The resilient character of PDO/PGI products in dynamic food markets

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Abstract. The European and Italian food system is experiencing a change in the relationship with the consumer and with the distribution. In fact, customers are increasingly demanding, and are attracted, by products that have high quality content and a strong link with the territory.

The brands with the price are the two factors affecting the strategic policies of the food producer firms. At the same time, the retail system has proven to be very sensitive to consumer demands by providing quality products at competitive prices and using their brand as an element of loyalty.

In the European context, the Italian agri-food system has the higher number of products with the Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) recognition. However, 90% of PDO products are represented by only 15 Designations. This figure shows how different types of products find a much diversified business position in relation to the firm's characteristics, to the markets characteristics, to the reputation of the Designation and to the consortium strategies in relation to their commercialization.

The objective of this research, based on observed data collected through the survey of QUALIVITA Association, is to provide an exhaustive picture of the economic characteristics of the Italian PDO, PGI Designations and define a typology of such Designation according different set of variables as production system, reputation level, role of the territory and distribution channel.

The ultimate goal is to determine the strategic levers taken at the marketing stage and to identify which factors clarify their potentiality on the market.

The methodology adopted for the quantitative analysis is based on non-hierarchical cluster analysis by the method of k-mean in order to identify clusters of similar designations which explain what variables act on the various strategies adopted and on the related development processes.

Keywords: PDO/PGI, quality, modern distribution, cluster analysis, marketing strategies, development processes.

1. Introduction

Italy is one of the European countries which has always supported a policy of recognition and institutionalisation of Designations of origin for food products. This is because of the important gastronomic traditions in all regions of the Country, as well as the presence of some of the most famous (and widely imitated) Designations of the world, such as Parmigiano Reggiano cheese and Prosciutto di Parma ham, have always push in the direction of a quality policy for food products

The purpose of developing a quality policy based on the use of PDOs and PGIs was, and remains, that of extending the supply of food products to consumers but, even more important, that of providing a better economic return to producers, often of small and medium dimensions, laying the foundations for the virtuous economic development of rural areas (Belletti et others 2003; Belletti and Marescotti, 2006). This concept highlights the capacity of producers to interact directly with the market and profit from the quality of their products without having to resort to public subsidies to support the companies and the economy of the territory.

The development strategy based on the use of Geographical Indications (GI) does, however, present a difficulty, represented by the capacity of the companies to develop an action of governance with the power to help them obtain remunerative prices on the prevalent market. In this regard, many GIs find their commercial positioning in large scale distribution, but many others have great difficulty in relating with this trade channel, preferring the direct sales or traditional distribution channels. These latter channels, in fact, taking advantage of a domestic convention (Marescotti, 2000) succeed in offering consumers better information so as to guarantee a better economic return to producers.

The choice of distribution channel is therefore a central factor in the search for a sales strategy capable of combining quality, price and communication capacity. It is no mystery that relations with large scale distribution, especially for PDO and PGI products which present low production volumes and low turnovers, are particularly problematic. This is due to the cost of access to the sales point and the difficulties encountered in meeting logistics requirements, service requirements, but above all, the request for information that justifies a quality/price ratio judged to be satisfactory by consumers.

Indeed, in order to improve communication initiatives directed at consumers, in addition to the well-known Community logos, companies resort to the use of quality marks that are often identified with collective trademarks – of the consortia that represent them – or with company logos. The latter have the duty to guide the consumer at the moment of purchase helping bridge the information gap as regards the quality of the products which, let's not forget, for this category of products and for many consumers is seen as a credence attribute.

Clearly, the reputation of the Geographical Indication is nourished by the quality of the products that the companies develop, but quality is not just the result of a precise corporate choice; it also depends on the collective strategy that the companies adhering to the GI have adopted and defined through the production specification tool (Sylvander and Barjolle, 2000). It is no coincidence that Reg. 510/06 allocates the task of defining production specifications to the producers' Association, leaving producers free to choose the link with the territory and the quality level that best allows the development of the most suitable sales strategy for the characteristics of the reference market.

Quality, commercial strategies and governance could be considered key factors for understanding the efficacy of each designation on the market. It therefore becomes important to understand the "positioning" of the individual Italian Designations with respect to the main factors that distinguish their strategies in order to assess whether the management tools and policies of the designations that have been developed are efficacious for the pursuit of the objectives that the quality policy developed through the GIs set itself to achieve.

The objective of this research, is twofold; the first objective is to provide an exhaustive picture of the economic characteristics of the Italian PDO PGI designations, while the second is to define a typology of such Designation according different set of variables than can explain the strategy of each designation and clarify their potentiality on the market.

This paper is divided into two sections. The first section presents the main features of the designation system in Italy as regards aspects relative to the relationship with the territory, the numerousness of the companies involved, the characteristics of the collective structures, the turnover and relations with large scale distribution. The second part provides a typological analysis of the designations present in Italy together with a number of considerations on the policies developed till now.

2. The spread of geographical designations in Europe

In Europe, in September 2008 as many as 812 PDO and PGI products were officially recognised (Table 1), referring to a wide range of commodities in which, however, two categories (fruit and vegetable products and cheeses) represent 50 percent of the designations. In any case, the registration of productions with geographical designations shows considerable territorial disparity between Northern and Southern Europe, the Countries in the Mediterranean area being at a clear advantage, both for the number of products and for the variety of the productions. In fact, almost 80 percent of the European designations are concentrated in five European Countries (Italy, France, Spain, Portugal and Greece). The reason for this is undoubtedly linked to the distinctive cultural and gastronomic history of these Countries, which has contributed to keeping alive, within the rural areas, gastronomic traditions and small and medium-sized enterprises, often craft enterprises, that represent the productive framework of the European Geographical Designation system.

To the number of designations registered in Europe in the Community register of geographical indications in September 2008, the 41 applications awaiting the completion of the final formal step prior to registration must be added, while a further 282 applications are in the preliminary investigation stages and are ready for examination by the European Commission (Pantini, 2008).

Not all these products, however, present the same features in terms of fame, reputation, volume of the supply, organisation of the supply chain, and governance structure adopted. In fact, a situation of co-existence emerges within the same reference market, between typical productions realised in large volumes with industrial methods and typical productions that may be considered as being niche or ultra-niche products.

Table 1. Geographical indication products (PDO and PGI) recognised in the EU as of 1/09/2008

Country	Cheese	Based Products meat	Oils and Fats	Fruit, Vegetables and Cereals	Fresh Meat	Other Products	Total
Italy	34	29	38	56	2	13	172
France	45	4	9	31	52	18	159
Spain	21	10	21	35	14	16	117
Portugal	12	32	6	23	27	10	110
Greece	20	-	26	33	-	7	86
Germany	4	8	1	7	3	50	73
United Kingdom	12	-	-	1	8	10	31
Czech Republic	-	-	-	3	-	13	16
Austria	6	2	1	3	-	-	12
Belgium	1	2	1	2	-	1	7
Netherlands	4	-	-	2	-	-	6
Ireland	1	1	-	-	1	1	4
Luxembourg	-	1	1	-	1	1	4
Denmark	2	-	-	1	-	-	3
Poland	2	-	-	-	-	1	3
Slovakia	2	-	-	-	-	1	3
Sweden	1	-	-	-	-	1	2
Finland	-	-	-	1	-	-	1
Slovenia	-	-	1	-	-	-	1
Cyprus	-	-	-	-	-	1	1
Hungary	-	1	-	-	-	-	1
Total	**167**	**90**	**105**	**181**	**108**	**161**	**812**

(Source: our elaboration of European Commission)

At this stage, it is essential to clarify that even if the PDO and PGI products refer to goods already present in the territory, and to a precise production method, the institutionalisation process - and more specifically, the choice between PDO and PGI and the definition of a public production specification - may lead to the development of productions that differ, for their production techniques and product features, from the original traditional goods. These diversities are justified by the economic/commercial objective that the players set themselves and by the technological and production restrictions that objectively exist during the production phase.

For this reason, it is not surprising that some PDOs and PGIs existing in Europe have been "revised" or "updated" through the definition of specifications that take into consideration production technologies currently available or marketing goals that the producers, exploiting the possibility of institutionalising the Designation, have set themselves. This is the case of Community designations existing in a number of European Countries extraneous to the "philosophy" of the designations (Tregear, 2003), such as Britain, and of designations – also Italian – that have developed characteristics very close to industrial type productions.

Even although PDO and PGI productions are often lumped together in the minds of the consumers, they are potentially different products depending on the production and sales strategy adopted by the producers. The element that differentiates PDO productions from PGI productions is precisely the link with the territory and the agricultural phase. While the specifications relative to the PDO products envisage a correspondence between the area of origin of the raw materials and the processing area, the PGI specifications offer a greater degree of freedom as regards the origin of the raw materials. These specifications, in fact, enable companies to overcome the restrictions connected with the availability of the raw materials in areas that are often extremely restricted and, at the same time, they accept production techniques that, while respecting the local traditions and knowledge, are ideally suited for processing high production volumes.

The PDO products present a greater specificity and a (potential) difference in terms of quality and reputation compared to the PGI products, especially due to the fact that they should be more linked to the agricultural phase. While PDO products – with the odd exception – may be considered as being niche productions, with limited volumes designed for proximity markets, PGI productions – especially processed productions – are better suited to more industrial – if not mass – production, geared to wider markets. In actual fact, there are also PDO products with high outputs, designed for wider markets, and PGI products with extremely small volumes designed for proximity markets.

It should therefore be observed that extremely varied situations exist leading consumers to confuse PGI products with PDO products, giving rise to the idea that the two types of designation possess the same link with the territory, generating a general underlying confusion that penalises those (PDO and IGP) productions with greater productive restrictions and high quality levels.

3. The spread of designations in Italy

3.1. The numerosity and territorial distribution

In addition to a numerical description of the designations existing in Italy, it is possible to carry out a detailed analysis of the productive, institutional, economic and commercial characteristics using more structured and detailed sources, that enable the creation of a more precise photograph of the Italian designation system. One of these sources is the Qualivita Foundation which, for each product that has obtained a geographical designation, collects information annually on the productive, economic and structural characteristics of the production organisations making up the Italian designation system. In fact, using the data contained in the 2008 Qualivita Atlas (with data referring to the year 2006), the main characteristics of the Italian designation system are described as follows.

In September 2008 the total number of Designations in Italy (PDO and PGI) was172, of which 56 were "Fresh fruit and vegetables", 38 Oils and fats and 34 Cheeses (table 2).

The Qualivita Foundation (2008) in 2006 identified 169 Designations comprising 111 PDO and 58 PGI (Table 2). The category of Olive oils is most numerous (33%) closely followed by Cheeses (30%) and meat products (20%). Fruit and vegetables account for only 11%, and other products account for the residual share (8%). Among PGIs, however, Fruit, vegetables and cereals account for 74% and meat products for 16%.

Italian Designation products vary widely in regions of origin, reputations, links with the area, volume of output and economic importance, method of obtaining the Designation and regulations involved.

The territorial distribution of in Italy is an important aspect to consider and shows the vocation of some areas for agri-food culture, which affects further rural development and governance actions in the spirit of European Regulations. The territorial distribution of a Designation is the main indication of the degree that it is linked to an area, and implicitly the quality level of the product. This has direct repercussions on sales strategies.

The 2006 Qualivita survey shows that the majority of Designations (89 PDO and 51 PGI) are based within a single Region, but there are also cases where the typical area is much wider. This can be due to precise historical and cultural roots of a local link, but there are also instances of a political decision to use instruments of development for an area and promote products for a mass market using large scale processing and distribution networks.

For some products the area of origin of the raw materials coincides with the area that processing takes place. These are mainly PDO products, especially cheeses and olive oils, and some PGI such as Fruit, vegetables and cereals, fresh beef meat (Vitellone bianco dell'Appennino centrale beef). Other products where industrial processing is more important, such as processed meats, include famous PGI cold cuts (Mortadella di Bologna, Cotechino and Zampone di Modena, Salame di Cremona) .There are also PDO products where the area of origin is very wide for historical and cultural reasons and because of market characteristics (Parmigiano Reggiano, Grana Padano, Parma ham).

Table 2. Number of PDO / PGI Products in Italy 2006 by product category

Product category	Numbers			Percentages		
	PDO	PGI	Total	PDO	PGI	Total
Balsamic vinegars	2		2	2%	0%	1%
Other products of animal origin	2		2	2%	0%	1%
Fresh meats		2	2	0%	3%	1%
Meat products	20	9	29	18%	16%	17%
Cheeses	33		33	30%	0%	20%
Olive oils	37	1	38	33%	2%	22%
Essential oils	1		1	1%	0%	1%
Fruit, vegetables and cereals	12	43	55	11%	74%	33%
Fresh fish, molluscs and crustaceans	1		1	1%	0%	1%
Bakery products	1	3	4	1%	5%	2%
Spices	2		2	2%	0%	1%
Total	**111**	**58**	**169**	**100%**	**100%**	**100%**

(Source: our elaboration of Qualivita data 2008)

The system of Designations involves about 119,000 firms in Italy, made up of 112,456 farms and 6,579 manufacturers such as dairies, oil presses, factories etc. (Table 3). The PDO production segment is by far the largest and involves about 89,000 firms, of which slightly more than 4,500 are manufacturers. Cheeses and oils account for the highest numbers of firms (37,000 and 33,000) and are also the type of producer most widely spread over the country, especially inland and in poorer areas where dairy farming and olive growing constitute two of the few opportunities for producers. For some types of product, such as Fruit and vegetables, industrial processing is not required and farms often sell produce directly to consumers.

Table 3. Distribution of designations by region and number of firms by product type (2006).

	Designations by category	NO. of farm involved	N of processing firm	Total firm
PDO	**111**	**84,259**	**4,667**	**88,926**
Balsamic Vinegar	2	69	382	451
Other meat products	2	62	15	77
Processed meat	20	6,621	265	6,886
Cheese	33	37,111	2,297	39,408
Olive oils	37	33,704	1,618	35,322
Essential oils	1			
Fruit, vegetables and cereals	12	6,583	76	6,659
Fish	1			
Bread	1	3	13	16
Spices	2	106	1	107
PGI	**58**	**28,197**	**1,912**	**30,109**
Fresh meat	2	3,576	679	4,255
Processed meat	9	38	188	226
Olive oils	1	10,251	627	10,878
Fruit, vegetables and cereals	43	14,332	418	14,750
Bread	3			-
Total	**169**	**112,456**	**6,579**	**119,035**

(Source: our elaboration of Qualivita data 2008)

PGI producers account for about 30,000 firms, of which 2, 000 are manufacturers or factories. Farms account for the majority of PGI too, and are the main producers of fruit and vegetables and olive oils (10,000 and 140,000 farms respectively). Only in processed meat products are the majority of firms processors. These are often large companies which can buy meat on European and non-European markets, which means that PGI can make an important contribution to rural development. In fact even if the raw material can be procured from areas outside the “typical area”, the presence of processing plants in that area can stimulate economic growth.

3.2. Characteristics of Protection consortia and Association

The way that producers lodge an application with the Ministero per le Politiche Agricole e Forestali (Italian Agricultural Ministry) and European Commission for permission to use a Designation has repercussions on subsequent product management. Regulation 510/2006 lays down that except in certain cases the application cannot be made by an individual producer, because one of the aims of this restriction is that the Designation is to be considered as a collective good, rather than the property of an individual producer. At the same time, it is intended that the producer guidelines take account of different production methods in order to prevent as far as possible mechanisms of inclusion / exclusion that can advantage some firms and disadvantage others. The European Commission does not lay down the form of governance of the Designation but allows applicants to choose the best form according to their objectives, product characteristics, and the target market.

In Italy, different forms of producer organisation exist. The main types are Protection consortia which account for 76% of Designations, and producer associations for 14%. Other forms such as cooperatives (6%), committees (3%), and producer organisations (1%) and Individual private firms (1%) also occur (Table 4).

Table 4. Organisations applying for designation by product category

	Consortia	**Association**	**Committees**	**Cooperatives**	**Producer Associations**	**Private firms**	**Total**
PDO	86	14	4	5	1	1	111
Balsamic Vinegar	2						2
Other meat products	1		1				2
Processed meat	17		1	1		1	20
Cheese	30			3			33
Olive Oils	25	9	2	1			37
Essential oils	1						1
Fruit, vegetables and cereals	8	3			1		12
Fish		1					1
Bread	1						1
Spices	1	1					2
PGI	43	9	1	5			58
Fresh meat	2						2
Processed meat	8	1					9
Olive oils	1						1
Fruit, vegetables and cereals	31	6	1	5			43
Bread	1	2					3
Total	129	23	5	10	1	1	169

(Source: our elaboration of Qualivita data 2008)

In particular, Consortia are the predominant type of association in the cheese sector, while Associations are used for 25 percent of PDO olive oil and PDO fruit and vegetable producers. The presence of organisations such as cooperatives and producers' associations engaging in activities similar to those of private parties is also to be noted[1]. On the other hand, only one geographical indication, represented by Prosciutto Carpegna PDO, presented the request for Protected Designation of Origin (which is

[1] The products using the cooperative form in order to present the Designation application were: Olio di Brisighella (oil), Canestrato Pugliese (cheese), Cappero di Pantelleria (capers), Carciofo di Paestum (artichokes), Ficodindia dell’Etna (prickly pears), Lenticchia di Castelluccio di Norcia (lentils), Marrone di Roccadaspide (marron-chestnuts), Formaggio Stelvio or Stilfser (cheese), Uva da tavola di Mazzarrone (grapes), Valle d’Aosta Fromadzo (cheese). While one product only used the form of the producers’ Association: the Valle d’Aosta Jambon de Bosses (salt-cured ham).

successfully obtained), despite the fact that it was the only producer company. Given the possibility that these cooperatives, producers' organisations and individual enterprises have to manage the product directly, they not only carry out the functions provided for by the Regulation, but also develop an extremely effective, operating business activity with regard to the market which the other forms of association, for their very nature, find difficult to put into practice.

An aspect directly linked to the type of association used is also the level of participation (and representation) with respect to the companies effectively constituting the Italian Designation supply chain. Again using the surveys carried out by Qualivita for 2006, from a comparison between the total companies making up the supply chain for each product (obtained as the sum of farm businesses and processing industries) and the number of companies registered with the associations themselves, what could be considered as being one of the main limitations of the Italian designations clearly emerges (Table 5).

Table 5. Level of participation of the enterprises in the associations and number of companies with certified products

Product category	Farms	Industries (dairies, factories, etc...)	total supply chain	Firms registered in Associations	Incidence %	Firms with certified product	Incidence %
	(a)	**(b)**	**(c)**	**(d)**	**(d/c)**	**(e)**	**(e/c)**
PDO	**84.259**	**4.667**	**88.926**	**8.310**	**9,3**	**8.337**	**9,4**
Balsamic Vinegar	69	382	451	328	72,7	235	52,1
Other meat products	62	15	77	54	70,1	48	62,3
Processed meat	6.621	265	6.886	406	5,9	390	5,7
Cheese	37.111	2.297	39.408	3.045	7,7	1.977	5,0
Olive Oils	33.704	1.618	35.322	4.109	11,6	1.086	3,1
Fruit, vegetables and cereals	6.583	76	6.659	246	3,7	4.520	67,9
Bread	3	13	16	20	125,0	13	81,3
Spices	106	1	107	102	95,3	68	63,6
PGI	**28.197**	**1.912**	**30.109**	**24.295**	**80,7**	**6.268**	**20,8**
Fresh meat	3.576	679	4.255	2.685	63,1	2.697	63,4
Processed meat	38	188	226	128	56,6	127	56,2
Olive Oils	10.251	627	10.878	10.465	96,2	261	2,4
Fruit, vegetables and cereals	14.332	418	14.750	11.017	74,7	3.183	21,6
Total	**112.456**	**6.579**	**119.035**	**32.605**	**27,4**	**14.605**	**12,3**

(Source: our elaboration of Qualivita data 2008)

With reference to the PDO productions, only 9.3 percent of the companies belonging to the supply chain is effectively registered with the respective Consortia or Associations. If the most important PDOs are considered, the total number of companies in the supply chain registered with associations is 7.7 percent for cheese, 11.6 percent for olive oil, 5.9 percent for processed meats, and 3.7 for fruit and vegetables.

These figures are justified by statutory obligations that dictate that only the processing companies should be registered with the Associations, excluding producers of raw materials but, as demonstrated by the PDO fruit and vegetable products, they are also justified by the lack of interest in being represented, given in any case the possibility of using the PDO mark, sustaining the certification expenses and contributing to the management costs of the Consortia.

The framework described totally changes if we consider the PGI productions where, in many cases, and especially in the fresh products sector, all the companies in the supply chain have the possibility to register with the respective Associations. In this case, in fact, approximately 80 percent of the total companies in the supply chain are registered with the Associations, with peaks of 96 percent for the olive oil sector and 75 percent for fruit and vegetable enterprises.

So a problem linked to the representativeness of the enterprises belonging to the PDO supply chains exists, especially in cases in which the quality level is higher, and where certain communication and marketing strategies - but above all the "maintenance" of the specifications - are developed not involving the farm businesses, the role of which is limited to supplying the raw materials, but almost exclusively the processing companies. This latter aspect could become a limiting factor in the development of the PDOs, as it contributes to divorcing the raw material production phase from the processing phase, with repercussions that involve the entire supply chain.

If we assume that the companies requesting quality certification from independent certifying bodies are those directly in contact with the market, the data collected by Qualivita in 2006 and by Istat (National Statistical Institute) in 2008 (Adua, 2008) (Table 5) attest to the fact that the companies actively involved in commercial initiatives relative to PDO and PGI productions are only a part of the companies registered with the associations.

In this regard, the number of companies requesting certification is almost all of the companies registered with the associations for certain sectors (PDO cheeses and PDO processed meats), while for others (this is the case of PDO fruit and vegetable productions), exactly the opposite condition applies, as the number of companies belonging to the associations is only a minimum part of the companies certified. On the other hand, in the olive oil sector, the companies requesting certification are in the minority compared to the companies associated. This phenomenon becomes particularly evident in the case of PGI olive oil from Tuscany, in which almost all the companies on the supply chain are registered with the Consortium, but only the bottlers request certification.

The decision not to request certification, thereby foregoing the geographical designation, is due to a large number of factors, such as the capacity of the companies to operate in the short channel, the reputation that the producers (farmers and small craft enterprises) and their product enjoy with respect to local market demand, and the need to sustain certification costs. All this would suggest that the oil sector companies seem to consider Designation as a "potential" to be used in "extreme" cases, while fruit and vegetable producers view Geographic designation as an opportunity to distinguish and enhance their commercial status, above and beyond the role carried out by the association that has set it up and that governs the system.

3.3. The economic aspects and marketing strategies

The Qualivita survey shows that the total turnover of Italian GI products is about 4,935 billion Euro. About 85% (4,207 billion Euro) is accounted for by PDO and 15% by PGI (728 million Euro) (Table 6). Three product categories cover more than 90% of total turnover: these are PDO cheeses (57%), PDO processed meat products (25%) and PGI processed meat products (10%). The third category by size is PDO and PGI fruit and vegetables which overall accounts for 6.5% of total turnover. Olive oil, both PDO and PGI, accounts for only 1.5% of the total, although production is widely spread over the country. The figures show that the two sectors of fresh meat and balsamic vinegar are particularly important at local level. Fresh meat accounts for a total turnover of 33 million Euro and comes mainly from inland areas in the central Apennines, while balsamic vinegar accounts for 8,5 million Euro from 450 firms in just two provinces, Modena and Reggio Emilia.

Regarding the average turnover for firms, the above analysis shows that the largest member firms of consortia or associations for PDO products are in the Fruit vegetables and cereals sector. This is because the leader firm “Mela della Val di Non” apple consortium accounts for 90% of turnover in the sector. For meat products and cheeses, average turnover stands at 1,0 million and 1,5 million Euro respectively, but it is not high enough to make the firms market leaders. In other sectors, the average size of member companies is significantly smaller and lies between 11,000 Euro for olive oil and 90,000 Euro for bakery products. For PGI products too there is a clear dichotomy of larger firms in meat processing, with an average turnover of 3.4 million Euro, and other sectors which have turnovers ranging from 10,000 to 50,000 Euro.

Table 6. Turnover by product category and sector

	Gross Saleable Production at production level	GSP per firm (member of Consortia)	Standard deviation of GSP
PDO	**4.207.291.547**	**1.011.323**	**1.786.041**
Balsamic Vinegar	8.500.000	20.793	12.000
Other meat products	850.000	15.741	-
Processed meat	1.233.769.215	1.035.163	2.105.737
Cheese	2.767.630.411	1.529.089	1.623.137
Olive oils	36.468.822	16.692	22.790
Fruit, vegetables and cereals	157.943.100	1.852.137	4.127.318
Bread	1.800.000	90.000	-
Spices	330.000	4.722	2.750
PGI	**728.021.623**	**1.062.003**	**2.324.591**
Fresh meat	33.000.000	14.300	8.864
Processed meat	493.809.380	3.456.065	3.172.669
Olive Oil	37.553.152	3.588	-
Fruit, vegetables and cereals	163.659.091	43.086	100.138
Total	**4.935.313.171**	**1.028.601**	**1.979.559**

(Source: our elaboration of Qualivita data 2008)

So among Designation products there are products from industries with high turnover, as well as other artisan products with much lower volumes of output and turnover. It is not surprising that PGI firms tend to have a higher turnover than PDO firms in the same sector. PGI firms are not necessarily obliged to procure raw materials from area of origin so they can often carry out economies of scale and volumes of output. Fresh meat and Fruit and vegetable products may in fact seem somewhat anomalous from this standpoint as they are closely linked to their area and a system of small and medium enterprises.

A clearer picture of the characteristics of Designations and supply chain firms is given by the overall and average turnovers of firms producing PDO and PGI products. Company turnover reveals that sales of Designations of origin are far from homogenous. Most producers, with few exceptions, show a very low average turnover which does not permit them to publicise the product at single firm level or to follow an innovation policy to compete successfully on the modern agri-food market. On the modern market, mass products are developed without restraints imposed by Designation of origin labelling and leader firms make wide use of trademark and branding policy. Most Designation companies however are not large enough to compete in supermarket distribution in their sector.

Average company turnover within the same sector may range from a few thousand to millions of Euro. Designations are an effective way of advertising the reputation of a firm and the value of the product, although naturally economic, structural, and strategic factors as well as management are also important elements in market competition. But the combination of reputation of the designation, the collective and company brand and the firm's capacity to promote the product and adopt more aggressive policies towards supermarkets with higher output volumes is what gives companies a strong position on the market. PDO and PGI are an important support as they ensure quality and a good price / quality ratio for supermarkets.

Clearly of course, not all GI producers have these characteristics. Just fifteen of them account for 90,7% of the overall turnover of PDO and PGI in Italy. (Table 7).

Table 7. Economic weight of the top 15 PDO /PGI products

Designations	Product	Volume of sales (€)	% of Total	Cumulative %
PDO	Grana Padano (cheese)	950,000,000	19.2	19.2

PDO	Prosciutto di Parma (ham)	850,000,000	17.2	36.5
PDO	Parmigiano Reggiano (cheese)	827,300,000	16.8	53.2
PDO	Mozzarella di Bufala Campana (cheese)	300,000,000	6.1	59.3
PDO	Prosciutto di S. Daniele (ham)	300,000,000	6.1	65.4
PDO	Gorgonzola (cheese)	200,000,000	4.1	69.4
PGI	Mortadella Bologna (processed meat)	200,000,000	4.1	73.5
PGI	Bresaola della Valtellina (processed meat)	165,000,000	3.3	76.8
PDO	Mela Val di Non (apples)	157,000,000	3.2	80.0
PGI	Mela Alto Adige o Sudtiroler Apfel (apples)	120,000,000	2.4	82.5
PDO	Pecorino Romano (cheese)	105,175,936	2.1	84.6
PDO	Asiago (cheese)	95,000,000	1.9	86.5
PDO	Fontina (cheese)	93,370,725	1.9	88.4
PGI	Speck dell' Alto Adige (processed meat))	91,000,000	1.8	90.2
PDO	Provolone Valpadana (cheese)	41,697,000	0.8	91.1
	Other Pdp products	287,747,886	5.8	6.7
	Other Pgi products	152,021,623	3.1	3.1
	Total	4,935,313,171	100.0	

(Source: our elaboration of Qualivita data 2008)

3.4. Brand strategies and retail channels

As already pointed out earlier, also an analysis of the company turnover by Designation indicates that the entire sector is anything but homogeneous, throwing light on the contradictions that distinguish it. In fact, apart from a few exceptions represented by a number of PGI productions (Bresaola dried beef, Mortadella di Bologna sausage, Speck dell'Alto Adige smoked ham) and a few PDO productions (Prosciutto San Daniele, Grana Padano cheese, Mela Melinda-Val di Non apples, Prosciutto di Parma), the producing companies, on average, present a turnover that is not sufficient to guarantee a corporate communications policy and an innovation policy that would enable them to compete on the modern agri-food market, where mass products are developed without the restrictions imposed by the designations and where leading companies resort extensively to company brand policies. In other words, most of these companies present dimensions that are not suitable for competing in the large scale distribution channel with other industrial enterprises from the same commodity sector.

From this it ensues that the designation system represents a sure tool for publicising the reputation of the company and the value of the product, but at the same time it is important not to forget the other economic, structural, management and strategic factors that enable companies to compete on the market.

In particular, the combination between the reputation of the Designation, the reputation of the collective trademarks, the reputation of the company logos as well as the capacity of the companies and the Consortia to promote the product and to adopt policies that are, in certain cases, aggressive towards large scale distribution represent the mix of factors that has enabled companies to achieve significant market positions also in this trade channel. In this process, the PDOs and PGIs have exerted the undeniable effect of innovating the food supply of a new category of products also in large scale distribution businesses, which, in some cases, have succeeded in making it a distinguishing element, and deriving significant commercial benefits from it. In fact, today, many distribution chains offer their clientele PDO and PGI products, both with their own house brand and with the manufacturer's brands, transforming them into elements to attract and using them as levers to promote the entire product supply in the point of sale.

From this interest demonstrated by the large scale distribution channel emerges an element of weakness for those designations marketed by enterprises that are not sufficiently familiar to consumers and, even more important, that do not have sufficient contractual powers with respect to large scale distribution.

The latter, in fact, moves increasingly on the market buying through large purchasing centres and, in order to attract customers to its points of sale, it offers quality products with sizeable discounts (if not indeed below cost).

This strategy is particularly damaging for companies that produce and sell PDO and PGI products, as they often do not have access to the popular company brands and most certainly do not have the necessary contractual powers over the purchasing groups. One example of this situation of great commercial weakness on the part of PDO products is represented by Parmigiano Reggiano, which is sold by large scale distribution and over 70 percent of the total sold through this channel is marketed through the promotion mechanism. PGI products falling into the category of processed meats are an exception to this condition as they are produced and marketed by only a few large enterprises in the sector which use the PGI productions to complete the range of products offered to the large scale distribution channel, and they make extensive use of policies for promoting their own company brand.

Notwithstanding the difficulties in developing commercial relations with large scale distribution, this channel appears to be the only one functional to the marketing of large volumes of product and, thus, that with the capacity to bring the designations to consumers. For efficiency of use, it is not sufficient for the product to be good and of good quality, it must also possess the service requirements and, above all, it must be marketed by companies that have a good reputation in the eyes of consumers and hence a well-known company brand. In this regard, it may be observed how in the past it was the important designations that promoted the product via the media advertising the collective trademark of the Protection Consortium (this is the case with Parmigiano Reggiano cheese, Prosciutto di Parma and Grana Padano cheese). Today it may also be the same producer companies that publicise their company name or rather their "company brand", strengthened by the guarantee of quality given by the presence of the PDO or PGI community logo that accompanies it. This is the case of some important designations in which the producer companies have reached economic dimensions that enable them to act on their own in the promotion of the product and the brand. Examples of this sort are brands such as Melinda, the apple of the Val di Non, Rigamonti in the case of Bresaola from the Valtellina and the company Parmareggio in the case of Parmigiano Reggiano cheese (Table 8).

Table 8. Brands of the Consortia and Associations of the 15 first Geographical Indications

GRANA PADANO	PARMA	PARMIGIANO REGGIANO	MOZZARELLA DI BUFALA CAMPANA	PROSCIUTTO DI SAN DANIELE
GORGONZOLA	MORTADELLA BOLOGNA	BRESAOLA della Valtellina	Melinda Val di Non	SÜDTIROL
		FONTINA DOP		PROVOLONE VALPADANA

(Source: our elaboration of Qualivita data 2008)

It may therefore be observed how some of the brands accompanying the most popular PDO and PGI products (Table 8) are much more than a simple logo. Indeed, whether they are consortium or company brands, for the image, brand awareness and loyalty expressed by the consumers in their regard, they assume the brand equity characteristics. This concept embraces the value of the brand for the enterprise; a value that is recognised not only by consumers but also by large scale distribution, inasmuch as it becomes a synonym of quality and an element of commercial appeal. It is during this step that the element of weakness is generated for many PDO and PGI productions inasmuch as the adoption of a brand policy – through the growth of brand awareness and brand image – is functional to the adoption of "aggressive" marketing mix policies ascribable to the use of the "famous" 4 Ps (Product, Price, Place, Promotion).

While brand awareness is an advantage of the consortium brand, the (protection) Consortia cannot in any way whatsoever develop marketing mix policies, as they do not possess the product and have not been appointed to market it. Moreover, very often the companies are unknown to the consumers who choose the Consortium guaranteed product not on the basis of the popularity of the company brand but on the basis of price or, whenever possible, on the basis of the price/quality ratio. And it is from this poor brand awareness of the companies that the contractual power of large scale distribution arises, which, moreover, also exploits its own contractual power to squeeze the maximum profits out of highly attractive productions.

It is no coincidence that the Mela della Val di Non, in order to promote its own brand awareness, makes use of the television commercial of the Melinda brand (which is the consortium of cooperatives that manages the 4 Ps and that markets it) and of product differentiation; the latter is obtained through the production of five categories of apple, three of which are PDOs (Golden delicious, Red delicious and Renetta) and two of which are not (Fuji and Stark). A similar situation is experienced by the producers of PGI Mortadella which are large industrial groups (among others: Alcisa, Galbani, Negroni, Vismara, which, in order to increase their brand awareness resort to extensive communication activities and a product differentiation policy.

In this analysis it is important not to forget an important aspect: that out of all the market leader PDO and PGI products, only the PGI product Bresaola della Valtellina displays the community logo in its mark, thereby reinforcing the Consortium's message promising quality.

What appears imminent is therefore a partial conflict between consortium brands and company brands in the name of the legitimation of the system, of the "capture/retention" of the clientele and of the building of a reputation for the Designation and for the company that markets it.

In this scenario, the action aimed at creating trust and triggering a process of reputation building can be realised by resorting to collective private or public initiatives. The first case involves intermediate institutions such as Protection Consortia that have the resources to develop a collective action aimed, among other things, at guaranteeing quality and the observance of quality standards; while in the second case, trust is gained as a result of the direct action of public institutions which, with the development of regulatory actions geared at creating and guaranteeing public quality brands and marks, give consumers assurance regarding the quality offered. In both cases, the objective is to legitimate the production system, in this particular case that of the geographical indications, by providing the consumer with a guarantee of the quality supplied in full observance of production regulations.

For these reasons, prior to Regulation 2082/92, and in absence of legislative action guaranteeing quality, the geographical indications were created and managed by the Protection Consortia which set themselves the task of providing a guarantee to the consumer and legitimating the collectively used trademark. As of 1992, the action of the Protection Consortia was changed, because the action of legitimation was carried out by a public body through the extension of a shared system of rules, including the methods for controlling the actions of the companies as regards the observation of the rules themselves.

As demonstrated by a number of studies, however, a public legitimation action alone is not sufficient to obtain the full trust of consumers and hence a condition of brand equity. In fact, in the presence of strong consortium brands, consumers are not willing to pay a higher price for the product guaranteed by the community logo alone, while they are willing to pay it to have the product that presents the consortium brand that has succeeded in creating the reputation of the product (Arfini, 2000). In this sense, the community logo as an expression of public action reinforces the company brand, but it does not replace, in terms of communicative power and value, the collective trademark. At the same time, however, when also the collective trademark is lacking or unknown, as is the case in many PDO olive oils, the community logo is the only way for legitimating the Designation and for contributing to creating a reputation for the company that sells it.

To this end, as we have already seen, the "important" Italian designations (with the exception of Bresaola della Valtellina PGI) use the collective trademark of the Consortia to promote their product. On the other hand, of the "other designations (PDO and PGI)" present in the Qualivita survey, there are as many as 17 PDO extra virgin olive oils2, in addition to the Fico d'india dell'Etna (prickly pear) and the Pane di

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[2] Extra virgin olive oil Cilento, Extra virgin olive oil Collina di Brindisi, Extra virgin olive oil Colline di Romagna, Extra virgin olive oil Colline Salernitane, Extra virgin olive oil Dauno, Extra virgin olive oil Laghi Lombardi, Extra virgin olive oil Molise, Extra virgin olive oil Monte Etna, Extra virgin olive oil Penisola Sorrentina, Extra virgin olive oil Pretuziano delle Colline

Genzano (bread), which use the community logo within the Consortium logo, specifically to increase the level of trust and reputation towards a Consortium which is largely unknown to the majority of consumers.

In brief, various factors contribute to influencing the adoption of a collective trademark policy “against” a company brand policy (still accompanied by the collective/company brand), and these factors often act in synergy. Among such factors, there is:

- The size of the companies compared to the competitors of the reference market and the presence of leader companies in the market segment. The larger the company, the greater the need to ensure that its brand emerges: this is the case of the manufacturer’s brands and the company brands of certain typical cold cuts, some of which have a high service content (as they are sold pre-cooked or sliced on trays and modified atmosphere packaged), such as Zampone di Modena, Mortadella di Bologna, Speck dell’Alto Adige and Bresaola della Valtellina, but it is also the case of certain companies in the dairy sector. Let’s focus on a number of “examples” – now considered marketing cases – of the companies Parmareggio, Auricchio and Lactalis (well-known for the brand President) which, thanks to huge investments in television advertising, developed a strong brand policy accompanied by a qualitative identity of the product sold.
- The level of homogeneity of the companies making up the Consortium. The more homogeneous the companies are as regards quality, production technology and size, the more effectively the policy for the use of the consortium brand emerges: this is the case of the hams named Prosciutto di Parma, Prosciutto del San Daniele and Prosciutto di Modena, but also of Mozzarella di Bufala Campana.
- The level of product selling/retailing development. In the case of Parmigiano Reggiano cheese, the majority of the product is sold by cheese factories to dealers when the cheese is not yet ready for retailing: for this reason it is the producers that manage the potential of the consortium brand, even if the product is sold to retailers prevalently by other parties in the supply chain.
- The added value of the product and the sector of the supply chain involved. This is the case of numerous vegetable productions with a low added value for which consortium (or association) brands are almost exclusively used, often linked to the community logo.
- Precise strategic choices and/or marketing policies. In some cases it is only the company brand that appears, which identifies itself with the producers’ Consortium. This is the case of a number of mass vegetable productions such as, for example, the Melinda apple of Mela Val di Non.

Obviously the choice of a specific strategy by the individual companies and by the Consortia depends on the characteristics of the reference market, the characteristics of the supply chain and the capacity of the companies to influence consortium policies, as well as to cope with the costs connected with the adoption of precise company brand promotion policies.

It is also important to look at the channels of distribution and sales for PDO/PGI. The two types of product clearly use different channels. (Table 9). PDO products tend to be sold directly to the consumer or through traditional retail channels (26% and 25%). PGI products make less use of these channels (16% and 18%). 56% of PGI sales are in supermarkets, compared to 39% for PDO products. At the same time, PDO products are sold more widely, although the overall volume of exports is only 15% of sales in Italy. And PDO are sold mainly on the European market, while PGI products are sold outside Europe.

There are however significant differences between PDO and PGI in each sector. Olive oil, for example, is mainly sold directly to consumers as a PDO (45%) but mainly through supermarkets as a PGI (70%). An average of 32% of PDO Fruit and vegetable products are sold directly to the consumer, but only 17% of PGI. High quality output is often sold in traditional retail outlets where the presence of a shopkeeper can be an important factor in guiding the consumer. This is the case for example for balsamic vinegar (Aceto balsamico tradizionale PDO) (59%) and PDO spices (59%). Product categories characterised by widely consumed products such as cheese and meat products are sold mainly in supermarkets (39% and 53%).

Table 9. Retail channel and product category.

Teramane, Extra virgin olive oil Riviera Ligure, Extra virgin olive oil Sabina, Extra virgin olive oil Tergeste, Extra virgin olive oil Terra di Bari, Extra virgin olive oil Umbria, Extra virgin olive oil Valle del Belice, Extra virgin olive oil Veneto.

	Direct selling	Traditional	Mod. dristribution	Ho.Re.Ca	Domestic Market	Export	EU	Non EU.
PDO	26%	25%	39%	10%	86%	15%	52%	48%
Balsamic Vinegar	25%	59%	11%	5%	45%	55%	51%	50%
Other meat products	5%	5%	90%	0%	100%	0%	0%	100%
Processed meat	8%	30%	53%	9%	94%	6%	62%	38%
Cheese	24%	29%	39%	8%	87%	13%	52%	48%
Olive Oil	45%	14%	24%	17%	80%	20%	55%	45%
Fruit, vegetables and cereals	32%	18%	48%	3%	81%	19%	29%	72%
Bakery products	11%	11%	74%	5%	95%	5%	100%	0%
Spices	13%	59%	10%	18%	93%	8%	40%	60%
PGI	16%	18%	56%	10%	89%	11%	32%	68%
Fresh meat	0%	24%	71%	6%	100%	0%	0%	0%
Other meat products	20%	19%	47%	14%	89%	12%	68%	33%
Olive Oil	20%	5%	70%	5%	40%	60%	28%	72%
Fruit, vegetables and cereals	17%	18%	55%	10%	91%	9%	30%	70%
Total	23%	23%	44%	10%	87%	13%	45%	55%

(Source: our elaboration of Qualivita data 2008)

A closer analysis at market strategy shows that GI products fall into two categories. The top fifteen products in terms of turnover form a distinct group. They sell mainly through supermarkets (57%) whereas the other PDO use channels which enhance their image, such as direct sales (20%) and traditional retail (24%). Important products in the top fifteen selling mainly through supermarkets include Grana Padano (89%), Parma and S. Daniele prosciutto hams (60% and 65%), Parmigiano Reggiano cheese (57%), Bresaola dried beef and Mortadella di Bologna sausage (55%). Some of these also sell significantly to restaurants and caterers, which indicates their importance as quality ingredients in gastronomically important dishes, as well as being important foods in themselves. It is also noteworthy that PDO cheeses not among the top fifteen use a different market strategy. 62% of cheeses in the top fifteen are sold in supermarkets while the percentage is only 39% for 'lesser' cheeses. Direct and traditional retail are the most common types of outlet for these.

It is also interesting to note the strategies for internationalisation adopted by European GI products. Few of these products are exported to any great extent; exceptions are Pecorino Romano cheese PDO (80%) Tuscan Olive oil PGI olive oil (60%) and Modena and Reggio Emilia balsamic vinegars PDO (55%). For other products among the top fifteen, the percentage of export is on average lower than 30%, and for less important products it is lower than 12%. It is significant that the GI which export the highest percentages overseas (Pecorino Romano, Tuscan olive oil and balsamic vinegar) sell mainly outside the EU where European protection system is not in force and where most cases of piracy occur. This shows that the PGI designation does not constitute a protection but rather a reliable quality marker in competitive markets. The other designation products, particularly PDO cheese and hams mainly target the European market and are protected against unfair and misleading competition by Regulation 510/2006.

Market strategy shows three distinct trends for GI products: a) Designations (PDO and PGI) sold in supermarkets, b) Designations (PDO and PGI) sold directly to the consumer or in traditional retail channels and c) Designations targeting international markets. The first two trends reflect the existence of two different requirements, on one hand the need for a strong brand identity and on the other, the need for support over and above direct selling to consumers. Given the stranglehold supermarkets exert on many suppliers, branding policy is key element of an 'active' strategy to fight competition. But company quality, brand, pricing and sales policies need to be viewed from a wider perspective. The marketing mix needs to reflect ongoing innovation, the capacity of the supply chain to adapt, as well as the need for consumer information on the tangible and intangible quality of products.

In order to develop this action, the companies that produce or sell the PDO and PGI productions must, of necessity, reach sufficient dimensions to enable the implementation of this strategy. These considerations partially explain the success of some productions which have a strong industrial orientation and the "suffering" of those products which, in contrast, are marketed in this channel by companies which, due to their commercial orientations, may be considered as craft concerns.

On the other hand, the designations that resort to the traditional trade channel require a strategy in which the Protection Consortia still have an important role in supplying consumers with those guarantees that justify the payment of pricing premiums. In these channels, in fact, the consortium brand, associated with the direct involvement of the shopkeeper or producer, is sufficient to attract consumers during the purchasing phase and to supply information and guarantees that contribute to the creation of a relationship of trust. In these channels, very often, it is the shopkeeper who selects the company, proposing to his clientele a product that presents specific features. In other words the customer, in contrast with large scale distribution, does not choose the company but the product and, in this, the Consortium brand plays a guiding role.

From these considerations, it emerges that the transition from the traditional trade channel to the modern channel of large scale distribution necessitates careful assessment, developing suitable structures and strategies for interacting with the same, running the risk of commercial "subjection", to the advantage of the distributor's mark.

A further aspect prompting reflection in this regard is supplied by an analysis of average market prices – from production to the point of sale (the latter being considered as the prevalent sales channel) – taking into account the percentages of product sold by the large scale distribution channel (Table 10 and Table 11). The analysis made, although taking into account the limitations created by the lack of homogeneity within the product category, brings to light how significant price increases are practised both for the "mass" products (on average 100 percent) and for the "niche" products (83 percent); whether they be marketed through direct sales and/or traditional retail outlets or through large scale distribution.

Table 10. Analysis of market prices for the first 15 products per turnover. (year 2006)

Product Volume commercialized at Gdo	**Average Price of Production (€/kg-l)**	**Average Price of Sale on the prevailing channel (€/kg-l)**	**Increase (€)**	**Increase (%)**
20-40%	**0,85**	**1,33**	**0,5**	**55,9**
Mela Alto Adige o Sudtiroler Apfel (apples)	0,60	0,90	0,3	50,0
Mela Val di Non (apples)	1,10	1,75	0,7	59,1
40-60 %	**6,10**	**11,47**	**5,4**	**88,0**
Asiago (cheese)	4,27	9,36	5,1	119,2
Bresaola della Valtellina (processed meat)	15,00	27,50	12,5	83,3
Gorgonzola (cheese)	4,05	9,37	5,3	131,4
Mozzarella di Bufala Campana (cheese)	7,50	13,00	5,5	73,3
Parmigiano Reggiano (cheese)	8,44	12,46	4,0	47,6
Pecorino Romano (cheese)	4,30	8,25	4,0	91,9
Provolone Valpadana (cheese)	4,60	9,95	5,4	116,3
60-80 %	**9,96**	**23,46**	**13,5**	**135,6**
Prosciutto di Parma (ham)	7,42	26,64	19,2	259,0
Prosciutto di San Daniele (ham)	12,50	25,75	13,3	106,0
Speck dell'Alto Adige (processed meat)	n.d	18,00	-	-
80-100 %	**5,52**	**10,19**	**4,7**	**84,6**
Grana Padano (cheese)	5,52	10,19	4,7	84,6
Total	**5,89**	**11,80**	**5,9**	**100,3**

(Source: our elaboration of Qualivita data 2008)

On the other hand, also selling through direct and/or traditional channels3 guarantees the achievement, for many types of product, of margins superior to those obtainable through large scale distribution, where the logic of low margins on high quantities sold prevails. There are, in any case, productions which, on the basis of their volumes and turnovers, cannot be considered as either niche nor mass productions. Many of these products, which we could define as intermediate (or large volume) products, consider large scale distribution as the natural commercial destination for their productions. It is, nevertheless, the analysis of the data collected by Qualivita that highlights how this category of product is the one in greatest difficulty compared to the previous two categories.

[3] The latter is considered when the quantities of product sold by large scale distribution channels are less than 40 percent.

Table 11. Analysis of market prices for niche productions (year 2006).

Product category	Average Price of Production (€/kg-l)	Average Price of Sale on the prevailing channel (€/kg-l)	Increase (€)	Increase (%)
PDO	**10,5**	**18,6**	**8,0**	**76,3**
Balsamic Vinegar (bott. 100 ml)	45,0	87,5	42,5	94,4
Other meat products (kg)	8,3	11,0	2,7	33,2
Processed meat (kg)	12,5	24,3	11,8	93,9
Cheese (kg)	7,0	11,9	4,9	70,9
Olive Oil (l.)	11,4	15,8	4,4	39,0
Fruit, vegetables and cereals (kg)	4,3	7,1	2,8	66,0
Bread (kg)	1,8	2,3	0,5	27,8
Spices (gr.)	7,5	9,0	1,5	20,3
PGI	**4,6**	**8,5**	**3,9**	**83,9**
Fresh meat (kg)	6,1	14,0	7,9	129,6
Processed meat (kg)	12,5	23,0	10,5	84,0
Olive Oil (l.)	10,4	12,0	1,6	15,4
Fruit, vegetables and cereals (kg)	3,6	7,4	3,8	105,8
Total	**8,7**	**15,9**	**7,2**	**83,4**

(Source: our elaboration of Qualivita data 2008)

In this case, the company brand does not exercise a guiding role and the PDO and PGI brand levels out the quality of the products, bringing them to a single level of distinctive quality guaranteed by the PDO and PGI designation. Faced with such great variability of supply and price, consumers are obviously "confused", not managing to identify the right price/quality ratio of the goods. A very clear case of this type is that of olive oil, the price of which oscillates between 7 and 33 euro per litre at the point of sale.

Once more, the correct choice of sales channel on which to rely becomes crucial and large scale distribution is not suitable for all the designations existing in Italy, but only for some. The problem of the choice of target market must be made on the basis of the need to reach suitable corporate dimensions and by the capacity, even on a small scale, to reach consumers and communicate to them the traditional values and contents of the productions, activating a virtuous circle on the basis of the development process of the rural areas. In this task, the role of public institutions and Consortia in contributing to the process of "entrepreneurial growth" must be considered as being of central importance for a sustainability policy of the designations themselves.

4. Toward a tentative of classification of Italian Designation of origin.

4.1. Some consideration on the issue of the classification

The data supplied till now highlight how in Italy it is possible to speak of the success of a policy aimed – at long last and among other things – at linking up producers and consumers and supplying tools for the economic growth of the companies and for the development of rural areas. An assessment of the effective spread of the use of the designations in the trade practices of companies is considerably more complex, not to mention entering into details regarding the level of satisfaction attained by the enterprises themselves in relation to the objectives that they set themselves. Paradoxically, it is precisely the success of this policy that has shown up the limitations of the geographical designation of origin instrument, inasmuch as many of them are little used by companies (the great majority of the turnover from PDOs and PGIs is raised by a very small number of products, many of which existed prior to Regulation 2081/92 which introduced geographical designations) and have great difficulty in reaching the final market; so much so in many areas there is thought to be too many geographical designations, and that consumers are not able to appreciate their value (Arfini, Belletti and Marescotti, 2009).

The outcome of the paths taken and performances achieved by the individual designations gives the image of a "system" inside constants and interpretations may be sought. This study, which might be considered by some to be a mere academic exercise, in actual fact gains great importance with a view to understanding which public policies can or should be implemented in order to improve the efficiency of the entire geographical designations system. In reality, such a study seems extremely complex since, as already pointed out, a large variety of types of designation exists, rendering it difficult to identify constants, common elements and, hence, overall interpretations.

It is undeniable that the geographic designation system has an extremely diversified composition, in which the differences between the PDOs and the PGIs – also due to the interpretation given to Reg. CE 510/2006 in our country – are less clear than actually appears from an examination of the text of the regulation. The interpretation provided by a comparison between PDO and PGI does not therefore appear very illuminating and some characteristics that would be expected to be specific to one or the other type are, in fact, rather vague. For example: the link with the agricultural component of the supply chain which, in numerous PGIs, in particular those concerning the fruit and vegetables category, is extremely strong. Additionally, each designation is distinguished by considerable variability on the basis of:

- the size of the target markets;
- the level of reputation achieved;
- the tendency to exportation;
- the presence of small and medium-sized or large enterprises;
- the level of coordination of the supply chain-designation achieved by the Consortium;
- the capacity of the designation to distribute the added value throughout the supply chain.

In the light of the characteristics of the single designations making up the Italian GI system, the search for a typological classification of the Italian designations appears particularly complex. It is, among other things, possible to construct an "ideal-typical" classification that brings together the various types of designation that we can identify in relation to the variables which, on each occasion, are deemed useful for describing a given characteristic. The non-exhaustive "list" of characteristics useful for defining a type may be represented by:

- the level of renewal of the system (traditional or renewed);
- the commercial destination of the products (niche or large scale market);
- the link with the agricultural component (weak or strong);
- the potential use and the real use of the designation (high or low);
- the link with the territory of production and origin (weak or strong);
- the level of processing of the raw materials (fresh or processed products);
- the length of the supply chain (short or long);
- the homogeneity of the supply chain compared to the type of producer companies (low or high);
- the level of sustainability of the designation (high or low);
- the form of governance developed (territorial, sectoral or corporative);

The theoretical list of variables on which to build a classification appears rather long and the characteristics to be considered are theoretically all useful for the development of public policies to support the sector. At the same time, in order to identify the types of designation existing in Italy, the first obstacle encountered is the harsh reality of finding a data source which, on the one hand enables the measuring of the main variables that describe the characteristics of each designation and, on the other, permits an analysis with suitable statistical tools.

4.2. A possible classification

In this study, the search for types of designation was conducted using the files contained in the Atlas of the Qualivita Association relative to the period 2005 / 2007. This source is of fundamental importance in order to overcome the problem of the "missing data" relative to some economic and productive variables attributable to the "minor" designations. Although the Qualivita Atlas may be considered a more up-to-date and complete statistical source with regard to the world of Italian designations, we had to limit ourselves to an analysis based on the mean data relative to the period 2005-2007 for a sample composed of 98 designations. For each designation the following variables were considered:

- production volume (in volume),
- the certifiable quantity in the territory indicated by the specification (expressed in volume),
- production price (expressed in Euro / volume),
- consumer price in prevalent channel (expressed in Euro / volume),
- direct sales price (expressed in Euro / volume),
- quantity of product sold per sales channel subdivided into direct sales, traditional, modern etc. (expressed in %);
- the quantity of sales made on the foreign market (expressed in %);
- production turnover (expressed in Euro / volume);
- retail turnover (expressed in Euro);
- publicity investments (expressed in Euro).

On the basis of the above-described variables, five indices were obtained for the purpose of representing: the characteristics of the supply chain, the production price and consumer price with respect to the prevalent channel, the type of distribution.

- Index a) Ratio between the number of companies with certified product and the total companies registered with protection consortia or associations (in %).
- Index b) Ratio between the consumer price in the prevalent channel and the production price (in %).
- Index c) Volume of certified product sold by direct sales channel (in %).
- Index d) Volume of certified product sold by traditional sales channel (in %).
- Index e) Volume of certified product sold by modern distribution sales channel (in %).

The correlation matrix calculated on the sample of 98 designations and with respect to the five indices listed is shown below (Table 12). The table shows how an effective link exists between the groups of variables. In fact, several correlation coefficients are significant – some reaching levels of significance of 0.05 (indicated with *) others of 0.01 (and indicated with **) – resulting in their correlation being considered significant.

The methodology adopted is of the non-hierarchical type, based on the k-means method and it was resolved using the SPSS statistical package. This methodology, starting from the variables and units, seeks a single division in a certain number of groups fixed *a priori* which meets a given optimal condition. This statistical method is suitable for analyses based on data set numbers and supplies an objective cluster division.

Table 12. Matrix of correlations between variables

		Index a	Index b	Index c	Index d	Index e
Index a	Pearson Correlation	1	-0.037	-0.081	0.277**	-0.060

	Sig. (2-tailed)		0.719	0.430	0.006	0.559
Index b	Pearson Correlation	-0.037	1	-0.221*	-0.170	0.284**
	Sig. (2-tailed)	0.719		0.029	0.095	0.005
Index c	Pearson Correlation	-0.081	-0.221*	1	-0.210*	-0.688**
	Sig. (2-tailed)	0.430	0.029		0.038	0.000
Index d	Pearson Correlation	0.277**	-0.170	-0.210*	1	-0.419**
	Sig. (2-tailed)	0.006	0.095	0.038		0.000
Index e	Pearson Correlation	-0.060	0.284**	-0.688**	-0.419**	1
	Sig. (2-tailed)	0.559	0.005	0.000	0.000	

(Source: our elaboration of Qualivita data 2008)

The evaluation of the effectiveness of the classification has been tested through an analysis of the global parameter R^2. The analysis made has led to the identification of 5 clusters to which an overall R^2 of 0.75 corresponds, thanks to which the analysis may be deemed to be significant. On the other hand, the analysis of the total deviation, of the deviation between the groups and of the deviation within the groups led to the identification of the R^2 value for the single variables (table 13):

Table 13. R^2 of the single variables

Index	R^2
a	0.999
b	0.691
c	0.813
d	0.626
e	0.637

(Source: our elaboration of Qualivita data 2008)

It may therefore be observed how the five clusters are generally more homogeneous internally with reference to the ratio between the number of companies with certified product compared to the total companies registered (index a) and to the designations that use direct sales as a trading mechanism (index c), and less with respect to traditional sales (index d) and to modern distribution (index e). It is important to underscore how the division into six groups is fairly satisfying even although it is essential to consider the variability within the clusters which is equivalent to 25% of the total deviation. At the same time, it is important to observe that convergence is obtained from the eighth step.

The final cluster centre table (table 14) contains the coordinates of the five clusters obtained, describing the mean characteristics of the clusters in terms of standardised deviations.

The last two tables require further examination and comparison in order to make a more detailed analysis of the characteristics of each of the groups identified:

- Cluster 1 (high value chain and modern distribution): The cluster is distinguished by a high ratio between the consumer price in the prevalent channel and production price (index a). The index expresses the available margin for the players of the distribution channel. This cluster contains 13 designations, both PDO and PGI, among which Prosciutto di Parma (Parma Ham) (PDO) - Pomodoro di San Marzano dell'Agro Sarnese-Nocerino PDO (tomatoes) and Nocciola di Giffoni PGI (hazelnuts), where the ratio between consumer and production prices is 3.2, 3.9 and 4.3, respectively.
- Cluster 2 (traditional retail): the cluster is distinguished by extensive recourse to traditional retailing. In fact, this cluster is composed of 32 designations among which Mozzarella di Bufala Campana cheese (PDO), Zafferano di San Gimignano saffron (PDO) and Pecorino Romano cheese (PDO) which sell 33%, 40% and 31% of certified production, respectively, in these channels.

- Cluster 3 (modern distribution and low value chain): the cluster contains products that rely more heavily on modern distribution. This is the most numerous cluster (41 designations) and it contains both PDO and PGI products, among which: Bresaola della Valtellina dried beef (PGI), Gorgonzola cheese (PDO), Parmigiano Reggiano cheese (PDO), Grana Padano cheese (PDO) and Prosciutto di San Daniele ham (PDO).
- Cluster 4 (direct sales): this cluster is characterised by the fact that it prefers the direct sales channel for its products. It contains 11 designations generally considered as being "minor", among which: extra virgin olive oil Alto Crotonese (PDO) which in the period 2005-2007 sold 93% of its products and Lamon della Vallata Bellunese beans (PDO), with a percentage of direct sales amounting to 91%.
- Cluster 5: (quality control and traditional retail) this cluster displays an extremely strong ratio between companies with certified product compared to total of companies registered and views traditional retailing as the main outlet for its products. It consists of one PDO only, the Mela Val di Non apple, and both the 17 cooperatives and all the associated farm businesses adhere to the Protection Consortium. Moreover, this PDO is directly mainly at the domestic market through traditional retailing (approx. 70%) and modern distribution approx. 30%).

The five clusters identified by the K-means methodology pinpoint the variables that have the most effect on Italian designation strategies, such as: positioning strategies in the sales channel, the added value accumulated throughout the value chain and quality management.

From an analysis of the individual designations, grouped by product category and cluster (tab. 13), it may be observed that the positioning and value creation strategy are absolutely independent of the product category and the designation possessed (PDO or PGI). In fact, the PDO category of cheeses (for example) is distributed in as many as 4 clusters, while the PDO processed meat category and the olive oils are distributed over 3 clusters. In other words, what affects the positioning strategies, even more than the designations, are the product specifications and the companies making up the supply chain and their capacity to implement efficacious commercial policies.

The analysis, conducted on a sample of 98 designations, brings to light how the majority of products are concentrated in cluster 3. This cluster brings together those designations[4] that are sold in the modern distribution channel but do not succeed in significantly increasing their value at the point of sale. In practice, these products, even although they possess prestigious designations (such as Parmigiano Reggiano) have difficulty in significantly increasing their added value at the point of sale and in developing remunerative strategies for the producer companies. The causes for this are to be sought in the weakness of the companies vis-à-vis large scale distribution which, in absence of strong brands, has the power to dictate its own sales conditions, and in the competition presented by substitute products adhering to designations and standards.

Companies belonging to cluster 2[5] (the second cluster in terms of numbers) are not better. There the chosen channel is traditional retailing and the power to build value chains is lower than that demonstrated

[4] Agnello di Sardegna (lamb), Arancia Rossa di Sicilia (blood oranges), Bresaola della Valtellina (dried beef), Carciofo di Paestum (artichokes), Casciotta d' Urbino (cheese), Castagna del Monte Amiata (chestnuts), Clementine del Golfo di Taranto (clementines), Colline di Romagna (olive oil), Farro della Garfagnana (emmer wheat), Gorgonzola cheese, Grana Padano cheese, La Bella della Daunia (olives), Lardo di Colonnata (pork fat), Lenticchia di Castelluccio di Norcia (lentils), Marrone del Mugello (chestnuts), Miele della Lunigiana (honey), Nocellara del Belice (olive oil), Pane di Altamura (bread), Parmigiano Reggiano cheese, Pecorino Toscano cheese, Penisola Sorrentina (olive oil), Pomodoro di Pachino (tomatoes), Prosciutto di Norcia (ham), Prosciutto di S. Daniele (ham), Quartirolo Lombardo (cheese), Radicchio Rosso di Treviso, Radicchio Variegato di Castelfranco, Riso Nano Vialone Veronese (rice), Riviera Ligure (olive oil), Salame di Varzi (salami), Salamini italiani alla cacciatora (mini salamis), Speck dell' Alto Adige (smoked ham), Taleggio (cheese), Terra di Bari (olive oil), Toscano (olive oil), Uva da tavola di Canicattì (grapes), Uva da tavola di Mazzarrone (grapes), Val di Mazara (olive oil), Valle d' Aosta Jambon de Bosses (ham), Valle del Belice (olive oil), Valli Trapanesi (olive oil).

[5] Aceto Balsamico Tradizionale di Modena (balsamic vinegar), Aceto Balsamico Tradizionale di Reggio Emilia (balsamic vinegar), Asiago (cheese), Asparago Bianco di Bassano (asparagus), Brisighella (olive oil), Caciocavallo Silano (cheese), Capocollo di Calabria (cured pork), Castagna di Montella (chestnuts), Ciliegia di Marostica (cherries), Colline Teatine (olive oil), Fagiolo di Sarconi (beans), Fagiolo di Sorana (beans), Farina di Neccio della Garfagnana (flour), Marrone di Castel del Rio (marron-chestnuts), Mela Alto Adige or Sudtiroler Apfel (apples), Montasio (cheese), Mozzarella di Bufala Campana (cheese), Pancetta di Calabria (bacon), Pecorino Romano (cheese), Pecorino Siciliano (cheese), Prosciutto Veneto Berico-Euganeo (ham), Provolone Valpadana (cheese), Ragusano, Raschera and Sabina cheeses, Salsiccia di Calabria (sausage), Soppressata di Calabria (sausage),

by cluster 3. Cluster 4 contains those designations[6] that embody, to a greater degree than the others, the multifunctional spirit of Reg. 510/06 enabling the implementation of those rural development policies based on a bottom up approach. These producers too have no power to add value at the point of sale, which is however almost entirely to the advantage of the producers.

The first and last clusters are of particular interest. The first cluster brings together those designations[7] that have succeeded more than the others in creating the value of the product. Both PDO and PGI designations exist, famous designations destined for the mass consumption market (such as Parma Ham) and little known designations destined for *niche* markets (such as Borgotaro mushrooms or Robiola di Roccaverano cheese). These designations, which are prevalently sold through large scale distribution, share factors such as the distinctiveness of the product, the service content or, also, the packaging features. In contrast, in cluster 5 there is one designation only (that of the Mela della Val di Non apple, sold with the producer's brand "Melinda") which owes its success to a particularly efficacious quality control strategy – inasmuch as extremely strict criteria required of the companies adhering to the designation - accompanied by a strong commercial planning and communications strategy. The choice of channel - that of the traditional retail channel – is fruit of the strategy aimed at creating a market leader with a high quality product that reduces competition at the point of sale.

Table 14. Final cluster centres

Index	Cluster				
	1	2	3	4	5
a	-0,10843	-0,09090	-0,10411	-0,10987	9,79537
b	2,05902	-0,37221	-0,14916	-0,76492	-0,32685
c	-0,29539	-0,05372	-0,50570	2,45963	-0,76289
d	-0,54375	1,02315	-0,47256	-0,81224	2,63754
e	0,41993	-0,62779	0,75826	-1,44511	-0,56232

(Source: our elaboration of Qualivita data 2008)

5. Conclusions

The interpretation of the data supplied by Qualivita and the data processing carried out confirm the existence of a rather varied picture of the products entitled to display the designation of origin, where designation of origin, as such, provides only partial information to consumers and is certainly not a guarantee of success. To achieve this objective, it is essential to consider all the components and strategies that the "standardised" products use in order to compete in particularly aggressive and competitive markets, such as: the distinctiveness of the products, the service content and the adoption of specific marketing strategies. Indeed, this latter aspect may be considered the element on which the companies producing designation of origin products – whether they be PDO or PGI – still have to work in order to achieve greater commercial efficiency.

The data obtained in this analysis demonstrate how the recent proposal of the Commission (2009) to adopt one type of designation only, very similar to the PGI system, would probably contribute to simplifying the relationship between GI products and consumers, without depriving producers of any of the commercial instruments. Rather, given the characteristics of the supply chain and the relationship

Terre di Siena (olive oil), Toma Piemontese (cheese), Valle d' Aosta Lard d' Arnad (pork fat), Veneto Valpolicella, Veneto Euganei e Berici, and Veneto del Grappa (olive oils), Zafferano di San Gimignano (saffron).

[6] Alto Crotonese (olive oil), Canino (olive oil), Carciofo Romanesco del Lazio (artichokes), Cartoceto (olive oil), Collina di Brindisi (olive oil), Fagiolo di Lamon della Vallata Bellunese (beans), Formai de Mut dell' Alta Valle Brembana (cheese), Marrone di San Zeno (marron-chestnuts), Molise (olive oil), Murazzano (cheese), Scalogno di Romagna (shallots).

[7] Castagna Cuneo (chestnuts), Ficodindia dell'Etna (prickly pears), Fiore Sardo (cheese), Fungo di Borgotaro (mushrooms), Kiwi Latina, Limone Costa d'Amalfi (lemons), Nocciola di Giffoni (hazelnuts), Pera Mantovana (pears), Pomodoro di San Marzano dell'Agro Sarnese-Nocerino (tomatoes), Prosciutto di Modena (ham), Prosciutto di Parma (ham), Prosciutto Toscano (ham), Robiola di Roccaverano (cheese).

between the agricultural component and the industrial component, as well as the relationship between companies and protection consortia, attention must be placed on how to develop collective commercial strategies with the power to increase the added value of the product and/or the bargaining power of the enterprises that turn to large scale distribution and traditional retailing.

It is common knowledge that the tasks entrusted to the Protection Consortia do not involve direct commercial action, but the development of communications activities and promotional campaigns. This action is designed to ensure that the Consortium builds up the required reputation in the eyes of the consumer. The latter action is not always efficacious for the companies of the sector that interact directly with the commercial channels and in order to do to this they need to have a company brand with the power to instil trust in consumers as well as being able to manage the product in function of the needs of the consumer and the distribution channel.

Combining collective commercial interests and strategies with special requirements is undoubtedly far from simple, but it is the path to be pursued in order to make traditional GI products competitive on modern markets.

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