of the sample see MÜLLER (2006, p. 156ff.).

Therefore the study does not allow an exact answer for how many consumers the country-of-origin of the base wine in sparkling is purchase decision relevant. Instead approximate estimations of the relative existence of the consumer segments in the German populations have to be done.

4. Consumer segments

All participants of the survey were asked about the relative importance of seven product attributes of sparkling wine: flavour type (dry, medium-dry, sweet), brand, price, fermentation method (bottle or tank fermentation), vine variety (e.g. Riesling), country-of-origin of the base wine and regional origin of the producer within Germany for a normal and special purchase occasion. These attribute weights were transformed into percentages that individually sum up to 100 percent. According to these attribute weights a cluster analyses was conducted with the aim to separate homogeneous consumer types that regard similar product attributes as relevant for there purchase decision.

A hierarchical cluster analysis based on the ward-criteria resulted in a 6-cluster solution that was subsequent determined with a non-hierarchical K-Means cluster process. The average attribute weight for an everyday purchase occasion for sparkling wine of the seven analysed product attributes for each cluster (consumer segment) can be seen in Figure 1.

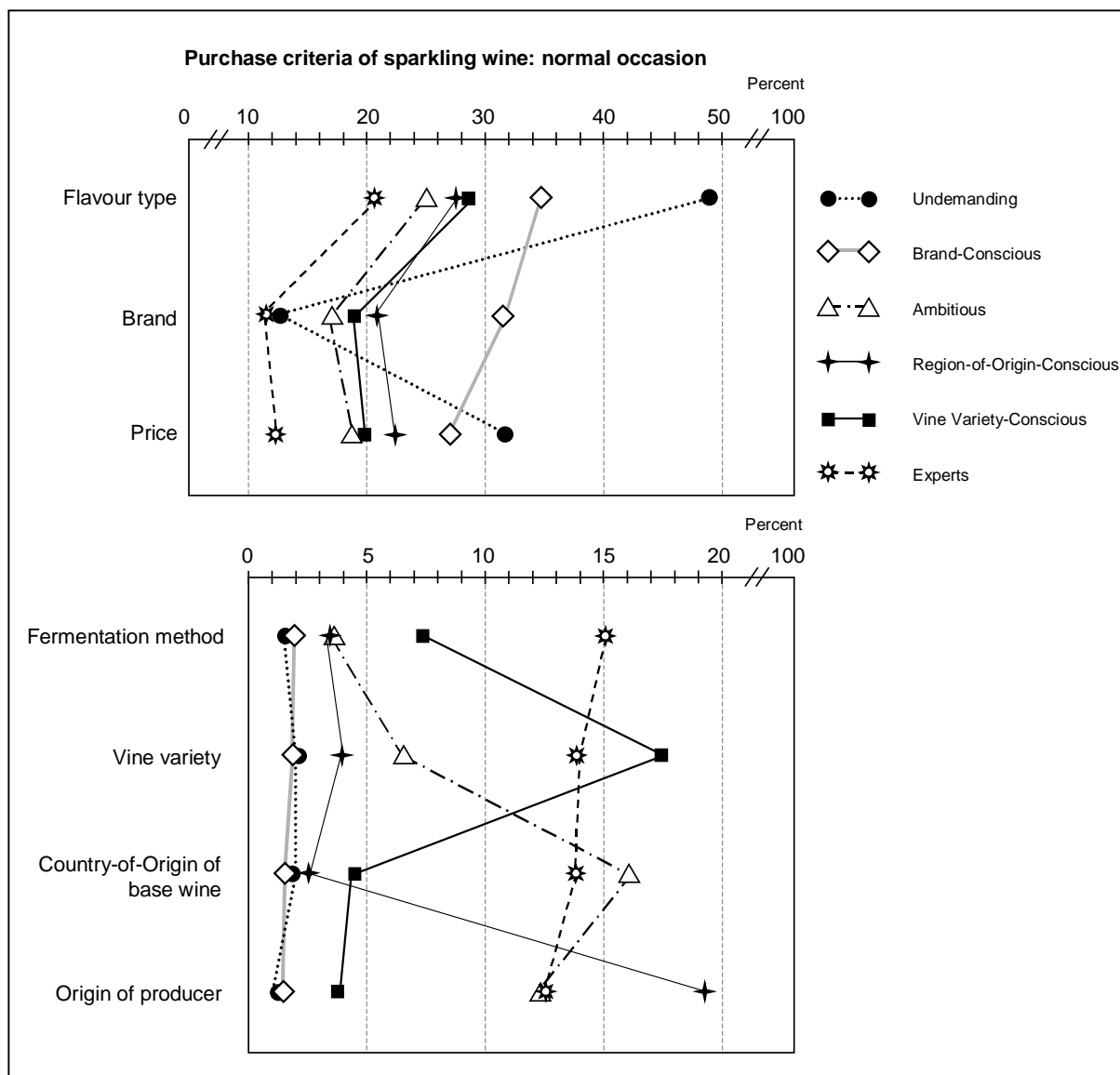


Figure 1: Importance of seven analysed product attributes of the six consumer segments

Almost every consumer segment is named after the purchase relevant product attribute. The “*Undemanding*” are only looking for flavour type and price when they are deciding for a sparkling wine, brand and other more specific characteristics are nearly unimportant. This segment accounted for 8,7 percent of the sample but is assumed to be heavily underestimated by sampling bias. The second cluster of “*Brand-conscious*” perceives brand with more than 30 percent importance as the second major attribute after flavour type and does not regard any special characteristic of the underpart as purchase relevant. 13,5 percent of the sample belong to this group. The “*Undemanding*” and “*Brand-conscious*” are based on the socio-demographic characteristics estimated to comprise almost 50 percent of the German sparkling wine consumers.

The segment of “*Ambitious*” comprises mostly young, wine-interested consumers with a low subjective product knowledge. These consumers are (still) overstrained with special attributes like vine variety and fermentation method that are hard to understand for them. In contrast they utilise country-of-origin of the base wine, and to a lesser extend regional origin of the producer as surrogate variables. The extend of this cluster was 18,5 percent of the sample, who’s true amount in the population is estimated not to differ much.

The “*Region-of-origin conscious*” segment deviates only insofar from the “*Brand-conscious*” that the regional origin of the producer is the fourth important product attribute after flavour type, price and brand. This special segment is mainly focused on the German market leading brand “*Rotkäppchen*” and is consumer-patriotic in a sense that it supports a local, East-German producer. This findings correspond to results of MÜLLER/KESSELMANN (1996) and GEIGENMÜLLER (2003) that verified a similar cultural consumer patriotism of consumers of the new German federal states for East-German producers. “*Region-of-origin-conscious*” comprise 8,8 percent of the sample and are assumed to be less represented in the total German population caused by the sample focus in middle and eastern Germany.

“*Vine variety-conscious*” consumers perceive the vine variety of a wine as the fourth important characteristic after flavour type, price and brand. Fermentation method and country-of-origin variables do play a minor role in their purchase decision. The measured size of 16,0 percent seems to be a little bit overestimated for the total population.

The only segment that observe all seven product characteristics as almost equally important for their purchase decision for a normal occasion are the “*Experts*”. These consumers are characterized by a more than average interest for and subjective knowledge of wine. They have the highest average age, education and income and use a wide variety of distribution channels to purchase wine and sparkling wine. Here direct purchase at winegrowers make up an important share. This group is over-represented with a share of 34,3 percent of all participants of the survey that is mainly caused by self-selection of product interested persons. Based on socio-demographics the segment of “*Experts*” represents at maximum 10 percent of the whole population of sparkling wine drinkers.

By now the analysis crystallised two major segments the “*Ambitious*” and the “*Experts*” as destination groups for the relevance of country-of-origin, based on self-stated importance weights. The analysis by now only tells us that these two groups perceive the country-of-origin of the base wine as important for their purchase decision, but not which origin they prefer or how much they are willing to pay for their preferred country-of-origin.

5. Estimated price premiums for origin of base wine

The answers which origin is preferred by each segment with what intensity can be answered by analysing the average price premiums of a Conjoint-analysis for the five investigated origins Europe, Germany, France, Italy and Spain (for more details of the set-up, regression

equations and validity of computation results of the Conjoint-analysis see MÜLLER (2006, p. 195ff.).

Figure 2 shows the price mark-ups for four origins that are all expressed as price premiums compared to a European origin of the base wine, that is how much more or less is a consumer willing to pay, if the base wine of a sparkling wine is not of European but of one of the four other origins.

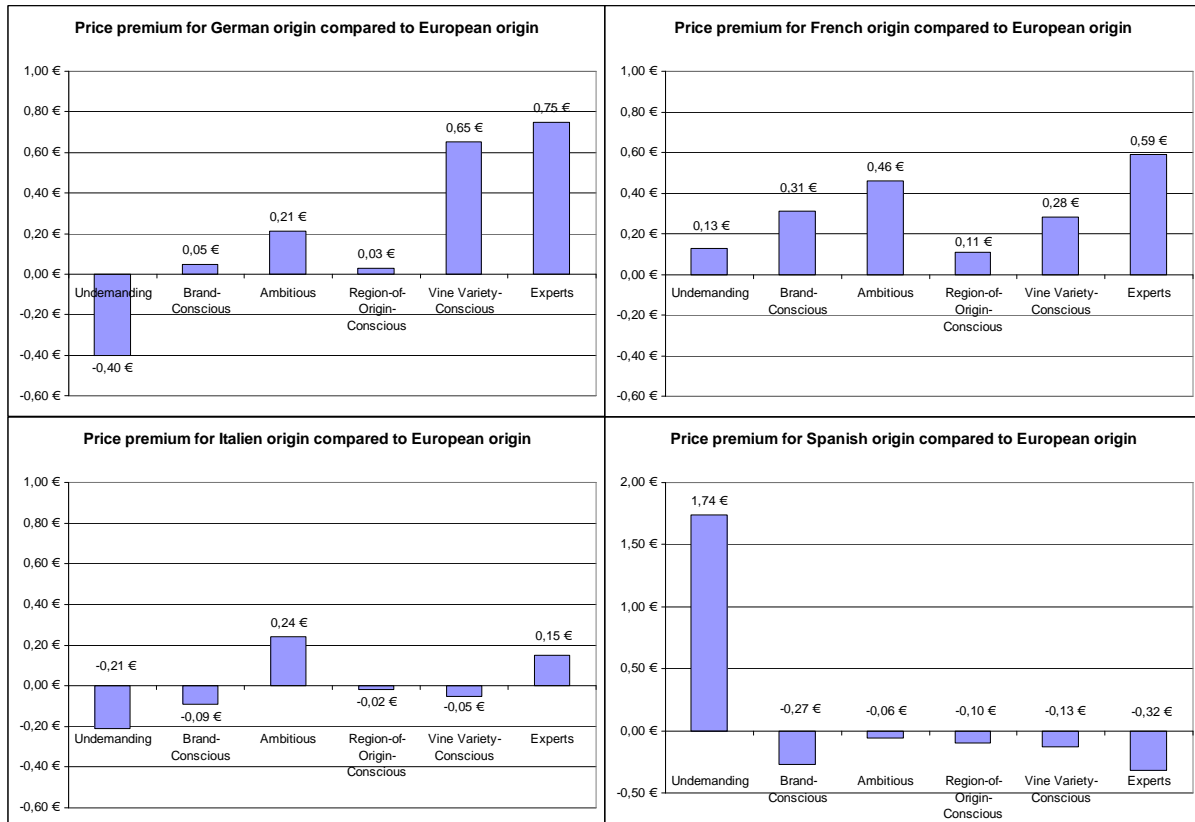


Figure 2: Conjoint-analysis estimated price premiums for the origins Germany, France, Italy and Spain compared to a European base wine origin for all six consumer segments

As the first of the four diagrams in figure 2 shows does not every consumer segment has positive willingness to pay for a designated German origin of the base wine. Especially the “Undemanding” would have to be compensated of a sparkling wine as made of German instead of European base wine. This group does have an exceptional high willingness to pay for Spanish base wine that might be ascribed on the one hand to the “Freixenet-effect” the second important brand after “Rotkäppchen” of the German sparkling wine market, that is market leader in the western federal states. An analysis of the country-image scale in MÜLLER (2006, p. 163ff. and 348) shows on the second hand that this consumer group does associate Spain with a very positive affective feeling (mentality of the inhabitants, vacation) and wine-cultural heritage (climate, wine growing history and culinary competence). All other consumer segments would demand price discounts for a Spanish origin (independent of brand!) of the base wine.

Back to the German origin one can further see that the “Ambitious” and “Experts” that had similar attribute weights for the origin of the base wine differ in their willingness to pay for German base wine. The young and internationally oriented “Ambitious” have the highest willingness to pay for French and Italian origin whereas “Experts” are in average willing to

pay 0,75 Euro per bottle sparkling wine extra if the wine comes from Germany. A second group that did not state that the country-of-origin is important for their purchase decision but the showed to be influencable unconsciously in the evaluation of sparkling wines within a Conjoint-analysis, where country-of-origin was only one of five varied attributes, are the “Vine variety-conscious”. These consumers showed to have a willingness to pay for German wines of in average 0,65 Euro. Therefore this is a major focus group for the marketing of sparkling wines made of German wine.

6. Marketing strategy for promotion of German base wine

An exhaustive marketing strategy for a target-oriented promotion of sparkling wine of German base wines has to cover the “Four P’s” that go back to MCCARTHY (1960): product, price, promotion and place.

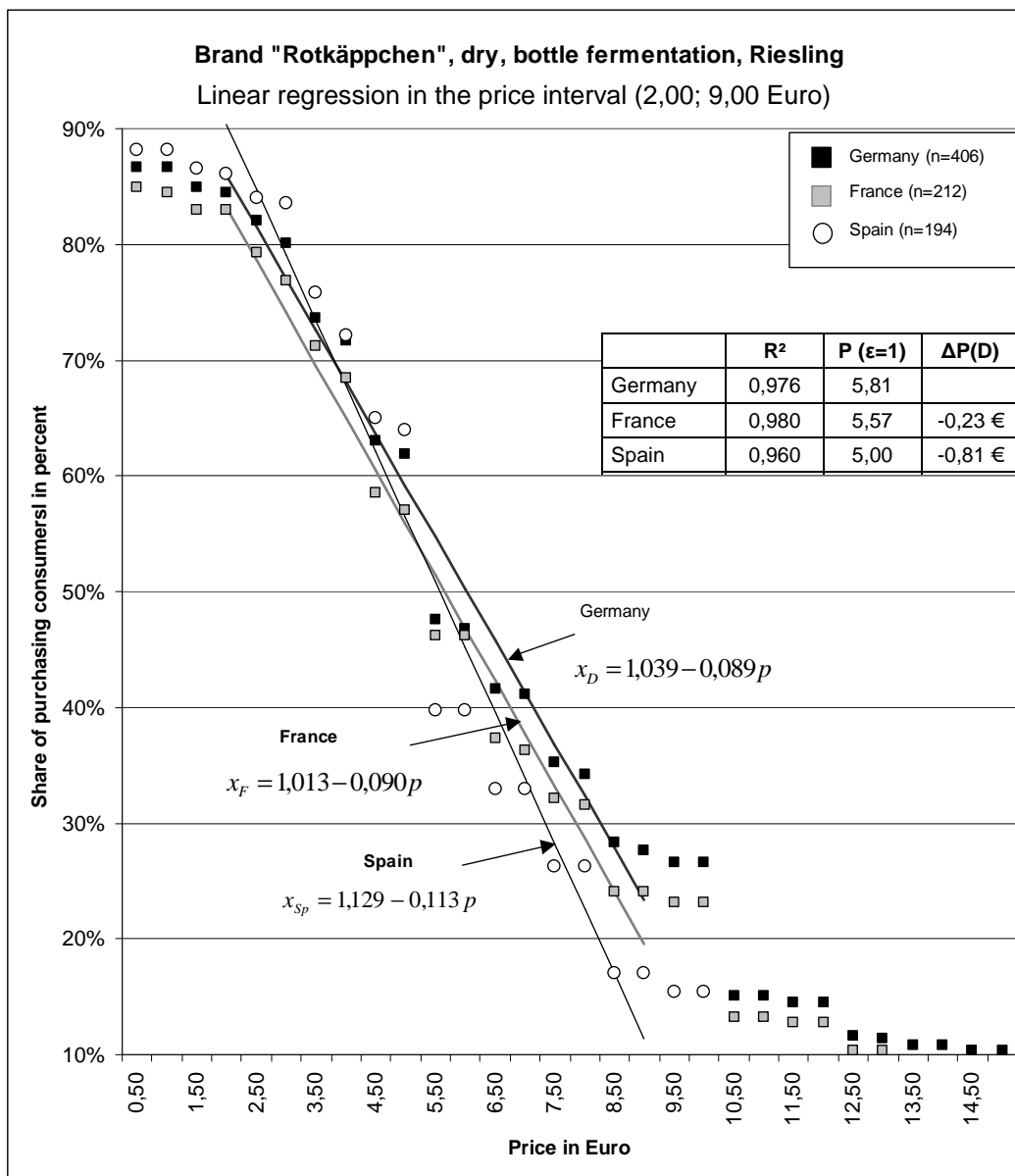


Figure 3: Price-quantity relationship for “Rotkäppchen, dry, bottle fermentation, Riesling” with three origins of the base wine: Germany, France and Spain

Based on all stated prices for the Conjoint-stimulus of a sparkling wine with the brand “Rotkäppchen”, of dry flavour that was bottle fermented of the vine variety Riesling and combined with three different origins of the base wine a linear price-quantity function fitted best among four analysed functional specifications in the price interval (2,00 until 9,00 Euro), see figure 3. The estimations of the price-quantity relationship shows that

- 1) *Price*: the preference for German base wines predominates in the premium price segment above 5,00 Euro,
- 2) *Product and Promotion*: German base wine enjoys a price mark-up for a speciality product – a dry sparkling wine, where also vine variety and fermentation method are declared; no price premium for German base wine could be detected for half-dry and sweet branded sparkling wines without further specific characteristics,
- 3) For this specific sparkling wine that was to a large part purchased for a special occasion a price mark-up for German compared to Spanish and French base wine of 0,81 Euro (0,23 Euro) was computed at the point of a proportional elasticity of -1 .

The estimated price-quantity function for one of several analysed products, for more details see MÜLLER (2006, p. 330ff.), draws a picture of the whole market that comprises all six detected consumer segments. If one analyses these consumer types in more details it shows again that the “Experts” and “Vine variety-conscious” segments are predominantly these consumers that have the higher price acceptance (dots on the right side of the price scale) and that prefer German base wines to other origins.

While the participants of the interviews were at the beginning not inaugurated in the aim of the study to avoid social desired answering behaviour, the interviews were closed with a battery of direct questions regarding the communication of the base wine and a potential consumer misguidance. The results are shown for all six consumer segments in a Skalogramme in figure 4.

The first two questions make clear that there is a huge potential in the communication of sparkling wine as a product that is made of the natural ingredient wine. Only if consumer know that wine is used to produce sparkling wine they can transfer their country-image of wine to the beliefs and image of sparkling wine. Especially those groups that do not see the country-of-origin of base wine as a relevant characteristic agree that sparkling wine is contrary to wine an industrial product.

Results of question three highly correlate with the separately raised country-images. Again it becomes clear that the “Experts”, the “Vine variety-conscious” and the “Region-of-origin-conscious” have a special preference for German base wine. In contrast the three other groups apparently dislike German wine and prefer internal origins – these results coincide with the decompositional computed price premiums in figure 2.

The stated disappointment and feeling of misguidance of the interviewees turns out to be highest for those groups that also showed high importance weights of the country-of-origin in figure 1. Besides the “Undemanding” it is positive for all other consumer segments.

The last two questions finally disclose the potential to market sparkling wine of German base wine by a better labelling or designation of origin. Only one group, the “Experts” decline the statement that the origin of base wine does not matter and only taste of sparkling wine counts. Again the disclaim of this statement correlates with the importance weights in figure 1. On the other hand the already above mentioned consumer segments of “Region-of-origin-conscious”, “Experts” and “Vine variety-conscious” claim for them selves that they would more often buy

sparkling wine from German base wine if they could clearly and easily learn the origin from the product label.

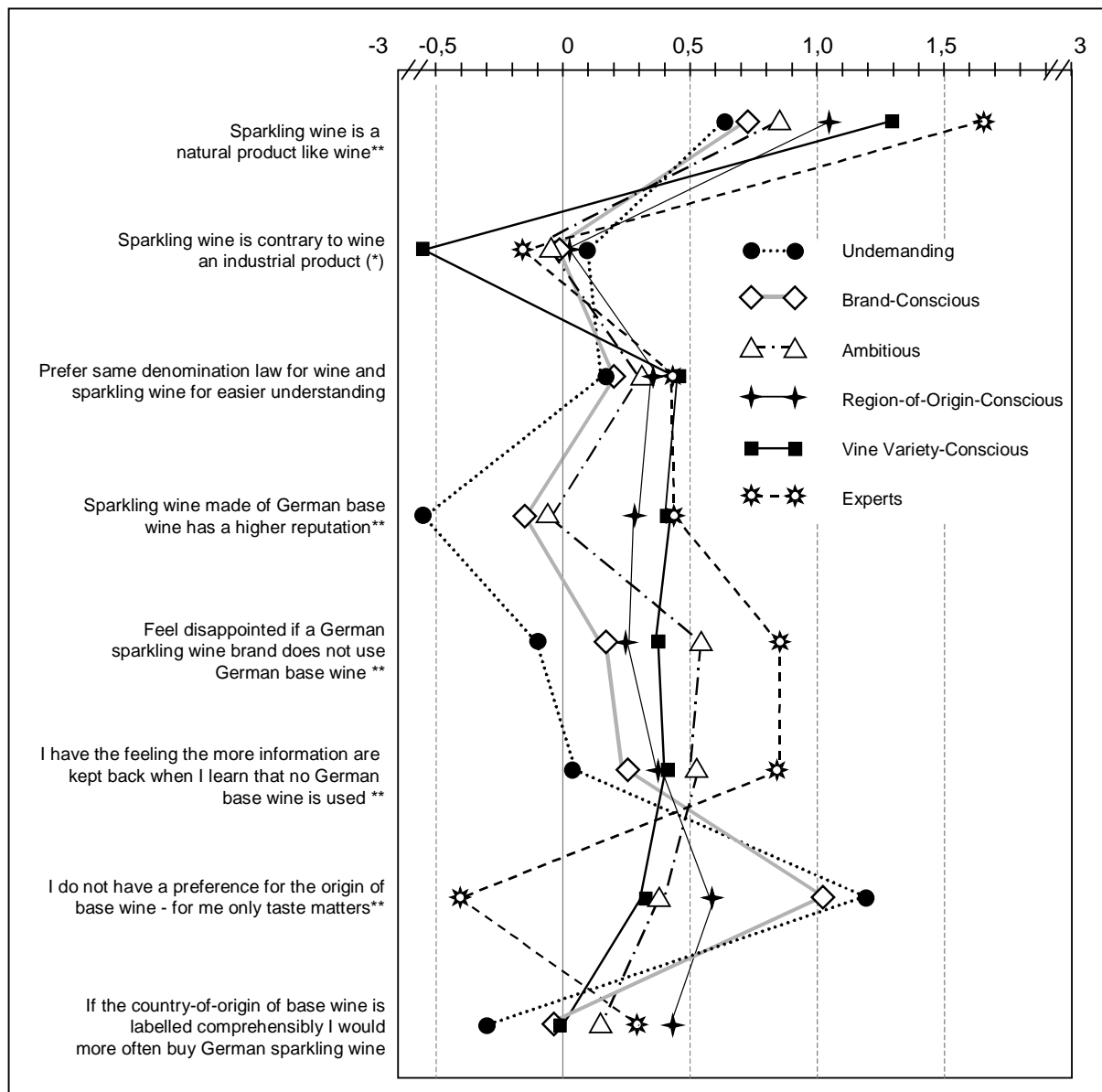


Figure 4: Skalogramme of direct questions regarding the designation of sparkling wine

Table 1 sums up the marketing potential with inhibiting factors that have to be overcome and approach points to tie up to for all six consumer segments. This summary also contains the examination of further socio-demographic and product related psychographic variables that could not be discussed here in full detail (see MÜLLER 2006, p. 270ff. and 339ff.). As a conclusion the study finds that in a short-term perspective only the “Experts” have the highest potential to promote German wine based sparkling wines. Despite this is a rather small group of approximately 7 to 10 percent of all sparkling wine consumers it has the highest consumption intensity and price acceptance. In their role as opinion leaders this group will also radiate on other segments. Especially the “Ambitious” are a group that further develop their knowledge of wine and sparkling wine and are influenced by opinion leaders. The only threat has to be seen in their recently dominating preference for international regions. It will be a challenge for German wine growers to attract this group in their lives.

cycles of a typical wine consumer by German wines. While German wine does already have a positive reputation for the “Vine variety-conscious” this segment still does lack the transfer of this wine reputation on sparkling wine. A further stress of wine for the production of sparkling wine might be one strategy to promote German sparkling wine.

Despite the “Region-of-origin conscious” state them self to be very consumer-patriotic and German-affine, their strong brand fixation on “Rotkäppchen” and low price acceptance are hurdles that are not easily to overcome. Compared to international bulk wine prices in South-Europe of approximately 0,30 Euro/Litre German wines have to receive a price mark-up of circa 0,70 Euro/Litre to cover long-term full production costs. The recent price sensitiveness of German consumers therefore limits the market potential of German wine based sparkling wines to a small market segment.

Table 1: Summary of marketing potential of the six consumer types for sparkling wine of German base wine

| | Undemanding | Brand-conscious | Abitious | Region-of-origin-conscious | Vine variety-conscious | Experts |
|---|---|---|--|---|--|--|
| Inhibiting factors for marketing of German base wines | <ul style="list-style-type: none"> - International orientation, - Negative attitude toward German wine, - Very high price sensibility, - Strong simplified purchase process,, - Low quality consciousness, - Low ethnocentrism. | <ul style="list-style-type: none"> - International orientation, - Negative attitude toward German wine, - High price sensibility, - Simplified purchase process, - High brand loyalty, - Low ethnocentrism. | <ul style="list-style-type: none"> - (Still) low subjective product knowledge of wine and sparkling wine, - international orientation. | <ul style="list-style-type: none"> - Origin of producer has higher relevance than origin of base wine. - Strong fixation to the brand “Rotkäppchen”, - Are highly price sensible, - Perceive German wine to have a weak price/ performance ratio. | <ul style="list-style-type: none"> - Still missing transformation of high reputation of German wines into relevance of the product attribute origin of base wine. | |
| Approach points for marketing strategy | <ul style="list-style-type: none"> - for special purchase occasions | <ul style="list-style-type: none"> - for special purchase occasions in combination with a strong, accepted brand. | <ul style="list-style-type: none"> - high tendency to seek information, - feel misguided without declaration of origin - moderate willingness to pay for origin, - potential to develop within the typical life cycle of wine consumers. | <ul style="list-style-type: none"> - German wines have high reputation, - pronounced ethnocentrism, - high brand loyalty for „Rotkäppchen“ - for special purchase occasions: „Rotkäppchen“ made of German base wine. | <ul style="list-style-type: none"> - German wines have high reputation, - Perceive sparkling wine as natural product – made of wine - Verified willingness to pay for origin. | <ul style="list-style-type: none"> - High quality conscious, - Desire for declaration of origin, - Opinion leaders, - Verified high willingness to pay for origin. |
| Marketing potential for German base wines | very small | very small | short-term remote, long-term medium potential | remote/medium | medium | high |

Conclusion

The study analyses in a comprehending market survey consumers beliefs and evaluations of sparkling wine that is made of base wine of different origins: European, German, French, Italian and Spanish wine. Results show that a compulsory declaration of the origin of the base wine will not necessarily attract all consumer of sparkling wine. Especially the consumer segments of “Undemanding”, “Brand-oriented” and “Ambitious” do prefer international origins over German base wine, that is they would rather choose the recent dominating European cuvee to designated German sparkling wine. Nevertheless shows the study that there is a potential of consumer misguidance by the only facultative denomination of the country-of-origin of the base wine for the consumer groups of “Experts” and “Vine variety-conscious” and to a lesser extend for the “Ambitious”. These three groups do perceive the attribute country-of-origin of the base wine as important for their purchase decision of sparkling wine and have a positive willingness to pay for it. Thus the preconditions for the

matter of fact of consumer misguidance are fulfilled for these groups that constitute a not irrelevant share of consumers of sparkling wine.

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