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Insights on the Alleged Imitation of Prosecco Wine Name: The Case of the German Market

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ABSTRACT

Prominent on the agenda in recent times has been the question of the widespread use of alleged imitations of Prosecco name on wine bottles sold in Germany. This question has attracted even the interest of Italian producers lately, who denounce the evoking effect of such name imitations of the original PDO wine. This paper examines the impact of some product characteristics and those related to the purchasing place on wine price, applying a hedonic price model to homescan data related to the German market in 2013. Findings suggest that the alleged name imitation has a premium price, thus getting a free ride on brand reputation at the expense of the original Italian wine.

Keywords: *wine, hedonic price model, Germany, consumers, wine name imitation*

1 Introduction

The reputation of the Italian agrifood, the so-called "Made in Italy", is well-known worldwide. Accordingly, Italian food is extensively appreciated by consumers, as it is characterized by high quality, prestige and exclusiveness, producer's recognized competences and a strong origin-related reputation known as "country of origin" effect. Accounting for 38.3 billion € in 2016, the export for the Italian agrifood sector registered a constant increase from 2010, with an average annual rate of 5.5% (ISMEA, 2017); in this context, wine represents the second top exported category in value (14,7%) after cereals (14,8%). Among EU Member States (EU-28), Germany represents the largest importer of Italian agrifood products (17%), followed by France (11%), USA (10%) and UK (8%); it is worth noting that these countries absorb more than 47% of the global value of Italian export.

In recent years the problem of food frauds has strongly emerged, leading to an increased competition in terms of sales for Italian producers. Such phenomenon can be considered as an intentional action of pursuing fraudulent practices for financial gain through consumer deception. Many different types of food frauds exist as product adulteration, substitution, counterfeiting, imitation and deliberate mislabeling (EPRS, 2014). All of them can generate several problems as: i) creating significant threats to the environment or health and safety risks for consumers (OECD/EUIPO, 2016); ii) creating an unfair market that damages producers' reputation and competitiveness; iii) promoting zero-cost imitations of successful innovations, with the consequent disincentive for firms to come forward with innovations[*] (Wilke and Zaichkowsky, 1999); iv) consumer deception, by inducing a false impression on consumers that are

[*] Imitators do not need investments or face development expenses, compared to innovators.

unaware of buying non original and oftentimes risky and low quality products (Carreno and Vergano, 2016). Not to mention all the problems related to the erosion of consumer trust towards food that increased during the last years, as a consequence of food scandals and scares occurred also in the wine sector (Forbes *et al.*, 2009). To this purpose, as argued by Giampietri *et al.* (2018), consumer distrust increases as much as the risk of moral hazard becomes higher, as in the case of food fraud. It follows that, given the importance of the negative consequences of food frauds, knowing them in order to counteract them represents a priority, nowadays.

It is against this background that even the widespread threatening phenomenon of brand imitation represents a major challenge nowadays, in order to guarantee the competitiveness of firms. Accordingly, brand imitation phenomenon refers to the creation of a product that is not identical but only similar to the original, as it copies only some attributes as name, colors, style or shape (Wilke and Zaichkowsky, 1999). Indeed, brand names can easily transfer a bundle of product attributes (e.g., quality, origin) and information (e.g., perceived manufacturer's competence or complexity of the product) to consumers, oftentimes better than what words can do. This is the intrinsic evoking strength of the brand known as brand equity, that is determined by the reputation of the brand among the target consumers. Moreover, brand origin can be defined as the place to which the brand is perceived to belong (Thakor, 1996). As suggested by Paciolla and Mai (2011), a correspondence between the country of origin and the brand origin can be generally assumed, being the country of origin a major and easily accessible information for judging the quality of a product. Moreover, the stronger the brand equity and the brand origin are and in a more positive way the good will be perceived and evaluated. This is the reason why products with a strong reputation linked to the brand name are mostly imitated, as in the case of the above mentioned Italian wine. Related to the type of imitated product, there is a sort of specialization for each country; for instance, food category takes advantage of the strong resonance and image of Italy (Paciolla and Mai, 2011). The false evocation of the Italian origin of products by imitating original brand names is broadly recognized as the "Italian sounding" phenomenon (Cembalo *et al.*, 2008). More generally, this consists in the improper use of labels, colors, images or symbols on the packaging that suggests the Italian origin of the ingredients, recipes, brands or production processes, albeit such origin is not authentic. In relation to brand name imitation, Le Roux et al. (2016) wrote an interesting paper on the effect of product imitations based on semiotic approach on consumers. What drives the imitators is the desire to reach an unfair profitable advantage by selling products reminding to Italy and whose high quality and symbolic meaning is immediately recognizable by consumers, as in the case of designations of origin or geographical indications (PDO or PGI) (Wilke and Zaichkowsky, 1999). According to the third Agromafie Report (Caselli, 2015), such phenomenon represents a huge and steadily increasing business which accounts for 60 billion € per year, representing more than twice the turnover of Italian food export. In 2015, a judgement of the European Court of Justice ruled that the labeling of a foodstuff should never cause consumer deceit. As widely described by Wilke and Zaichkowsky (1999), brand imitation can potentially generate negative consequences as well as food fraud. However, it is not considered unlawful actually, as opposite to counterfeiting (consisting in the exact copy of the original product).

As above mentioned, due to its high value added and its wide consumption and reputation, wine represents a popular target of imitation (MISE, 2014). Moreover, according to Lecat *et al.* (2017), iconic wines are those mostly imitated, as in the case of many French wines or the Hungarian Tokaji (Boatto *et al.*, 2011) or Prosecco wine in Italy. In line with this last example, many concerns about several alleged imitations of Prosecco name sold in Germany have recently increased among the most part of Italian producers. The reason is twofold: on one hand, such concerns are based on the imitations' taking advantages as they get a free ride on brand reputation; on the other hand, the premium price of these alleged imitations can be quite far from being negligible in the German market.

This paper provides insights into the retail market of sparkling white wines in Germany. In particular, this study applies a hedonic price model, based on revealed purchasing behavior, to investigate the effects on wine prices of the characteristics of the point of sale (i.e., typology, purchase geographical area) and product attributes (i.e., wine name, origin, brand, volume, number of units per pack), including the alleged name imitation. Findings provide some preliminary insights into and enrich the discussion on the issue concerning Prosecco's supposed imitations that, to the best of our knowledge, still does not find any trace in the scientific literature.

2 The iconic Prosecco wine

2.1 The success of Prosecco: The current picture

Prosecco is a white wine produced from Glera grapes that are grown in a limited area of two Italian

regions, namely Veneto and Friuli Venezia Giulia. Despite being produced in three different versions, namely still, semi-sparkling and sparkling, it is the latter that made this wine famous and appreciated all over the world. Indeed, in 2016 the sparkling version accounted for more than 85% of total production, followed by the semi-sparkling version with a share on production of almost 15%; conversely, still Prosecco accounted for less than 1% of total production. From an organoleptic point of view, Prosecco wine usually has a relatively low alcohol content, a delicate floral and fruity bouquet and a good acidity that confers great freshness. Not only Italian consumers seem to appreciate these characteristics (Thiene *et al.,* 2013a), making Prosecco one of the most popular sparkling wines (Rossetto *et al.*, 2011). According to the specific geographical area of cultivation, it is possible to distinguish two categories of Prosecco wine: Prosecco Controlled Denomination of Origin and the Prosecco Controlled and Guaranteed Denomination of Origin (hereafter, Prosecco DOC and Prosecco DOCG, respectively), both under the European Protected Designation of Origin classification (Onofri *et al.*, 2015). Nowadays, Prosecco represents the largest PDO in Italy, being the most exported and produced sparkling wine in volume worldwide in 2014 and 2015, respectively. Due to the success of this product, which started particularly at the end of the 1990s, its production has increased significantly in order to meet the growing demand. As a consequence, the production area has been progressively extended, especially after the introduction of DOCG appellation in 2009. Hence, the supply has increased in recent years, with a Compounded Average Growth Rate of 14.7% over the period 2010-2016 (Table 1). Despite the block imposed in 2014 on the expansion of vineyards surface, that interested more than 80% of the producing area, the quantity of Prosecco placed on the market kept increasing, reaching 501 millions of bottles in 2016, while the forecasts for 2017 amount to a total production of 530 millions of bottles. In 2016, Glera grapevine was cultivated on a total of 30,800 hectares, distributed over 5 provinces in Veneto (Treviso, Venice, Vicenza, Padova, Belluno) and 4 provinces in Friuli Venezia Giulia region (Pordenone, Udine, Trieste, Gorizia). Table 1 shows the increase of Prosecco production since the change in production specifications.

Table 1.
Evolution of the vineyard area and production of Prosecco DOP, 2010-2016

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**Δ16/11**
Production area (ha)	17,560	21,580	24,690	27,150	30,110	30,450	30,800	75.4 %
Production (hl)	1,646,500	2,007,800	2,337,400	2,794,700	2,893,955	3,291,973	3,759,571	128.3%
Sparkling production (hl)	1,116,000	1,391,200	1,687,300	2,156,900	2,344,410	2,719,570	3,176,660	184.6%

Source: CIRVE elaboration of Valoritalia data, 2017

Table 2 offers a comparison among the three main sparkling wines produced and exported in the world, namely Champagne, Cava and Prosecco. Together, these three sparkling wines accounted for more than 40% of global sparkling wine production in 2015. Despite having a relatively smaller production area, Prosecco leads when considering production volumes, because of its highest yield per hectare and also the higher transformation coefficient from grape to wine. It is worth noting that, for Champagne and Cava, the production volume has been stationary in the period 2010-2015, while Prosecco registered an increase in supply of around 262%; the same trend affects the export, with an increase of almost 390%, compared to Champagne (+12%) and Cava (+5%). In terms of sale price, it is not surprising that Champagne is sold at a completely different price level, notoriously. When comparing Prosecco and Cava, it is worth noting that the latter is sold at a price that is 15% lower, despite having a more expensive production method (i.e., Champenoise vs Charmat) and a lower production per hectare.

Table 2.
Comparison among the three most produced sparkling wines

	Champagne	**Cava**	**Prosecco**
Country	France	Spain	Italy
Sparkling process	Champenoise	Champenoise	Charmat
Productive area (ha)	33,762	33,591	27,150
Production volume 2014 (000 hl)	2,343	1,831	2,673
Incidence on domestic production sparkling wine	66,0%	68,0%	71,0%
Export volume 2015 (000 hl)	1,091	1,179	1,662
Export/production	46.6%	64.4%	62.2%
Incidence on domestic export of sparkling wine	62.1%	69.8%	59.9%
FOB price (€/L) 2015	24.61	3.07	3.62
Production growth (2010-2015)	-2.2%	-0.3%	262.7%
Export growth (2010-2015)	12.0%	5.4%	386.9%

Source: own elaboration on data from GTA, OIV, Consejo Regulador del Cava, Comité Champagne and Valoritalia, 2016.

2.2 The open debate on "Secco" wine

The prestige and the rising demand of Prosecco are likely to represent two major reasons that encourage winemakers to imitate such Italian top-selling sparkling wine. In fact, Prosecco name reminds to a specific geographical area in Italy as well as to a well-recognized quality. In addition to the clamor generated by the Prosecco on tap, detected by the Central Inspectorate of Quality Protection and Fraud Repression (ICQRF) that is part of the Italian Ministry of Agriculture, the widespread use of alleged imitations of Prosecco name on wine bottles sold in Germany has attracted the public opinion awareness and received high media exposure over the last years. Accordingly, in 2014 Gori and Alampi Sottini reported a wide diffusion of name imitations of the original Prosecco wine in Germany, as "Prisecco" and "Consecco" wines. Moreover, we found a similar position of the two Consortia for the Protection of Prosecco PDO (DOC and DOCG[†]), who denounced other cases of name imitation, as "Kressecco", "Meer-Secco" or the canned Prosecco, mostly sold in the German market. Hereafter, we refer to these types of name imitation as "Secco".

Although it does not represent a fraud but a brand imitation indeed, in particular a name imitation, in fact what suggested by Holmberg (2010) is not surprising: in recent times the problem of wine fraud has received a lot of interest in Germany. With regard to "Secco" wine, the use of this name on the label, as a term to remind to Prosecco wine, can be considered an example of "Italian sounding"; furthermore, even if it has a deceptive intention to imitate the original product, this is actually allowed by the law. It is worth noting that after Germany (56.9% in value), the most part of "Secco" wine is produced in Italy (40.8%), followed by Spain (2.3%). A possible reason to explain the diffusion of "Secco" wine, especially in the German market, is reasonably due to the enormous growth of Prosecco wine there over the last years and, as above mentioned, to its recognized quality reputation. Accordingly, in 2013 Germany represented the second market worldwide after Italy in terms of consumption of sparkling wines, including Prosecco wine[‡]. "Secco" clearly reminds to the Italian Prosecco name and to its powerful symbolic meaning, as it happens for other Italian excellences as Parmigiano (Boatto *et al.*, 2016) or Mozzarella. Most of the time, the faking employment of original brand names is used by producers with the clear aim of placing their product (that is reasonably produced at lower price) on a higher price market segment, thanks to its evocative appellation. Indeed, as argued by Dodds *et al.* (1991), brand name represents an important tool to enhance a product's value as it provides information about product quality to consumers and, the greater its ability to reduce perceived risks, the greater its strength (Smith and Park, 1992). To this purpose, Prosecco represents a well recognized and excellent product worldwide and a tempting product to imitate. On the contrary, the end consumers represent the victims most of the time (Holmberg, 2010). Indeed, it seems pretty plausible that the mislabeling effect of an Italian imitation may induce confusion in consumers' perception (Cembalo *et al.*, 2008), stressing them to perceive the product as being Italian or, at least, with similar characteristics and quality to the original one. Moreover, this can both influence

[†] According to EU Regulation N. 1308/2013 (art. 112a), in Italy two traditional terms related to Protected Designation of Origin (PDO) wines exist: namely, DOC (Denominazione di Origine Controllata) and DOCG (Denominazione di Origine Controllata e Garantita).

[‡] http://www.euromonitor.com

their purchasing decisions and represent a trap, especially for those who are not completely aware of buying an imitation (non-expert consumers). The success of imitations of Italian products mainly concerns foreign countries due to a twofold reason: firstly, the Italian origin envisages an important purchasing attraction there; secondly, consumers are reasonably less aware of the meaning of geographical indications because of the long distance from Italy (Thiene *et al*., 2013b).

3 Data and Method

Considering the wine market as being widely differentiated nowadays (Orrego *et al.,* 2012), it is possible to assume that each wine represents a unique combination of many different characteristics as origin, brand, variety, price, vintage, labeling, packaging, etc. Due to the fact that consumers can not taste the wine before buying it, wine choice and quality judgement are mainly based on extrinsic characteristics (Schäufele and Hamm, 2018) and the most part of them are credence attributes, namely those that are difficult to verify even after the use (Nelson, 1970, 1974; Darby and Karni, 1973). It follows that, among a wide range of different attributes, consumers choose their optimal bundle of characteristics to maximize their utility, being subject to a budget constraint as stated by Lancaster (1966). Based on these assumptions, this research applies a hedonic price model that was pioneered by Rosen (1974). In particular, the model provides the estimates of the implicit price of some attributes related both to the product itself and to the purchase.

A number of previous empirical researches proved a large adoption of the hedonic price model to different sectors as the apple market (Tronstad *et al.*, 1992; Carew, 2000), tuna fish (McConnell and Strand, 2000), fruit beverages (Szathvary and Trestini, 2014), yogurt market (Bonanno, 2016), extra virgin olive oil (Cavallo *et al.*, 2017), and wine (Costanigro *et al.*, 2007 and 2010; Di Vita *et al*., 2015).

The hedonic price function can be written as $P_i = f(z_i)$, where P represents a given price of the *i*th product and z is a vector of attributes of product *i*th. Such equation can be estimated using different functional forms as linear (Boland and Schroeder, 2002; Maguire *et al.*, 2004), semi-logarithmic (Szathvary and Trestini, 2014; Bonanno, 2016), inverse square-root (Landon and Smith, 1997; Costanigro *et al.*, 2007) and box-cox transformation (Loureiro and McCluskey, 2000; Costanigro *et al.*, 2007). A Box-Cox transformation of the dependent variable (Loureiro and McCluskey, 2000; Huang and Lin, 2007) was used to choose among a linear (λ = 1), a log-linear (λ = 0) or a inverse (λ = -1) functional form: based on the residual sum of squares of each regression, the likelihood was maximized when λ = 0. In addition, our choice was also supported by the Adj-R^2 estimation (this was equal to 0.490 when λ = 1; 0.667 when λ = 0; 0.483 when λ = -1).The following semi-logarithmic form was chosen for the equation:

$$\ln(P) = \beta_0 + \sum \beta_i z_i + \varepsilon$$

where ln(P) is the price log, z_i is the *i* wine attribute or purchasing characteristic, β_i are the estimated coefficients and ε the random error, respectively.

The dataset used for the estimation consists of 42,002 total observations coming from AC Nielsen Homescan Panel® (The Nielsen Company) and related to household purchases of sparkling white wine in Germany spanning an entire year, from January to December 2013. It follows that the price data used in this research reflects what households effectively paid, as opposite to the most part of the existing literature on wine market which used suggested prices from specialised magazines or wine guides. We considered the following wine names[§]: "Secco", Prosecco DOC (*ProsDOC*) and Prosecco DOCG (*ProsDOCG*), Champagne PDO (*Champagne*), Asti PDO (*Asti*), Cava PDO (*Cava*), Cremant PDO (*Cremant*), Trento PDO (*Trento*), white Lambrusco PDO (*Lambrusco*) and other quality wine (i.e., *Sekt*)[**].

The dataset includes 9,682 households from all the 16 German federal Lands that, as shown in Table 3, are grouped into seven areas (Area). In addition, for each household we estimated an average annual expenditure of white wine of 21.38€, spending on average 4.83€/L. As above mentioned, our assumption considers "Secco" wine as a brand imitation of the well-recognized Italian Prosecco wine, due to its sounding name reminding to the original Italian wine.

[§] In relation to the wine names considered in the model, they can be described as follows: Champagne (PDO), Cremant (PDO), Cava (PDO). Among the Italian wines, we can find both DOC (Prosecco, Asti, Trento) and DOCG (Prosecco and Asti) types of PDO and a Protected Geographical Indication (PGI) that is the white Lambrusco.

[**] According to EC Reg. N. 607/2009 (art. 60), the word "sekt" can be used as attribute of quality sparkling wines.

Table 3.
Sample description statistics

Variable	Description	Type	%	Mean	Std. Dev.
WINE NAME					
Secco		D	2.8		
ProsDOC	Prosecco DOC	D	8.1		
ProsDOCG	Prosecco DOCG	D	<0.1		
Champagne	Champagne PDO	D	1.1		
Asti	Asti DOC/DOCG	D	3.3		
Cava	Cava PDO	D	0.6		
Cremant	Cremant PDO	D	0.5		
Trento	Trento DOC	D	<0.1		
Lambrusco	Lambrusco DOC	D	0.2		
Sekt	Other quality wine	D	72.9		
OtherW	No quality wine	D	10.4		
AREA	(LANDs)				
Area 1	Hamburg, Bremen, Schleswig-Holstein, Niedersachsen	D	14.3		
Area 2	Nordrhein-Westfalen	D	18.1		
Area 3	Hessen, Rheinland-Pfalz, Saarland	D	13.2		
Area 4	Baden-Württemberg	D	13.8		
Area 5	Bayern	D	13.5		
Area 6	Berlin, Mecklenburg-Vorpommern, Brandenburg, Sachsen-Anhalt	D	14.0		
Area 7	Thüringen, Sachsen	D	13.1		
POINT OF SALE					
Ssup	Small supermarket	D	8.4		
Lsup	Large supermarket	D	10.4		
Hyper	Hypermarket	D	20.4		
Disco	Discount	D	50.3		
OtherS	Specialised shops	D	10.6		
VOLUME					
Vol		C		0.668	0.194
UNITS PER PACK					
Unit		C		1.070	0.364
BRAND					
Brand1	Rotkäppchen	D	23.9		
Brand2	Mumm	D	2.5		
Brand3	Freixenet	D	5.6		
Brand4	Sohnlein Brilliant	D	3.4		
Brand5	MM Extra	D	4.1		
Brand6	Faber	D	2.8		
Brand7	Henkell	D	1.4		
Brand8	Kupferberg	D	2.0		
Brand9	Fürst von Metternich	D	1.1		
Brand10	Cinzano	D	2.3		
Brand11	Martini	D	0.2		
Private label	Private label	D	34.3		
OtherB	Other brands	D	16.6		
ORIGIN					
Germany		D	66.7		
Italy		D	22.4		
France		D	2.8		
Spain		D	7.7		
OtherO		D	0.4		

Note: D = dummy variable; C = continuous variable.

In relation to "Secco", it is worth specifying that we considered all the wines containing this word as product name on the label (gathering this information after an accurate label inspection on each product's website), whereas we didn't refer to the compulsory labeling on sugar content information required by the Reg. EC N. 607/2009[††].

The dataset includes also information about the retail shop that, with the exception of Boatto *et al.* (2011) and Steiner (2004), has been scarcely analyzed by the existing literature. In particular, we considered five different categories of point of sale as small supermarket (*Ssup*), large supermarket (*Lsup*), hypermarket (*Hyper*), discount (*Disco*) and specialised shops (*OtherS*). In addition, different volumes of package[‡‡] (*Vol*) and different number of units per pack[§§] purchased (*Unit*) were examined. With reference to wine brand (*Brand*), our model included the following information regarding: the eleven most relevant brands in Germany in 2013 according to Euromonitor dataset, ordered according to their market share; one private label; other brands not included into the previous mentioned. Finally, the origin variable indicates the product's country of origin, including Germany, Italy, France, Spain and others.

4 Results

The dependent variable is here represented by the log-price of a bottle (0.75 L in volume) of a sparkling white wine sold in Germany in 2013. Our estimation was obtained by using SPSS 24, as summarized in table 4. In addition to explaining the variability of the dataset well (R^2_{adi}= 0.667), the model also shows a very good overall significance as almost all the variables have a P value lower than 0.01. The baseline is here represented by a generic sparkling white wine produced in Italy, of a brand other than those listed into the model, and sold in a discount in the Thüringen and Sachsen Land in Germany. The average price of this product is equal to 2.20 €/bottle of 0.75 L. In relation to the point of sale, findings show that the price premium is higher when the shop type is *OtherS* (+12%), followed by *Ssup* (+9%), *Lsup* (+7%) and *Hyper* (+2%), compared to a discount. It follows that sparkling wines reach the higher price when sold in a specialised shop, instead of general retail markets, as opposite to what found by Boatto *et al*. (2011) for the Italian Tocai. When it comes to the country of origin, we find that *France* (+55%) has the higher price premium compared to *Italy*, reflecting the high reputation of the place of origin of Champagne. As opposite to *Spain,* which has a price premium of +34%, *Germany* shows a price discount (-9%) when compared to Italy. Moreover, findings demonstrate that the effect of the brand on price is very different if considering the eleven major brands in Germany or the private label: indeed, in some cases we notice a price premium (higher for *Brand11 and Brand9, respectively*), whereas in other cases we find a price discount (higher for the *Private Label* and *Brand6*), compared to a brand other than those previously considered (*OtherB*). It is widely recognized (Schamel, 2006; Costanigro *et al.*, 2010) that reputable brands positively affect wine purchase decisions, as they are renowned and trusted for their authenticity and associated with high quality. Generally speaking, consumers are willing to pay higher prices because of this brand effect, especially when they have scarce information or they are uncertain about the wine quality. In line with this, the discount for *Private Label* (-24%) can be consistent with what found by Szathvary and Trestini (2014) for fruit beverages. However, our findings demonstrate that the reputation of each brand and its effect on wine price can also depend on the specific marketing strategy of each company, instead of its reputation, that is here represented by the brand's market share. With regard to *Vol* and *Unit* variables, we find a significant and negative effect on price for the first variable and a significant positive effect for the latter. Hence, we will find a price discount (-70%*0.75 equivalent bottle) for a marginal increase (i.e., +0.75L) and a price premium (+3%) for an additional unit. With regard to the area in which the wine was purchased, we notice that two southern Lands in Germany, namely *Area4* followed by *Area5*, show the higher price premium among other (+7% and +4%, respectively), compared to *Area7.* Finally, in relation to the wine name, we find that all the estimated coefficients positively contribute to price, compared to the baseline (*OtherW*). Among these, the higher price premium that consumers paid is related to *Champagne* (+430%), followed by *Trento* (+195%), *Asti* (+125%), *ProsDOCG* (+79%), *Cremant* (+75%), *Sekt* (+67%), *Cava* (+47%), *Lambrusco* (+25%), *ProsDOC* (+24%), and "*Secco"* (+17%).

[††] Commission Regulation (EC) No 607/2009 of 14 July 2009 laying down certain detailed rules for the implementation of Council Regulation (EC) No 479/2008 as regards protected designations of origin and geographical indications, traditional terms, labelling and presentation of certain wine sector products. In relation to the indication of the sugar content, this Regulation requires the word "dry" written on the label ("secco", in Italian), when the sugar content of the wine is between 17 and 32 grams per litre.

[‡‡] For this variable, the dataset included the following types: 0.200 L; 0.375 L; 0.400 L (2*0.20 L); 0.600 L (3*0.20 L); 0.750 L; 0.800 L (4*0.20 L); 1 L; 1.2 L (6*0.20 L); 1.5 L; 4.8 L (24*0.20 L).

[§§] For this variable, the dataset included the following possibilities: 1 single unit (a bottle) or 2 units per pack, 3 units per pack, 4 units per pack, 6 units per pack, 24 units per pack.

Table 4.
Hedonic model estimates

	β	Std. Err.	Sign.	% Price Premium[a]
POINT OF SALE				
OtherS	0.116	0.005	***	12.3
Ssup	0.087	0.005	***	9.1
Lsup	0.066	0.005	***	6.8
Hyper	0.021	0.004	***	2.2
Disco	0.000			
ORIGIN				
Germany	-0.094	0.007	***	-8.9
France	0.435	0.013	***	54.5
Spain	0.296	0.010	***	34.4
OtherO	0.601	0.021	***	82.3
Italy	0.000			
BRAND				
Brand1	-0.153	0.004	***	-14.2
Brand2	0.130	0.009	***	13.9
Brand3	-0.202	0.011	***	-18.3
Brand4	-0.198	0.008	***	-18.0
Brand5	-0.228	0.007	***	-20.4
Brand6	-0.242	0.009	***	-21.5
Brand7	0.137	0.011	***	14.7
Brand8	-0.220	0.010	***	-19.8
Brand9	0.545	0.012	***	72.4
Brand10	0.008	0.014		0.8
Brand11	0.627	0.032	***	87.1
Private label	-0.268	0.005	***	-23.5
OtherB	0.000			
VOLUME				
Vol	-0.697	0.007	***	
UNITS PER PACK				
Unit	0.027	0.004	***	
AREA				
Area 1	0.025	0.005	***	2.5
Area 2	0.013	0.005	***	1.3
Area 3	0.028	0.005	***	2.8
Area 4	0.064	0.005	***	6.6
Area 5	0.039	0.005	***	4.0
Area 6	-0.004	0.005		-0.4
Area 7	0.000			
WINE NAME				
Secco	0.160	0.010	***	17.4
ProsDOC	0.217	0.006	***	24.2
ProsDOCG	0.586	0.057	***	79.4
Champagne	1.668	0.018	***	430.0
Asti	0.809	0.012	***	124.5
Cava	0.388	0.018	***	47.4
Cremant	0.560	0.022	**	75.0
Trento	1.091	0.127	***	195.3
Lambrusco	0.222	0.030	***	24.8
Sekt	0.511	0.007	***	66.6
OtherW	0.000			
Constant	1.283	0.009	***	
Adjusted R^2			0.667	
N. Obs.			42,002	

*Note: ***p<0.01; **p<0.05; *p<0.1. [a] Adjustments were made according to Kennedy (1981).*

5 Discussion and conclusion

This paper reports the estimation of a hedonic price model examining the impact of some major characteristics related to both the wine and the purchasing place on sparkling white wines' prices in Germany. In particular, findings offer some interesting insights into "Secco" and Prosecco (DOC and DOCG) price positioning on the German market for the first time, in line with the open debate on the existence of Prosecco name imitations. Results show that, compared to *OtherW* (that are not quality wines), all the considered PDO sparkling white wines and other quality wines (*Sekt*) get a premium price in the German market, in line with consumers' expectation of their own reputation and renowned quality. However, it can happen that even the designations of origin are misinterpreted or ignored by unaware consumers (Grunert, 2005). Moreover, it is also possible to assume that not every consumer can distinguish original wines over other imitations, as those built on name assonance. Accordingly, as suggested by Cooper and Ross (1984) and Völckner and Hofmann (2007), consumers may interpret price as representing quality, under the assumption of asymmetric information. Based on these last issues, we can try to justify the purchase of "Secco" wine that, even though it is not a quality wine (similarly to *OtherW*), registers a premium price in the German market not far from Prosecco DOC (albeit lower than this), as our hedonic model shows. In our opinion, this may be due to the fact that German consumers erroneously consider "Secco" as a substitute of the original Prosecco, because of its Italian sounding name effect. Hence, it is possible to suppose that this phenomenon of name imitation may give room for "Secco" producers to have some benefits in the long run. Firstly, "Secco" wine may increasingly gain market share, getting a free ride on Prosecco brand reputation. As a consequence, this may generate a potential threat both for Italian producers and for the image of excellence of Italian wines. This hypothesis is supported by the fact that, as previously mentioned, the cultivated area of Prosecco DOC and DOCG was blocked in 2014, albeit its increasing demand. In addition to this, results about the price discount of wines with a German origin (when compared to Italy) confirm the importance of the Italian reputation, at least in the German market. Furthermore, due to the fact that "Secco" wine has not a designation of origin, it is reasonable to assume that its producers face lower production costs compared to Prosecco, thus earning higher margins based on its deceptive sounding effect. Finally, looking at the heterogeneous brand effect on price, we can suppose that not only brand leaders but also other producers, who generally sell their products at the discount, might be encouraged to produce "Secco" wine; in line with this, our dataset showed that the most part of sparkling wines (47.5% in volume) are sold at the discount in Germany. Although further research is clearly needed, these findings contribute to fill the gap in the existing literature, inasmuch as they open the discussion on the potential negative impact of the alleged imitation of Prosecco name by "Secco" wine in Germany.

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