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Evaluation of the effects of changes in regulatory policies on consumers perception: the case of designations of origin in the wine common market organisation

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Abstract

The paper analyses how different aspects connected with regulations can influence the consumers' quality perception and the value that consumers attribute to the wine sector products. In particular, aspects concerning labelling and presentation of designations of origin, which, in turn, mirror different regulations of production methods, are considered. Consumers' preference can allow enterprises to complying with more restrictive rules and sustain higher costs for differentiate their products and achieve higher quality. When choosing a product, consumers do not evaluate each single quality factor but the product as a whole, therefore the analysis has to be done with a methodology considering both the combination of all characteristics of the product, and the contribution of every factor to the creation of value for consumers. For this reason the value that consumers attribute to different characteristics is evaluated through an experimental economic analysis applying the method of the Conjoint analysis.

Keywords: Conjoint analysis, designations of origin, wine sector regulation, consumer perception

JEL classification: Q 13, Q 18

1. INTRODUCTION

In the Common Agricultural Policy, support measures are usually joined to regulatory ones. The wine CMO maybe represents the most evident example. The Council Regulation (EC) No 479/2008 is divided in: Titles that contain only support policies (i.e. Title II - Support Measures), Titles that contain only regulatory provisions (i.e. Title III - Regulatory Measures: oenological practices and restrictions, designations of origin and geographical indications, traditional terms, labelling and presentation, producer and inter-branch organisations), Titles in which regulatory provisions are joined to expenditure policies (i.e. Title V – Production potential: unlawful plantings, transitional planting right regime, grubbing-up scheme).

While for expenditure policies a set of specific instruments has been elaborated (effectiveness, impact evaluation, etc.) to evaluate choices in a way that is as much as possible objective, for regulatory policies the evaluation is not so easy. However, it cannot be denied that changes in regulatory systems produce effects on enterprise competitiveness, either operating on the costs side (i.e. oenological practice restrictions or designations of origin product specifications) or operating on the incomes one, namely allowing enterprises to differentiate products and collocate them in higher added value market segments.

In particular provisions in wine labelling and presentation, which are joined to rules on production methods linked to health concerns, origin and quality would allow consumers to distinguish between products of higher and lower quality level and differentiate consumers' willingness to pay. This is possible if consumers are able to notice the diversities and attribute a higher value to some quality aspects of the products.

The paper analyses how different aspects connected with regulations can influence the consumers' quality perception and the value that consumers attribute to the wine sector products. In particular, aspects concerning labelling and presentation, which, in turn, mirror different regulations of production methods, are considered. Consumers' preference can allow enterprises to complying with more restrictive rules and sustain higher costs for differentiate their products and achieve higher quality.

Generally, in retail selling points, consumers mainly choose on the basis of extrinsic cues, used as quality signals of the product. Moreover, they cannot taste the product or get specific information about it by the selling point staff.

In this case, attributes that are usually considered in marketing and sensory studies are: packaging (bottle colour and shape, label, etc.), brand name (producer, geographical indication), information about wine characteristics (variety, region of origin, vintage) and price.

However, we have also to consider other information that is directly linked to rules about labelling and wine products presentation (Reg. EC No 607/09), concerning compulsory (i.e. horizontal rules about ingredients: "contains sulphites") or optional particulars (i.e. the indication of a geographical unit smaller or larger than the area underlying the designation of origin; terms referring to certain production methods; indication of the Community PDO and PGI symbols; terms referring to a holding; the role of an enterprise like producer and bottler at the same time: "produced and bottled by…"), as well as information concerning other regulations like the EU organic legislation (Council Regulation (EC) No. 834/2007 about organic production and labelling of organic products).

All these attributes are not usually taken into consideration together in evaluating consumers' preferences, even if some studies analyse differences in consumers' perception and willingness to pay between organic and traditional wine products (Sirieix, Remaud, 2010). However, we feel that they are significant since they can modify consumers' perceptions and preferences considerably.

In the new wine CMO, an evident novelty is also the change in provisions concerning designations of origin and geographical indications, which are brought back to the rules concerning all the other PDO and PGI agro-food products. On the wine labels, producers can insert the PDO (and PGI) abbreviation and logo, in addition or as a replacement for the national designations that were previously in use in each national state (in Italy DOC, DOCG and IGT). So the effect of this change in consumers' perception has to be analysed.

In this study, we consider the following elements linked to regulation provisions that can be used by enterprises as means of differentiation in product labelling and presentation:

- the discipline of organic farming (Council Regulation (EC) No 834/2007);

- the possibility of using additional producer organization brands (Italian Dlgs. April, 8 2010, No 61, in application of the Council Regulation (EC) No 479/2008);
- the indication of the name of the producer and the bottler, and other specific indications about production methods (Reg. EC No 607/09);
- the content of sulphur dioxide in wines and the rules concerning its indication on the labels (Reg. EC No 607/09 and Directive 2000/13/EC).

All these elements influence the consumers' quality perception and the value that consumers attribute to a product and, therefore, their willingness to pay for it, so conditioning the profitability of the enterprises.

When choosing a product, consumers do not evaluate each single quality factor but the product as a whole, therefore the analysis has to be done with a methodology considering both the combination of all characteristics of the product, and the contribution of every factor to the creation of value for consumers. For this reason the value that consumers attribute to different characteristics linked to regulation aspects will be evaluated through an experimental economic analysis applying the method of the Conjoint analysis.

Conjoint analysis is usually used for guiding enterprises in their marketing choices; in this paper we use this technique, together with Factor and Cluster analysis, to evaluate how regulations and provisions in wine labelling and presentation can affect consumers' quality perception. More than two hundred questionnaires have been drawn up by wine consumers in the Abruzzi Region, evaluating different labels of a protected designation of origin "Montepulciano d'Abruzzo DOC" wine.

2. METHODOLOGY

2.1. The Conjoint analysis

Conjoint analysis is a marketing technique that researchers use to determinate the importance of some aspects of a product/service. It assumes that consumers may be able to evaluate a range of products/services along some key dimensions, called attributes. With the Conjoint analysis we construct different series of product profiles (concepts) that represent a possible product or service, in our case a different combination of information on wine labels and prices (different scenarios). The aim of the research is to estimate the importance of each attribute of the plan. For categorical attributes, the utility function consists of part-worth estimate for each level of the attribute. The market simulation models use this information to predict how each respondent would choose among alternative products.

In the literature related to the agricultural and food field, there are various applications of the conjoint analysis to the study of the impact of some factors/elements of a product on the purchase decisions. Cicia and Perla (2000) have carried out an experiment of Conjoint analysis applied to the organic extra-virgin olive oil, analyzing four attributes: the place of origin (Campania, Tuscany, Calabria), the institute of certification (AIAB or IMC), the aspect (limpid

or cloudy) and the price (10,000, 15,000 and 25,000 Italian lire). The impact of the place of origin is the most important.

In the wine field an interesting experimentation has been realized from Szolnoki et al (2010) that has estimated the impact on various targets of consumers of some variables characterizing the product: the type of wine (Pinot Gray, Palatinate Riesling, Moselle Riesling), the shape of the bottle (Bordeaux, Schlegel), the colour of the bottle (green, brown, white) and three different styles of label; in this study was used a reduced plan that is constituted of 9 different profiles. Nardella (2009) has applied the Conjoint analysis to the milk product, studying the impact of some factors on the product acceptance: expiration, origin of the milk, percentage of fat. All the variables has been evaluated with a score from 0 to 100. Others interesting applications have been carried out on other products, like bovine meat (Makokha et al, 2007), fish (Haldrendt et al, 1991), transgenic milk (Schnettler et al, 2008).

2.2. The full profile technique

There are different ways to use the Conjoint analysis and different techniques. With the full profile method, complete products are presented to consumers, namely with all attributes of a product at the same time. In any case the product to evaluate is a real physical object or similar to real.

The method is developed constructing various profiles to estimate/to order. In each profile, all the factors are present although with different combinations of levels and attributes. The respondent must then classify/estimate each profile using a criterion of preference: it could be liking, purchase intention, or other scales of preference.

With the full profile method the number of possible profiles grows in extremely fast way thanks to the various combinations of attributes and levels. So it has to be reduced to a fraction of all possible combinations. The plan must be balanced with a sufficient rotation of the attributes and with a sufficient number of profiles in order to maintain the overall significance of the experiment.

In the applied method , the respondent is asked to assign a score of preference to each profile, constituted by the label and the price of the wine, indicating a number comprised between 1 and 100 (score method). Then the impact of each attribute on the decision of the consumers and the part-worth of the different attributes will be estimated.

The full profile method better mirrors what consumers actually do, they focus on the complete product, not only on some aspects of that; in fact, the importance of full profile Conjoint analysis is that consumers value the product considering all factors together. In this case the situation is similar to the real process of buying.

3. RESEARCH DESIGN

The survey concerned more than two hundred wine consumers, interviewed at the Faculty of Agriculture of the University of Teramo and in different wine shops in the Abruzzi region

(Italy). The participants had to answer to a questionnaire composed by two parts: the first part containing questions about personal information, attitudes in wine consumption and wine sector knowledge; the second one containing pictures of eight labels differing for some elements and identifying eight different profiles of the same product. The respondents had to evaluate each profile on a scale from 1 to 100 on the basis of the willingness to buy the specific product profile.

The participants evaluated different versions of the same label of a designation of origin Montepulciano D'Abruzzo DOC wine, provided by a local producer and modified by an image managing software to obtain eight different products' profiles. Therefore, the profiles are the same for the characteristics concerning the type of wine, the name and description of the product, the denomination of origin, the year, the alcoholic strength by volume, the label stile, but differ for indications related to the respect of some regulations.

In this way the labels are comparable to a label of a PDO wine sold on the Italian market in terms of information, aspect and way to present the contents.

The regulatory aspects took in consideration are the organic production of grapes, the membership of a Designation of origin Consortium (in this case the "Consorzio di Tutela Vini d'Abruzzo"), the sulphites content, production and bottling in the enterprise. The variable "price" has been added to these elements, with the purpose to verify his influence as a marketing variable.

Organic production is regulated by the Council Regulation (EC) No 834/2007; this is the variable more often analysed in literature, but not in conjunction with the other factors considered in the paper. Usually a premium price for organic products is recognized by consumers, especially if sensible to natural and environmental aspects, even if this positive attitude does not always seem to extend to organic wines (.

The obligation of indicating the presence of sulphites on the label is regulated by Directive 2000/13/EC that was modified by Directive 2003/89/EC; the use of the terms "contains sulphites" or "sulphur dioxide" is compulsory when the SO2 concentration is higher than 10 mg/L or 10 mg/kg. The opportunity of avoiding this indication (very difficult to achieve because a small amount of sulphur dioxide is naturally produced by the yeast during the fermentation stage of winemaking) can be used like an indicator of naturality (sulphites are usually aggregated to prevent microbial contamination) and safety (sulphites are considered allergens) of the product.

The indication of wine "produced and bottled" in the enterprise (Reg. EC No 607/09) represents another guarantee of origin and naturality of the product, because indicates that the production and bottling of a designation of origin or geographical indication wine is done directly by the wine grower.

Finally the use of a Designation of origin Consortium brand (regulated by the Italian Dlgs. April, 8 2010, No 61 in application of the Council Regulation (EC) No 479/2008) is another guarantee of origin and control of the production.

The variable price has been divided in four ranges, which usually identify in literature (Rabobank, 2003) different segments: popular premium (price range between 3-5 euro), premium (5-7 euro), super premium (7-14 euro) and ultra-premium (14-25 euro).

The experimental design has been constructed with a reduced orthogonal plan with eight profiles, presented in Table 1. The software employed for the experiment is SPSS 18.0.

Table 1: Experimental design

Profile (label) number	Brand Membership of the Consortium Abruzzi wines	Indication "contains sulphites"	Indication "produced and bottled"	Grapes' organic certification	Price range
1	Present	Not present	In the enterprise	Not present	From 5 to 7 euros
2	Present	Not present	Bottled in other enterprise	Indication of organic certification	From 14 to 25 euros
3	Present	"contains sulphites"	In the enterprise	Indication of organic certification	From 3 to 5 euros
4	Not present	Not present	Bottled in other enterprise	Not present	From 3 to 5 euros
5	Not present	"contains sulphites"	In the enterprise	Not present	From 14 to 25 euros
6	Not present	"contains sulphites"	Bottled in other enterprise	Indication of organic certification	From 5 to 7 euros
7	Not present	Not present	In the enterprise	Indication of organic certification	From 7 to 14 euros
8	Present	"contains sulphites"	Bottled in other enterprise	Not present	from 7 to 14 euros

Source: own elaboration

The valid answers to the questionnaire have been 207. The sample is composed by 42% of people between 18 and 30 years, 30% between 31 and 40 years and 28% with more than 41 years. Male are 55% and female 45%.

The 46% of the sample declare sufficient knowledge of the wine sector, 26% quite good knowledge, 22% very limited knowledge and only 6% of the sample are expert or professional of the sector.

The sample is composed by 47% of people with a medium frequency in wine consumption (at least once a week), 20% of regular consumers (daily consumption), 20% of social drinker (at least once a month), while 13% of people drink wine rarely (less than once a month).

4. RESULTS

4.1. Analysis of the utility values and the relative importance of the factors

In the following table are indicated the main results of conjoint analysis that indicate the relative importance of the various factors.

Table 2: Conjoint Analysis. Relative importance of the factors (%)

Factor	Level	%
Consortium	(= Associated or not to "Consorzio di Tutela Vini d'Abruzzo")	18.399
Sulphites	(= Contains sulphites or not)	9.583
Bottling place	(= The wine is bottled in the production enterprise or in other enterprise	27.591
Organic certification	(= Organic certification or not)	11.968
Price range	(= The four different price ranges used in the experiment)	32.459

Source: own elaboration

From the result of the conjoint analysis it turns out that the greatest importance is attributed to the price, with a score of approximately 32.5%; then we find the bottling place, with a value of approximately 27.6% and the association or not to a Consortium brand. The organic certification of grapes has a relative importance in the consumers' perception of about 12% and the presence or not of sulphites represents the least important factor (about 9.6%).

Table 3: Estimate of the factors utility value

Factor	Level	Utility value
Consortium	Associated	3.355
	Not associated	-3.355
Sulphites	It contains sulphites	-1.748
	It does not contain sulphites	1.748
Bottling place	In the enterprise	5.031
	In other enterprise	-5.031
Organic certification	Certificated	2.182
	Not certificated	-2.182
Price range	From 3 to 5 euros	3.289
	From 5 to 7 euros	5.076
	From 7 to 14 euros	-1.603
	From 14 to 25 euros	-6.762
(Constant)		48.856
R of Pearson – Value 1.000		
Tau of Kendall – Value 1.000		

Source: own elaboration

Referring to the price values, a positive utility results to be correlated to the ranges from 3 to 5 euros and from 5 to 7 euros, while negative utility characterizes the ranges from 7 to 14 euros and, above all, that from 14 to 25 euros. 49% of the sample has answered "controlled denomination of origin (DOC)" to the question: "Based on its acquaintance, which of the following acronyms better indicates the wine to denomination of origin of high quality? "; 32% believe that the denomination of protected origin (DOP) is a synonymous of a better qualitative level, while 19% answered that the acronyms do not indicate qualitative differences.

The weight of the various factors that influence the choice of the consumer in terms of product acceptance differs in the various range of age. For individuals aged 18 – 30 years the price variable has a relative importance of 27.2% and represents the most important element; in the range between 31 and 40 years the incidence of such factor is 47.9%, while over 41 years the most important element is the bottling place. In the range between 18 and 30 years the various factors (with the exception of the affiliation to the "Consorzio di Tutela Vini

d'Abruzzo", whose relative influence on the product acceptance is evaluated only the 9,5%) have a similar incidence that is close to 20%.

Table 4: Relative importance of the factors / age range of the sample

	Between 18 and 30 years (n=87)	Between 31 and 40 years (n=62)	Over 41 years (n=58)
Consortium	9.564	19.899	30.025
Sulphites	21.814	2.804	1.185
Bottling place	20.254	26.579	41.136
Organic certification	21.175	2.836	13.312
Price range	27.194	47.881	14.343

Source: own elaboration

The price is an element that influences more men (36.3%) than women (27.1%), while the sulphites seem to be considered by the sample, especially by the feminine component, the least important factor (respectively, 11% by men and 7% by women).

Table 5. Relative importance of the factors / gender

	Male (n=113)	Female (n=94)
Consortium	16.788	20.632
Sulphites	11.204	7.336
Bottling place	23.285	33.565
Organic certification	12.389	11.383
Price range	36.335	27.083

Source: own elaboration

It turns out that the price is the factor of highest impact for the standard and occasional consumer (36% and 35%), while, for the frequent consumer and for the non-consumers, the bottling place results to be the most important factor (40.1% and 27.6%).

Table 6: Relative importance of the factors / frequency of wine consumption

	Regular consumption (daily) (n=42)	Medium (at least once a week) (n=97)	Occasional (at least once a month) (n=41)	Non consumer (less than once a month) (n=27)
Consortium	13.924	18.04	25.341	16.2
Sulphites	7.061	11.287	1.64	18.761
Bottling place	40.887	22.05	27.774	27.576
Organic certification	9.195	11.843	10.155	20.012
Price range	28.933	36.779	35.09	17.451

Source: own elaboration

The price range 7-14 euros, generally with a negative impact on the product acceptance, it is instead a positive member of the utility both for irregular wine consumers and for the consumers who have insufficient acquaintance of the product wine.

4.2. Market segmentation (factor analysis and cluster analysis)

The need to be fast in developing new products as a consequence of constant changes in the market, strong competition, globalization and difficult economic situation, contributes to make product improvement a key point for on-going competitive advantage (Deliza R., Macfie H., Hedderley D.). In the competitive and dynamic wine market, it's very important for the wine producers not only to find out what kind of product the consumers look for, but also to understand which particular information, provided in the label, can influence the consumers acceptance of a specific wine bottle.

To study the consumer attitude towards the product, a factor analysis was used to analyse the main components of the consumer's characteristics and product. The aim of this research is to enable the response of each wine consumer to be analysed for the relative importance of each factor and, similarly, performing consumers can be clustered.

The statistical analysis was performed using the SPSS statistical package.

Table 7: Factor Analysis. Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Age	1.86	.827	207
Purchase frequency	2.26	.928	207
Product cognition	2.84	.841	207
Sex	.5459	.49910	207
Purchase place	2.6618	1.27776	207
DOC_DOP	0.1836	0.38808	207
Profile 1	61.88	23.071	207
Profile 2	44.35	24.874	207
Profile 3	60.97	27.542	207
Profile 4	43.32	27.699	207
Profile 5	39.84	24.494	207
Profile 6	45.98	23.779	207
Profile 7	52.86	22.312	207
Profile 8	41.65	23.101	207

Source: own elaboration

Table 8: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.731
Bartlett's Test of Sphericity	Approx. Chi-Square	877.909
	Df	91
	Sig.	.000

Source: own elaboration

Table 9: Rotated Component Matrix (a)

	Component				
	1	2	3	4	5
Profile 4	.856			-.194	-.144
Profile 3	.854			.148	
Profile 6	.773	.433		-.134	
Profile 1	.705	.168		.112	.255
Profile 5	-.148	.823		.167	
Profile 8	.228	.758		.102	
Profile 7	.311	.717		-.114	
Profile 2	.138	.671		-.218	
Product cognition			.839		
Purchase frequency			.824		
Age	-.109		-.336	.793	
Purchase place	.278	-.143	.392	.570	
Sex		-.216	-.296	-.448	.408
DOC_DOP					.906

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 5 iterations.

Table 10: Total Variance Explained

	Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %
1	2.842	20.303	20.303
2	2.520	18.001	38.304
3	1.754	12.531	50.835
4	1.355	9.675	60.510
5	1.098	7.845	68.356

Extraction Method: Principal Component Analysis.

Results of the Factorial Analysis are statistically significant (KMO = 0.731) and the first 5 components explain more than 68% of the total variance of the studied phenomenon:

- Component n. 1 “YOUNG PEOPLE WITH LOW PRODUCT COGNITION”: it explains more than 20% of the total variance and is correlated to young male subjects that mainly buy wine at restaurants, without a detailed knowledge of the product and with a standard frequency of purchase; the preference for the types of wine is above all for profiles 4, 3 and 7, while high price appears decidedly to be little appreciated (profile n. 5, characterized by a negative coefficient).
- Component n. 2 “WOMEN AVAILABLE TO PAY FOR QUALITY”': it explains 18% of the total variance and is characterized by women who buy in wine cellar; their preferred product profiles are 5, 8 and 7, indicating a preference for wine characterized by a medium-high range of price.

- Component n. 3 "YOUNG WOMEN WITH LOW PRODUCT COGNITION": it is characterized by young women with little knowledge of the product, which is bought irregularly, above all at the large-scale retail trade; this component differs from the others, in the sense that it is not correlated to the preference for details product profiles.
- Component n. 4 "MATURE AND TRADITIONALLY WOMEN": it is correlated to mature women who buy wine mainly at restaurants, without detail cognition of the product and with a standard frequency of purchase; it seems that they do not appreciate the organic wine and the one bottled by the producer.
- Component n. 5 "MEN LOOKING FOR PRICE-QUALITY RELATIONSHIP": it is correlated above all to male subjects that declare indifference for DOP and DOC quality marks, without detailed knowledge of the product and with a standard frequency of purchase; this component is also characterized by middle-aged consumer, which express preference for profile 1 and shows not to appreciate in particular profile 4.

Results of cluster analysis, obtained using the 5 above described components as variable, provided 5 segments (of which the fifth represent the only subject that has given extremely positive judgments to the several profiles):

- First segment (35 elements): mainly young men, with a good product cognition; their wine purchases are characterized by an average frequency, and they buy wine mainly at the restaurant; they identify the DOC mark (60%) more times than the DOP one (34.29%), as a quality indicator; in this segment we can verify a remarkable preference for the wine profiles 3 and 4;
- Second segment (83 subjects): mainly young women, with a sufficient product cognition; their wine purchases are characterized by lower frequency than the average; they buy wine above all from the producer or at the restaurant; they identify the DOC mark (56,63%) more times than the DOP one (39.76%), as a quality indicator; the wine profiles 1 e 7 are the most preferred in this segment;
- Third segment (42 subjects): medium age subjects, not differentiated by sex, with little more than sufficient product cognition; their wine purchases are characterized by an average frequency; they buy wine above all from the producer or at the restaurant; they identify the DOC mark more times than the DOP one, as a quality indicator; the wine profiles 1 e 7 are the most preferred in this segment;
- Fourth segment (46 subjects): medium age male subjects, with little more than sufficient product cognition; their wine purchases are characterized by an average frequency; they buy wine above all from the producer; almost 70% of the subjects of this segment correctly identify both the DOC and DOP marks as quality indicators; the wine profiles 1 e 3 are the most preferred in this segment;
- Fifth segment (1 subject): not to be considered

Table 11: Cluster Analysis - Average of the gender variable in the 5 cluster

Cluster	n. of cases	Women (%)	Men (%)
1	35	25.7	74.3
2	83	61.4	38.6
3	42	52.4	47.6
4	46	26.1	73.9
5	1	0.0	100.0
Total	207	45.4	54.6

Source: own elaboration

Table 12: Cluster Analysis - Average of the wine profiles evaluation

Cluster	profile 1	profile 2	profile 3	profile 4	profile 5	profile 6	profile 7	profile 8
1	77.0	38.5	91.4	82.4	16.8	71.3	52.5	37.2
2	64.8	58.2	61.5	46.6	54.6	53.2	68.5	54.2
3	39.0	24.9	35.6	16.9	25.7	17.5	27.0	23.2
4	65.8	40.6	61.2	32.5	42.5	38.7	47.9	38.3
5	70.0	90.0	5.0	5.0	90.0	90.0	80.0	80.0
Total	61.9	44.3	61.0	43.3	39.8	46.0	52.9	41.6

Source: own elaboration

Table 13: Cluster Analysis - Average of the identification of DOC and DOP as a quality indicators

Cluster	n. of cases	DOC (%)	DOP (%)	No difference (%)	Total (%)
1	35	60.0	34.3	5.7	100
2	83	56.6	39.8	3.6	100
3	42	81.0	16.7	2.4	100
4	46	0.0	30.4	69.6	100
5	1	0.0	0.0	100.0	100
Total	207	49.3	31.9	18.8	100

Source: own elaboration

We can observe that results of cluster analysis show, in general, that no segments are characterized by the availability to pay for a bottle of the studied wine that is more than seven euro, which is a low-medium price. This confirms the results of Conjoint analysis, in the sense that price seems to be the variable that influences, more than others components, the consumers demand analysed in this paper. Anyway, the second segment, characterized by the feminine presence, shows the highest evaluations for the more expensive wine (profile 2 and 5).

We can also verify another confirmation of results of ACP analysis, which is the presence, in the wine market, of a segment characterized by the feminine demand that should be considered, if confirmed by a larger survey, for successful wine marketing.

5. CONCLUSIVE REMARKS

This study provides a non-traditional segmentation, based not only on demographic and behaviour aspects of wine consumers but also on variables that indicate the individual acceptance for specific product attributes and the perception of changes in regulatory policies.

Also aspects of wine labelling and presentation, which are not usually analysed and are directly linked with regulatory policies, affect Italian consumer perception, especially when linked with naturality, quality control and safety aspects.

In our analysis attributes like the membership of a Protected designation of origin Consortium (that may mean a deeper quality and control guarantee) and the indication of wine produced and bottled in the enterprise have higher importance than the organic certification. Also the absence of the indication "contain sulphates" takes some importance. These are all elements of further differentiation within the designation of origin wines category.

At the same time the effects of new rules or changes in regulation should be analysed also in relation with the effects on enterprise competitiveness and consumers' quality perception.

Price is confirmed to be a key element, and we have to underline that the higher positive influence of price on consumers' preference concerns the wines of the category "premium" (5-7 euro).

The differentiated attribution of quality to brand DOC rather than to PDO put in evidence for EU policy makers the need to inform the European wine consumers in a more efficient way, considering that only about 19% of the sample, clustered into segment n. 5, gave the correct answer about these quality indicators. Labelling designation of origin wines with different indications (PDO and / or DOC) and using the Community PDO Logo can increase confusion in the consumers.

It was possible to identify different segments of consumers characterized by their acceptance or rejection of the product attributes, their cognition of new designations of origin in the wine common market organization and their demographic and consumption habits.

From these results, emerges the interesting aspect of differentiation of the women preferences from the men's ones, and this is a useful information for the market-orientation.

The results show clearly that, while is confirmed the importance of a traditional factor like the price for the majority of wine consumers, emerge differences among subgroups of consumers aggregated by their responses to concepts indicated by the wine label. So it is possible to identify meaningful segments of wine consumers on which elaborate a market-oriented strategy.

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