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## Article

# A cross-cultural comparison of wine consumption and purchasing behaviour in Germany and Hungary

Wine Economics and Policy

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*Suggested Citation:* Szolnoki, Gergely; Totth, Gedeon (2020) : A cross-cultural comparison of wine consumption and purchasing behaviour in Germany and Hungary, Wine Economics and Policy, ISSN 2212-9774, Firenze University Press, Florence, Vol. 9, Iss. 1, pp. 19-29, <https://doi.org/10.14601/web-8053>

This Version is available at:

<https://hdl.handle.net/10419/284490>

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**Citation:** G. Szolnoki, G. Totth (2020) A Cross-Cultural Comparison of Wine Consumption and Purchasing Behaviour in Germany and Hungary. *Wine Economics and Policy* 9(1): 19-29. doi: 10.14601/web-8053

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**Data Availability Statement:** All relevant data are within the paper and its Supporting Information files.

**Competing Interests:** The Author(s) declare(s) no conflict of interest.

Original Research Article

## A Cross-Cultural Comparison of Wine Consumption and Purchasing Behaviour in Germany and Hungary

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**Abstract.** Both the German and the Hungarian wine markets belong to the “old world” European winemaking heritage and each have long winemaking traditions; however, since the 1950s, they have gone through completely different changes as political and economic circumstances greatly influenced the development of these wine markets. This paper, based on a representative survey of 2,000 participants in Germany and 1,500 participants in Hungary, investigates the differences in consumer behaviour and sales channel structures in both countries. The results indicate that, despite some similarities, there are large differences between German and Hungarian wine consumers in not only wine preferences but also in the use of sales channels. The two countries differ especially in the number of heavy drinkers and in the socio-demographic background of wine drinkers. These results shall provide important information and insights for producers and marketers about the wine markets of these two European countries.

**Keywords:** wine, wine market, consumer behaviour, Hungary, Germany, cross-cultural comparison, sales channels.

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### 1. INTRODUCTION

While most wine growing countries in Europe are considered part of the “old world” winemaking heritage, the differences between those countries can be substantial. With singular political and economic circumstances as well as unique cultural backgrounds that influenced the development of their wine markets, Germany and Hungary are excellent examples of how the wine markets in two “old world” heritage countries differ significantly. These two countries, both with a long wine tradition and similar per capita consumption, will be compared within the framework of this study in terms of consumers’ preferences and sales channel usage.

Germany’s winemaking tradition has a 1,000-year history [1]. More recently, Germany has become one of the most important marketplaces of the European wine business; it is the world’s largest wine import market by volume, with annual per capita consumption of 24.2 litres of still and sparkling

wines [2, 3]. Trade structures that include very effective discount stores have encouraged this volume growth as they promote additional sales and thus contribute to what has been a rapid change in demand volume [4].

Hungary also has a more than 1,000-year wine tradition. Unlike Germany, however, wines by domestic Hungarian producers dominate the market and this pattern is expected to continue [5]. The average annual wine consumption has been decreasing since 2010 and is currently around 24.0 litres per capita [6]. The sales channel structure also differs from the German model; in Hungary, super- and hypermarkets are the leaders in selling wine [7].

Two representative surveys have been conducted in order to describe the current situation of consumer preferences, to analyse the differences between these two markets, and to model the total wine market in Germany and Hungary.

The paper begins with a general description of the German and Hungarian wine markets, followed by the materials and methods of the representative survey. Then, in the “Results” chapter, data analyses using various statistical methods show the differences between German and Hungarian wine consumers. At the end of the paper, the “Discussion” chapter summarises the results, gives some managerial implications, and provides some information on the limitations of the research.

### *1.1 The German wine market*

German viticulture land area has remained constant during the last ten years [3]. Germany currently has 102,000 hectares of vineyards, which makes it the 14th largest wine growing country globally. The total wine production from the 13 official registered wine regions averages approximately 9.0 million hectolitres annually. Germany imports another 15 million hectolitres each year, making it the largest importer of wine by volume globally and one of the most important sales markets in the world [8]. This has gradually led Germany to become the primary wine marketplace of Europe. While this market is not considered very attractive due to the high degree of competition and saturation [9], the German wine market has one significant advantage and opportunity in its consumers’ willingness to purchase foreign wines.

The overall still wine market consists of 60 per cent imported wine and 40 per cent domestic wine [3]; further, this market composition is expected to remain stable on a long-term basis. This enthusiasm for foreign wines represents an critical aspect of the German market. Also, the lack of impairing trade barriers makes the market easily accessible for wine exporters all over the

world. The limited production capacity of the domestic German wine business results in a high level of imports, consisting mainly of bulk wine, primarily from Mediterranean countries [10].

Due to extremely low costs, Germany is an important bottling hub in the international wine trade; 2.6 million hectolitres are imported annually as bulk, repackaged into 341 million 0.75 litre bottles, and then exported as low-priced wine, mainly to neighbouring European countries such as the Netherlands, Belgium, and Scandinavia [12]. Net exports of German wine remained at a low level of about 1 million hectolitres [3].

This business has been particularly lucrative for large food retail groups, which dominate the domestic market. Discounters have been especially successful, overtaking the sales of large food retail chains due to their strong emphasis on private labels. Their success has also contributed to the high price sensitivity in the German retail market [13].

The on-trade sector accounts for approximately 18 per cent of all wine sales in the country and is often guided by the nationality of the businesses in Germany [9, 11]. This sales channel shows the highest average sales price per bottle as 25 EUR [13]. A general trend of premium wines, priced above 5 EUR, is gaining popularity in Germany [9, 14]. The market demand for German quality wine is relatively constant at about 7.5 million hectolitres [3]. Quality wine represents a high share in the German wine market; only about 3 per cent of German wine production is marketed and bottled as table wine [12].

The German market is liberal in terms of sales channel structure for wine, and this liberality is related to both the huge import component of the market and to the peculiar structure of German retail stores. German consumers have several possibilities when deciding where to buy a bottle of wine [15] as the structure and diversity of the distribution channels offers a broad range of points of purchase. Globally, Germany is one of the few countries with such enormous diversity in wine distribution options. Direct selling and specialised wine stores reach a higher average price, though their share is significantly lower than that of discount stores or super- and hypermarkets. Online sales have been increasing annually, although their market share is still below 5 per cent [16].

### *1.2 The Hungarian wine market*

The Hungarian wine sector has undergone several serious political and economic changes over the past 150 years – from the dual monarchy of Austria-Hungary to communism after the second world war to a democratic state with a free economy after the Iron Curtain fell.

After the political change in 1989 to a democratic state, the Hungarian wine industry changed significantly – vineyards of co-operatives and state wineries were privatised, thousands of new wineries were founded, and quality winemaking dominated instead of mass production [17, 18]. At the same time, however, by 2017, vineyards shrank from 130,000 to 65,000 hectares [19], and production has decreased to approximately 2.5 – 2.9 million hectolitres as of last year [5]. Export volume has remained stable the past five years, reaching a volume of 0.7 – 0.8 million hectolitres, with a substantial share as bulk wines (60 per cent) [19].

The order and importance of export countries has changed for the Hungarian market; former communist countries of the Warsaw Pact, especially Slovakia and the Czech Republic, have increased their wine import from Hungary in the last two years and become the two most important export destinations for Hungarian wines. Germany, which had been the primary market for exported Hungarian wines for many years, fell to third [20].

Domestic consumption of Hungarian wines is high. Therefore, wine imports do not play an essential role in the Hungarian wine market. Although there were some peaks above 0.6 million hectolitres before 2011, during the past three years wine imports have stabilised at a volume of 0.2 million hectolitres, primarily from Italy and Germany [21].

The market for sparkling wines was estimated for 2017 at 6.5 per cent of the total volume, while on-trade has a share of approximately 20.0 per cent [5].

Regarding sales channels, discount stores do not have the same hegemony as in Germany. Instead, the market is dominated by super- and hypermarkets such as Auchan Hypermarche SAS, Tesco PLC, and SPAR. Also, small grocery shops are the main distribution centres for food products in villages [21], increasing sales venue diversity in Hungary.

Table 1 summarizes the main differences and similarities of Germany and Hungary in terms of wine production, trade and consumption.

**Table 1.** Wine related statistics in Germany and Hungary 2018.

	Germany	Hungary
Vineyard areas (ha)	102,000	65,000
Annual wine production (million hl)	9.0	2.5
Wine import (million hl)	15.0	0.2
Wine export (million hl)	1.0	0.7
Sparkling wine (share in %)	16.0	6.5
On-trade (share in %)	18.0	20.0

Source: [3, 5, 8, 9, 11, 19, 21].

### 1.3 Objectives and research questions

Both the German and the Hungarian wine markets have been previously studied, though in limited amounts. Previous scientific papers about Germany range widely on their topics, including: cooperatives [22], consumer segmentation [16], wine price analysis [23, 24], winery structure [25], wine tourism [26], social media usage in the wine business [27], and on the German wine production sector [28]. In addition, the popular German scientific magazines *Weinwirtschaft* and *Meininger's Wine Business International* also publish articles on the German wine market [9, 10, 14]. There has also been some research into Hungary's consumer segmentation [29], consumption and purchasing behaviour [30, 31], innovation processes [32, 33], general overview of the wine sector [34], wine tourism [35], and a comparison of French and Hungarian wine producers [36].

These two countries represent two different worlds. Germany symbolises the wealthy Western Europe, while Hungary, as one of the former communistic countries in Middle-Eastern Europe, is at the border between Europa and the Balkan. Due to the completely different development, both on political and on economic level, of these two countries, there is a certain scientific interest to investigate wine consumers with various cultural backgrounds. We suppose that differences in culture, economic and political have their influence also on wine consumption behaviour.

There has not, however, been a comparative study on the German and Hungarian wine markets nor on consumer behaviour in these two countries. Therefore, for the purposes of this study, representative surveys were conducted in Germany and Hungary. Based on the assumption that German and Hungarian wine consumers and markets differ significantly, this article examines the following questions:

RQ1: What are the main differences between German and Hungarian wine consumers in their basic characteristics and preferences?

RQ2: How do the wine market sales channels differ in Germany and Hungary?

## 2. MATERIALS AND METHODS

### 2.1 Consumer sample

Representative consumer surveys were conducted in May 2017 in Germany and Hungary. The random sampling of 2,000 and 1,500 participants respectively is representative of the basic socio-demographic structure of the German population from age 16 and of the

Hungarian population from age 18 (the legal drinking ages in each nation). Therefore, the provided information was generalised for the total population of each country. In order to increase the validity and reliability of the results, the survey was carried out in the form of a personal interview (face-to-face survey) in the households of the interviewees by using quota sampling [37]. The interviews were conducted by a professional market research company, GfK (Nürnberg, Budapest). For quotas, we used official statistics from Federal Office of Statistics on national level. In Germany, it was on the basis of data from Statistisches Bundesamt, Wiesbaden [55] and in Hungary from Köszponti Statisztikai Hivatal, Budapest [56]. The quote for gender, age and social class are reported in Table 3. Regarding the selected quota criteria, the German sample corresponds to the German total population and the Hungarian one to the Hungarian total population. For the determination of the respondents, the external employees of GfK received the characteristics gender and age of the respondents as well as occupation of the head of household and household size directly; the characteristics town/city size and federal state were indirectly specified. The questioning of the respondents was based on a structured questionnaire. The external employees of GfK had to follow the question formulation and the order of the questions. A total of 400 interviewers in Germany and 200 interviewers in Hungary were involved in this investigation. For the interviewer an automated software was used.

## 2.2 Methodical approach

The questionnaire, based on the study by Szolnoki and Hoffmann [16], included identical questions in both countries regarding wine consumer behaviour as well as socio-demographic profile information. Consumption of still wine, sparkling wine and beer was measured by using six frequency categories such as “many times a week”, “once a week”, “2-3 times a month”, “once a month”, “less than once a month” and “never”. For wine type preference (white, rosé and red wine), sweetness preference (dry, semi-dry, semi-sweet and sweet wine), preference of origin (German and imported wine) and sales channel usage (discount shop, supermarket, hypermarket, wine shop, cellar door and online sale) constant sum scaling was used [38]. Considering the results of Friedmann and Amoo’s study on rating scales [39], the questionnaire utilised a seven-point interval scale for gauging involvement. This was measured by asking consumers for their interest for and knowledge about wine. For the socio-demographical variables gender and age, we applied the same response categories in both coun-

tries, while social class was calculated from education level, net-income and current profession.

The questionnaire was designed in German and back-translated (German-Hungarian) so that the native language of each country was used during data collection.

Data from the survey were analysed with SPSS 23.0 (SPSS IBM) using mean, frequency, cross tables and ANOVA. Like Mueller et al. [40], we used the  $\chi^2$  test as an ordinal penetration measure to test the differences between the segments in terms of socio-demographic and behavioural profiles combined with Cramer’s V for cases with more than four cells [41]. For metric responses, factorial analysis of variance was used, and post-hoc effects (Tukey-b test) were estimated, allowing analysis of the significant differences between the segments.

## 3. RESULTS

### 3.1. Consumption frequency of alcoholic beverages

First, the consumption frequency of three alcoholic beverage types (still wine, sparkling wine and beer) was determined in order to provide preliminary insight into differences between German and Hungarian consumer behaviour. Table 2 shows that there were significant consumption differences in all three beverage types. The consumption pattern reflects that Hungarian frequent wine drinkers (at least once per week) is significantly higher than in Germany (22 per cent vs 12 per cent). According to this, the share of occasional drinkers and non-wine drinkers in Germany is higher than the Hungarians’.

Germany’s annual per-capita sparkling wine consumption is number one in the world with a value of 3.4l [3]. This is reflected in the Table 1 results, especially when comparing the first frequency categories. In Hungary, sparkling wine is also popular; however, the drinking frequency is lower than in Germany.

Beer consumption in Germany exceeds that of Hungary [3, 42]; comparing frequent beer drinkers, 45 per cent of the German population consumes beer at least once a week, while in Hungary, this share is only 24 per cent.

### 3.2. Socio-demographic profile of wine drinkers

To evaluate the socio-demographic makeup of wine drinkers, we employed cross-tabulation to determine any significant differences between the two countries (Table 2). For this analysis, we only involved wine drinkers

**Table 2.** Consumption frequency of selected alcoholic beverages in Germany and Hungary.

	Sparkling wine		Sparkling wine		Beer	
	Germany n=2,000	Hungary n=1,500	Germany n=2,000	Hungary n=1,500	Germany n=2,000	Hungary n=1,500
Several times per week	6%	11%	1%	0%	28%	13%
Once a week	8%	11%	3%	1%	17%	11%
Two or three times per month	13%	14%	9%	3%	11%	15%
Once a month	10%	12%	12%	6%	6%	8%
Less than once per month	24%	19%	49%	54%	13%	19%
Never	39%	34%	27%	37%	25%	35%
$\chi^2$	68.421*		144.739*		177.311*	
Cramer-V	0.198		0.284		0.302	

\* significant differences between Germany and Hungary,  $\chi^2 = p < 0.05$ .

**Table 3.** Socio-demographic profile of wine drinkers in Germany and Hungary.

	Germany n=1,237	Hungary n=988	$\chi^2$	Cramer-V
<b>Gender</b>				
Male	44%	50%	15.587*	0.105
Female	56%	50%		
<b>Age</b>				
16/18-29 years <sup>a</sup>	15%	17%	31.209*	0.165
30-39 years	13%	20%		
40-49 years	20%	18%		
50-65 years	28%	26%		
Older than 65 years	24%	18%		
<b>Social class<sup>b</sup></b>				
Upper	37%	17%	210.455*	0.325
Middle	45%	40%		
Lower	17%	43%		

<sup>a</sup> Legal drinking age in Germany is 16 years, while in Hungary 18 years; <sup>b</sup> Social class is based on education level and net monthly salary; \* significant differences between Germany and Hungary,  $\chi^2 = p < 0.05$ .

from both countries, therefore the investigated number of cases reduced on 1,237 in Germany and 988 in Hungary. Comparing first the gender of wine drinkers, it becomes clear that in Hungary, there is an even distribution of male and female wine drinkers at 50 per cent each, while in Germany, wine preference is slightly higher among women than men.

Age seems to be a more significant indicator of drinking frequency. Table 3 shows that while the consumer drinking behaviours are similar in both countries between the ages of 40-65 years, younger generations in Hungary are more likely to consume wine than their

German peers. However, these statistics reverse for the oldest generation, with more German consumers over age 65 drinking wine than their Hungarian counterparts.

The largest socio-demographic difference between German and Hungarian wine drinkers is related to social class. In Germany, wine drinking seems to be strongly correlated with higher social status; more than one-third of wine drinkers in Germany are wealthy and well-educated consumers, while the lower social class makes up only 17 per cent of the wine drinking population. The exact opposite is observed in Hungary, where wine drinking is popular among the middle and lower social classes but has significantly fewer upper-class participants.

### 3.3. Wine consumption behaviour

Factorial ANOVA was applied to analyse significant differences in the metric responses of wine consumption behaviour (Table 4); origin, wine type, level of sweetness, and place of consumption were measured with a constant sum scale. Involvement was evaluated by looking at self-reported interest in and knowledge about wine on a scale from -3 to +3.

A main distinction between the German and Hungarian wine markets is the preference of origin of wine: domestic or foreign. Germany is considered the largest import market internationally [3], while the Hungarian market is dominated by domestic wines; German consumers stated a 59 per cent preference for their domestic wines, but 94 per cent of Hungarians favoured a native vintage.

Wine type preferences show some differences; however, they are not substantial. Both countries produce more white wines than red [3, 19], which also reflects

**Table 4.** Wine consumption behaviour of German and Hungarian wine drinkers.

	Germany n=1,237	Hungary n=988	F-value	Sign.
<b>Origin</b>				
Domestic wines	59%	94%	1124.27*	0.000
Imported wines	41%	6%	1124.27*	0.000
<b>Wine type</b>				
White wine	44%	53%	44.09*	0.000
Rosé wine	12%	12%	0.00	0.989
Red wine	44%	34%	43.15*	0.000
<b>Level of sweetness</b>				
Dry	43%	23%	150.18*	0.000
Semi-dry	34%	18%	152.99*	0.000
Semi-sweet/sweet	23%	58%	477.95*	0.000
<b>Place of consumption</b>				
Home	46%	53%	25.87*	0.000
Dining establishment	18%	13%	27.66*	0.000
Visiting friends or relatives	25%	25%	0.02	0.963
Events	11%	9%	14.55*	0.000
<b>Involvement</b>				
Interest	-0.31	-0.65	18.68*	0.012
Knowledge	-0.83	-1.22	22.42*	0.002

\* Significant differences at  $p < 0.05$ , ANOVA-test.

the consumer preference structure. Yet, the above-mentioned imported wine share contributes to higher red wine consumption in Germany. In Hungary, the preference level for white wines is above 50 per cent.

One of the greatest differences in this study was sweetness preference. The majority of German respondents prefers dry wines, which comprise 43 per cent of their total consumption, while sweet wines account for just 23 per cent. Hungarian wine drinkers demonstrated nearly inverse choices, with strong preferences for wines with a higher level of residual sugar and only 23 per cent consumption of dry wines. One explanation for Hungary's inclination for sweet wine may be that one of the most popular wine growing regions in Hungary is Tokaj [21], where the focus is on sweet wine production.

As for consumption location, two categories have meaningful differences: drinking wine at home and at exterior dining establishments. In Germany, restaurants are a more popular choice for drinking, at 18 per cent compared to 13 per cent in Hungary, while at-home consumption in Hungary is significantly higher at 53 per cent.

With respect to involvement, Hungarian consumers indicated a lower value; however, the differences on a seven-point scale, even though they are significant, are marginal.

### 3.4. Usage of sales channels for purchasing wine

Germany and Hungary have entirely different landscapes regarding wine sales channels. Therefore, in the questionnaire, the inquiry about sales channels differed according to the retail structure of each country. In Germany, the categories "supermarket" and "hypermarket" were not separated and "purchasing wine abroad" was an added option. In Hungary, the category "small grocery" was included as small groceries are still of enormous importance in terms of selling wine, especially in the countryside, where there is not significant super- and hypermarket coverage.

Table 5 summarises the results of sales channel usage in Germany and Hungary. Discount shops such as ALDI Einkauf GmbH & Co. and Lidl Stiftung & Co. have huge popularity in Germany when it comes to purchasing food and beverages. Accordingly, the share of the discount shop channel is 37 per cent followed by supermarkets and hypermarkets at 36 per cent. Discount shops are not unknown in Hungary, but they are not as widespread as in Germany. Therefore, based on the survey data, we estimate their share at 12 per cent. The greatest piece of the total wine market in Hungary is controlled by hypermarkets, such as Tesco PLC or Auchan Hypermarche SAS, with a 33 per cent market share. Supermarkets follow at 20 per cent, and then small groceries, with a significant 18 per cent share. Specialty wine stores also having large differences in market share; in Germany, wine stores perform far better than those in Hungary (11 per cent versus 5 per cent market shares respectively). Winery-direct sales have a similar share in both countries at 12 per cent. Online wine shops sales, however, differ significantly between Germany (2 per cent) and Hungary (0.1 per cent).

**Table 5.** Usage of sales channels of German and Hungarian wine drinkers.

Sales channels	Germany n=1,237	Hungary n=988	F-value	Sign.
Discount shop	37%	12%	314.276*	0.000
Small grocery	n.a.	18%	n.a.	n.a.
Supermarket	36%	20%	n.a.	n.a.
Hypermarket		33%	n.a.	n.a.
Wine store	11%	5%	51.983*	0.000
At the winery	12%	12%	3.709	0.054
Online wine shops	2%	0.1%	29.732*	0.000
Abroad	2%	n.a.	n.a.	n.a.

\*Significant differences at  $p < 0.05$ , ANOVA-test.

When analysing the usage of sales channels by comparing different sub-segments, we have found significant differences. In Germany, there are proportionally more females than males, who buy their wines in discount shops. In Hungary, due to the fact that discount shops play a less important role, super- and hypermarkets have a higher proportion of female consumers. This phenomenon can be tracked back to the fact that in both countries mainly females do the everyday grocery shopping, which, obviously, is combined with purchasing wine. In terms of age, older consumers in Germany buy more frequently in wine stores, while in Hungary younger generations have a significant higher share of purchasing wine in hypermarkets. One of the main influencing factor among socio-demographic and –economic characters is social status – regardless of the country. German wine consumers with higher income and social status purchase very little wine in discount shops and spend more money on wines form wine stores or directly at the winery. In Hungary, we a similar situation can be seen regarding purchasing wine in wine stores and cellar door. There is a higher proportion of Hungarian wine drinkers from lower social class, who buy wine in small groceries [1].

Additional questions about consumers' activity and attitudes towards online wine sales were asked to analyse the potential and to forecast the development of this market in the future. As already stated, German online wine sales cover two per cent of total purchases and have an active consumer group of seven per cent (see Table 6).

In Hungary, only one per cent of all wine drinkers purchased wine online in the last year. Wine drinkers in both countries that have not already purchased wine online are to the same extent (13-14 per cent) interested in ordering wine online in the future. However, the share of those who do not want to consider online wine purchases is still substantial at 79 and 86 per cent, respectively.

**Table 6.** Active and potential online wine buyers in Germany and Hungary.

	Germany n=1,237	Hungary n=988
Have purchased wine online	7%	1%
Have not purchased wine online but willing to do so in the future	14%	13%
Have not purchased wine online and unwilling to do so in the future	79%	86%
Chi-square	53.447*	
Cramer-V	0.189	

### 3.5. Market structure of wine

There are official statistics of wine sales in terms of total volume by the Federal Statistic Offices in both countries. According to these, in 2016, Germany had sales of approximately 20 million hectolitres and 2.2 million hectolitres were sold in Hungary. Even the total proportion of sparkling wine consumed can be defined precisely – 16 per cent in Germany and 6.5 per cent in Hungary [3, 43, 44]. When deducing the volume of the total wine market by the share of sparkling wines, 16.8 million hectolitres remain in Germany, while in Hungary the volume changes to 2.06 million hectolitres. However, there are limitations when trying to quantify the value of the total wine market due to the very raw estimates appearing in different media. According to Euromonitor [5, 44], the total value of the German wine market was estimated at 13 billion Euros, and the Hungarian one at 315 billion Forint. Other sources, however, show a significantly lower value of 9 billion Euros in Germany [45]. Attempting to determine the value share of the on-trade wine market in each country is even more complicated. For that reason, this study only calculated the volume, but not the value, of the retail market. The study considered the on-trade share to be 18 per cent in Germany and 20 per cent in Hungary, which then converts to approximately 14 million hectolitres in the German off-trade wine market and 1.64 million hectolitres in Hungary [5, 44].

Tables 7 and 8 indicate the importance of different retail sales channels in Germany and Hungary. As already discussed above, the structure of the channels in Germany and Hungary differs substantially, especially when comparing the share of discount shops as well as super- and hypermarkets. Weighing the shares by volume, winery-direct sales in both countries gain in importance while discounts and super- and hypermarkets become less significant. This can be traced back to the fact that consumers in discount stores and super- and hypermarkets have below-average consumption rates while those who buy their wine directly from the winery tend to have a higher average consumption.

**Table 7.** Retail market structure of still wine in Germany.

	Discount	Food retails	Wine store	Cellar door	Online	Abroad
Average price (€/l)	2.92	3.20	10.00	6.72	10.00	8.00
Unweighted share	37%	36%	11%	12%	2%	2%
Volume share	33%	34%	12%	16%	2%	3%
Value share	20%	23%	26%	22%	3%	5%



**Table 8.** Retail market structure of still wine in Hungary.

	Discount	Small grocery	Super-market	Hyper-market	Wine store	Cellar door	Online
Average price (Ft/l)	800	870	1,000	1,000	3,300	2,000	3,300
Average price (€/l)*	2.51	2.73	3.14	3.14	10.34	6.27	10.34
Unweighted share	12%	18%	20%	33%	5%	12%	0.1%
Volume share	11%	20%	19%	30%	5%	16%	0.1%
Value share	8%	15%	17%	27%	14%	20%	0.2%

\* Average price in € was calculated based on the official exchange rate on 15. February 2019.

For the value share, this study used official statistics [3] and, in some cases - especially in Hungary, where no statistics were available - conducted short qualitative interviews with wine market experts. Based on the official statistics and the results of the expert interviews, the average price for each sales channel was defined. Although the German and Hungarian average prices were calculated separately, there are definite similarities in terms of price in certain sales channels.

Due to the lower average price and lower volume share, discount shops in Germany have a 20 per cent value share, while the share of wine stores and wineries rises strongly above 20 per cent. In Hungary, too, wine stores and wineries increased their value share massively compared to discounts, small groceries, and super- and hypermarkets.

#### 4. DISCUSSION

This study sought to identify differences between German and Hungarian wine drinkers, to provide insights into their wine purchasing and consumption behaviours, as well as investigate the structure and importance of sales channels in these countries. The results indicate that major differences appear in wine purchasing and consumption behaviours in Germany and Hungary.

Social class is the strongest differentiating factor for wine consumers in these two countries. Wine in Germany is trendy among consumers from the higher and middle social classes, but it still attracts quite a few consumers in the lower class. In Hungary, however, the main wine drinker population comes from the lower and middle social classes. The positive correlation between wine consumption and higher social status in Germany verifies previous research by Mortensen et al. [46], Lockshin et al. [47], and Thach and Olsen [48]. There were also significant differences in terms of age of the consumer. In Hungary, wine drinkers are evenly distributed across

all ages examined; however, in Germany, wine consumers are generally older (above 40 years). In other studies, age was also recognized as a robust variable influencing wine consumer behaviour [40, 49, 50, 51, 52, 53]. Preference of origin is also a substantial behaviour difference; Hungarian wine consumers greatly favour domestic wines [21], while imported wines are of great importance in Germany.

Sales channels in the two countries are also entirely different. In Germany, more than two-thirds of the total wine volume is sold in discount shops and other food retailers [37], while in Hungary, hypermarkets, supermarkets, and small groceries are the leading wine distributors.

The above-mentioned significant differences between Germany and Hungary underline the hypothesis that countries with different cultural, political and economic background have a different consumption pattern of alcoholic beverages. In Hungary, wine consumption is distributed more homogeneously within the different segments. As stated above, the differences in wine consumption between younger and older consumers as well as wine drinkers from lower, middle and higher social classes are much lower than in Germany. Due to this fact, wine in Hungary can be seen as an alcoholic beverage, which goes beyond social and age borders, while in Germany, socio-demographic and -economic characters influence consumption of wine more significantly.

##### 4.1 Practical and managerial implications

From a managerial perspective, these results contribute to more profound insights and better understanding of German and Hungarian wine markets and consumers.

Germany, with its 15 million hectolitres of imported wine, is one of the most important and popular wine markets worldwide [3]. In addition to the approximately 8,000 German self-marketing wine estates, large wine bottler operations and cooperatives, international wine

companies compete for German buyers. In Hungary, the pressure of imported wines is not as great as in Germany, however, the diminishing geographic area of vineyards as well as the decreasing per-capita-consumption in the country [43] challenges producers and wine market experts. For the reasons mentioned above, detailed information and data about consumers in these countries is crucial in order to understand their behaviours, needs, recent market trends, and the importance of various sales channels.

With the help of this study's results, sales channel target groups can be identified which may lead to better positioning for wine suppliers and offer the opportunity for promotional campaigns. In addition, wine producers and specialty wines stores, as well as discount shops and other retail channels, will be able to quantify the market share of their respective channels and also better position themselves in the German and Hungarian wine markets.

The market structure presented in 3.5 summarizes the importance of different sales channels. The German retail landscape differs significantly from the Hungarian one, especially in volume and value of discount shops and wine stores. This overview shall support wholesalers, exporters as well as importers of wines from Hungary to Germany and vice versa, to identify the target market and its sales channels and to position their products in the right channel.

This study also analysed trends for future developments in the wine sales landscape. Although online sales currently only make up 2 per cent of total wine sales in Germany and 0.1 per cent in Hungary, per study results, e-commerce will become an increasingly important and substantial portion of the future sales markets. This fact is essential for retailers to prepare their business for the future.

#### 4.2 Limitations and further research

Academically, this study enhances existing research into wine consumers' behaviour in two wine growing countries. As the framework of this study included two representative surveys (one in Germany and one in Hungary), the results can be generalised for the total populations. While this article shares new results, there are also limitations of the research that should be considered.

The current study outlines a snapshot of the German and Hungarian wine market in 2017. Although other representative studies from Germany [16] and Hungary [54] can confirm the results about consumer behaviour and structure of the sales channels, only a long-term investigation would give a complete picture on the development of both markets.

The authors of this paper, therefore, recommend continuing data gathering and comparing Germany and Hungary again in the future. Furthermore, we also encourage other researchers to adopt this way of investigation to compare other wine markets and their consumers.

#### ACKNOWLEDGEMENTS

We would like to thank the Geisenheim University and the Hungarian National Council for the Wine Communities (Hegyközségekn Nemzeti Tanácsa) for supporting our idea, the data collection and the analyses of this study. We would also like to thank Nicole Siegenheim and Dávid Brazsil for their helpful comments.

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