THE CONSUMPTION OF WINE: A ANALYSIS OF MARKET CONDUCTED IN SICILY

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Abstract

The methodology used in conducting the research project was of a quantitative and random kind. Random surveying refers to the identification of the prominent factors, from which consumers' purchasing behavior derives. In order to carry out the research a motivational survey was conducted using a methodology of seeking opinions through answers to a questionnaire. As a first step members of the research team designed and developed the research hypothesis, identified the questions to be asked in the survey and drew up the questionnaire to be given to the sample of consumers. The tool used for processing data consisted of the creation of a double entry table and estimation of the log-likelihood ratio test with relative p-value. The fixed level of significance for the overall statistical analysis was α= 0,05. The log-likelihood ratio test, referred to in statistics literature as the G test, was used to evaluate the association between the two qualitative variables.

Keywords: wine, marketing, market analysis, statistical analysis, log-likelihood ratio test

1. Introduction

The methodology followed to conduct the research project was quantitative and random. The random search refers to the identification of the prominent factors from which springs the buying behavior of consumer. Preliminary components of the research team have defined and developed the research hypotheses, identified the survey questions and constructed the questionnaire to be administered to the sample of consumers. The construction of the questionnaire has led to questions about the definition of perceived quality, the habitual consumption, the price-quality ratio. The objective of the research was to understand the habits and buying preferences of wine, with particular reference to that produced in Sicily. The research was conducted as a motivational survey through a methodology that refers to the survey by questionnaire. The survey on consumption of wine has been conducted in the period between November 5th

of 2012 and February 10th of 2013 on a sample of 200 consumers of Sicily. The recognition by the administration of the product was mainly conducted at some outlets, supermarkets, wine shops and bars, interviewing a sample of consumers directly with the method *"face to face."* The survey purpose was conducted to understand the needs of wine consumers and the role played by the mark of quality in the choice of purchase, and finally the degree of appreciation and consumption of Sicilian wine. The instrument used for data processing has been the construction of a double entry table and the estimated *log-likelihood ratio test* with the relevant *p-value*. The significance level for the whole statistical analysis was $\alpha = 0.05$. *The log-lik lihood-ratio test* known in the statistical literature as test G was used to evaluate the association between two qualitative variables. The questionnaire was structured in three sections, the first tending to acquire information about the socio-demographic characteristics of consumers surveyed (age, sex, marital status, education level). The second section identifies the factors and the specific consumption of wine (wine type, frequency of consumption, purchasing places, places to eat). Finally, the third one was to obtain information about the perception of quality, price and preference for the consumption of Sicilian wine.

In order to assess whether the frequency of wine consumption is significantly influenced by age was estimated by ordinal logistic regression model, known in statistical literature as a model PLUM. In this context it was made known only a part of the research, we refer to a next publication of the full report.

2. Brief analysis of the Sicilian wine growing and producing market

Sicilian wine growing and producing is one of the main economic resources in the region (Bacarella G., Nicoletti G., 2010), accounting for a gross total of about 15% of agricultural produce. With about 110,000 hectares (plus about 19,000 hectares in reserve) of vineyards, Sicily is the most important wine growing and producing region in Italy. Three Sicilian provinces possess the greatest resources in this area: Trapani (66,557.79 ha), Agrigento (19,943.24 ha) and Palermo (15,821.91 ha). These provinces account for about 88.5% of Sicily's wine growing and producing land. Those with the smallest land areas dedicated to wine production are Messina (0.76%) and Enna (0.32%) (Bacarella S., Corona G., Forte A, 2010). The most widely grown grape varieties are Catarratto Bianco Comune (28.4%), Nero d'Avola (16.8%) and Inzolia (6.12%); these are followed by smaller quantities of Trebbiano Toscano, Catarratto Bianco Lucido, Grillo, Syrah, Chardonnay, etc.. Overall, there is a clear prevalence of white varieties (63.8%) over red ones (35.9%); other varieties account for only 0.25%. Table wines and muscatels account for 65 – 70% of total production, 25 – 30% is made up of IGT products, and 4 – 4.45% is made up of QWPSR. As regards forms of growing, the most widely used is the espalier (81.2%), followed by the canopy (9.8%) and the traditional sapling (8.4%). Overall Sicilian wine grape production is around 6 million hectoliters, as would be expected from the number of hectares given over to it (Pomarici E., Sardone R., 2001). The province producing the most wine is Trapani, with more than 3 million hectoliters; Trapani is followed by Agrigento and Palermo. The three Sicilian provinces with most land dedicated to wine growing and producing account for almost 85% of overall production, roughly in line with the land area concerned. The Sicilian provinces producing the least wine are Siracusa (1.28%) and Enna (0.67%). Today there are about 710 wine growing and producing forms in Sicily, 55 of which are associations of producers.

3. General characteristics of the sample

The analysis was conducted on a large heterogeneous sample had different demographic and socio-economic conditions. 200 respondents were detected as surveyed. The survey was conducted in Sicily (Italy).

Summary of socio - economic characteristics of consumers surveyed

Table no. 1

Indication	characters	n°	%
sex	males	102	51
	females	98	49
	total	**200**	**100**
age classes	70 and up	2	1
	50 - 69	21	10,5
	30 - 49	43	21,5
	18 - 29	134	67
	total	**200**	**100**
civil status	single	151	75,5
	married	47	23,5
	divorced	2	1
	total	**200**	**100**
study qualifications	degree	30	15
	diploma	149	75
	primary-secondary	20	10
	total	**200**	**100**

Source: Our calculations based on data collected directly

51% of respondents are males, the remaining 49%, corresponding to 56 subjects, are females. On the basis of demographic characteristics, the target of the respondents were divided into four age groups: members of the class, include persons aged between 18-29 years, represents 67% of respondents (134 units) ; members of the second age group (30 - 49 years) are 21.5% of total (43 units); respondents included in the third age group (50-69 years) represented 10.5% of the sample; Finally, only 1% of respondents older than 70 years. With reference to the qualifications, it is possible to note that the majority of respondents, 75% (149 units), graduated, only 15% have a college degree, while the remaining 10% (20 units), has the title of middle school or elementary.

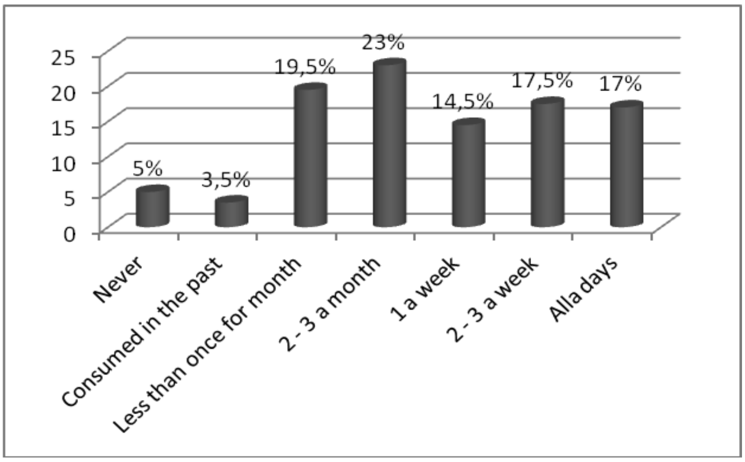
Another variable considered in the sample for the survey is conducted on marital status. 75.5% (151 units) of the respondents are single (unmarried), 23.5% (47 units) are married and only one person reported being divorced.

4. Analysis and interpretation of results: consumption, frequency, preferences

Respondents were administered a questionnaire consisting of ten questions aimed to assess, in particular, consumer habits and buying wine, the characteristics which must have a quality wine, and the reasons to choose from a wide range of wines. The first question asked respondents to consumers is related to frequency of consumption of wine. From the replies (fig. no. 1) can be seen that there are two opposing groups fed, on the one hand those who consumes wine time to time, not more than once per month (19.5%), on the other those who consumes it usually, in fact, 34.5 % says they consume at least 2 to 3 times a week.

What is your wine consumption?

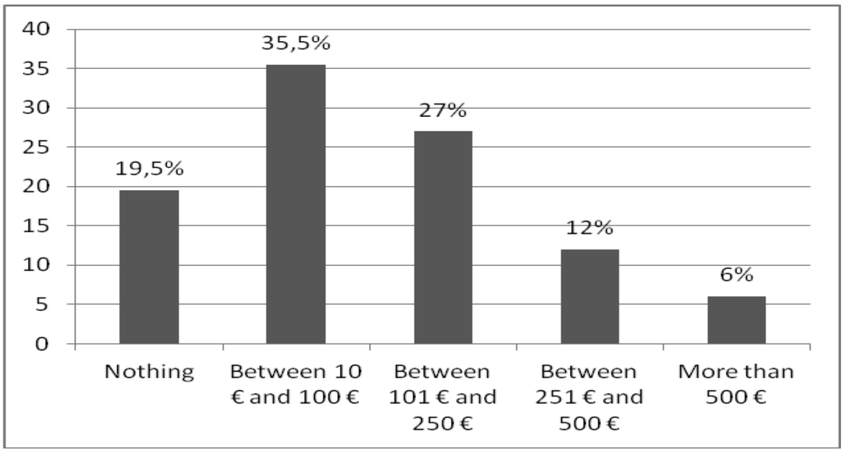
Fig. no. 1



In particular, as shown in Graph no. 1, 17% of regular consumers, prefer to taste the wine every day. Regarding the place of consumption, the majority of respondents prefer home or restaurant (74%). Only a small proportion of respondents, about 4%, prefers to consume wine at the bar. Maybe this place can be a pleasant meeting point but not the ideal place to savor or enjoy a glass of quality wine. With regard to the propensity of expenditure and the habits of the consumer of wine, have been formulated two questions. The first relatively to the maximum expenditure for the purchase of a single bottle, the second which is roughly the budget for the purchase of wine in an year. Regarding the first question, 42.5% of respondents said it is willing to spend for a single bottle of wine, an amount not exceeding 10 €, only 26% of consumers would be willing to buy a bottle at a price above the 10 €. When asked how the average annual expenditure for the purchase of wine, most of the answers is between 10 and 100 euros (35.5%), significant, approximately 27% is the percentage of those who are positioned on a top-end buying, on average, between 101 and 250 euros (fig. no. 2).

How supposedly spends in a year for the purchase of wine?

Fig. no. 2

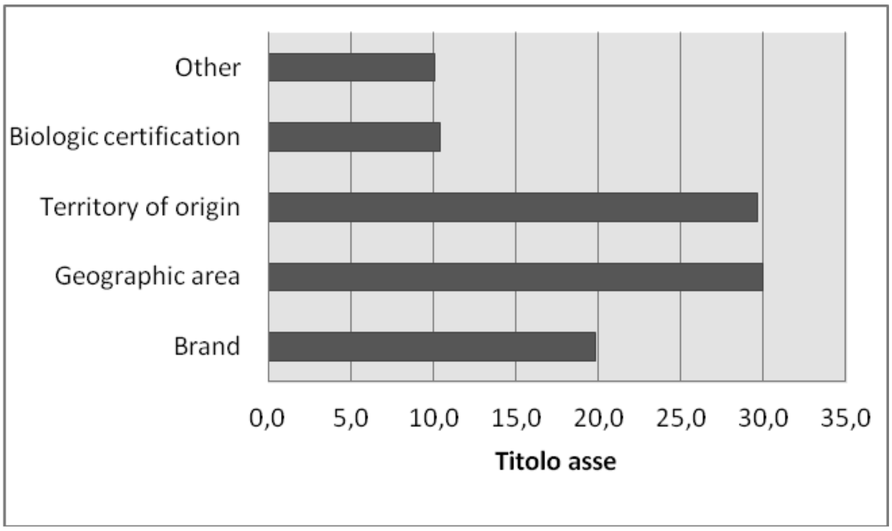


Only 6% of respondents are willing to spend an amount in excess of 500 euros to deal with such consumption. To know the habits of the consumer, it was also asked, what is your favorite place to buy. The majority of respondents (37%) replied by the manufacturer. This shows that the average consumer is still looking for a genuine product, and that the seller prefers to meet in person, the raw materials and techniques used. This finding is important because it reflects consumer preference towards short chain, which allows us to contain the costs of intermediation.

29% of respondents prefer to buy that product in supermarkets and hypermarkets. Only 10% discount on wine purchases, a sign that they tend to buy more quality wine. Subsequently, the respondent is asked, what were the factors that determine the quality of the wine. For this application, he had the opportunity to provide a multiple choice (fig. no. 3***)***. The extrapolated data is interesting, in fact, about 60% of respondents match the quality of origin area (30%) or more specifically the designation of origin (29%). This shows that the average consumer, you feel protected, only if there is an official recognition that guarantees the quality of the product.

What are the factors that determine the quality of wine?

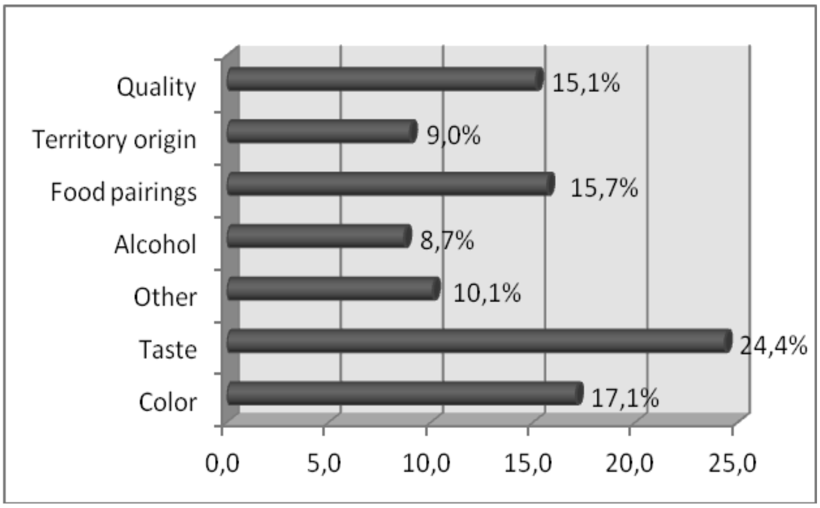
Fig. no. 3



Only 10% of consumers said that the factor that determines the quality of wine is certified organic, meaning that even today this kind of recognition is not entered in the "culture" of the average consumer. Through the investigation, among other things, an attempt was made to understand the reasons, which push the consumer to purchase a product over another. This question has been answered question No. 7. For 24.4% of respondents, the decisive factor in the choice of purchasing wine is taste, follows with 15% of those who believe that the parameter of choice is paramount pairing with food. This date, however, shows us that the "quality" factor, is not paramount in purchasing decisions (15.1%) (Fig. no.4).

Which factors are most important choice for the purchase of wine?

Fig. no. 4



The answer can be justified by the fact that generally the 'quality' wines have a higher price, and as evinced by the previous answers, the consumer is not willing to spend an exorbitant sum for the purchase of a single bottle.

17.1% of respondents said that one of the main factors that determine their choice in wine is the color. Some 35.5% of the sample of respondents said they preferred the color red. 25% of consumers have shown a preference for white wine, while 18% does not matter the color of wine. How many regards consumer habits, the interviewee was asked if changes in general type of wine, and how many times he prefers to do it. The answers shows that the average consumer normally change the type of wine. More specifically, 31% of respondents say to change the type of wine consumed occasionally.

Instead, 24.5% say they frequently prefer to change the type of wine, only 14% of respondents do not like change wine, but prefers to consume the same type. The investigation extended to the territory of Messina, as we had said, the goal of interpreting the buying habits of consumers relative to the market of Sicilian wines. For this reason has been given the following question: do you drink Sicilian wine?

The most frequent response was two to three times per month (26%). This finding is consistent with that provided by respondents to the first question (how many times consumes wine) In fact, even then most consumers gave the same response. 12.5% of respondents said that Sicilian wine consumed each day. Finally we asked respondents if they know the beneficial effects of wine consumption. Almost all respondents (74%), say they know the benefits of wine, this date is concerned, since it appears that consumers in this regard is interested in health aspects associated with the consumption of wine, particularly the presence of polyphenols can reduce the negative effects associated with the digestion of certain fats of animal origin present in red meat.

5. Identikit of the wine consumer in Sicily

The study conducted on the reference sample has been able to trace the profile-type on the consumer of wine in Sicily. Man, bachelor or graduate degree, over the age of fifty years and among those belonging to the younger age group between 22 and 25 prefer red wine on a budget with which to purchase the bottle of wine quality even more than 10 euros if bought at Enoteca, less than 5 euros when purchased at discount store. The annual expenditure for the purchase of wine does not exceed 100 euros. This is the identikit of the wine consumer at Sicily. The research showed, among other things, that the consumer prefers-the type of wine consumed at home or in restaurant. With regard to distribution channels, the consumer-type prefers to buy the bottle from the manufacturer, preferring the short chain, and researching the quality of the product, even if it is high proportion of subjects that buys at the supermarket. Among the factors that determine the choice process of consumption, the market survey showed that the area of origin for the majority is synonymous with quality. This is an aspect of particular importance that reinforces even more the need to link the image of the area to the product. The consumer research is realized so through official recognition of a brand of wine quality.

6. Conclusions

The continuing international economic crisis has been less sharply felt in the European agri-food sector, thanks to the flexibility of this sector, which is safeguarded by differentiations in company size; indeed, in the 27 countries of the European Union, more than 99% of the agri-food sector is made up of small and medium-sized enterprises. The European agri-food system currently has a turnover of about 917 billion Euros and employs more than four and a half million people; small and medium-sized enterprises are thus fundamental to the European agri-food industry. This is demonstrated by the figures, which highlight that agri-food SMEs have created an ancillary system which accounts for 63% of jobs in the sector and a highly valuable 47% of its added value. The Italian agri-food sector includes as many as 900,000 agricultural firms, 6,500 food manufacturers, about 70,000 micro-enterprises and artisans and almost 400,000 commercial businesses, as well as the restaurant business. The importance of agribusiness within the EU is reflected in Italy, where it accounts for 12.6% of the employment market and 8.4% of gross domestic product. It is worrying to note that almost 90% of Italian wine growing and producing enterprises do not carry out market surveys or studies; indeed, fewer than a hundred Italian firms in this sector commission market research in an attempt to adapt their products to changing consumer requirements and new demands from the international market. The only source of market information for entrepreneurs is often the importer or distributor his form uses. The supply of Italian wine is undoubtedly one of the most varied and prestigious in the world, possessing unique characteristics and strong local identity, elements which help make it highly competitive. Today, supply is characterized by a structure not only composed of small and medium-sized enterprises, but a myriad of micro-enterprises which cause fragmentation of the production system. This could become an added value only if action is taken to inform the market of the peculiarities of the various production models. The future of Italian wine growing and producing is thus closely tied to the need to activate cooperation processes, which encourage vertical, as well as horizontal, forms of integration. In this way, added value can be created, through the bottled product, and the currently weak or almost inexistent contractual power of producers can be improved in their dealings with large distributors.

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