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Quality of food products and consumer attitudes in France

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Abstract

The French animal food product market is nowadays very segmented, particularly with the proliferation of quality marks relating to: (1) official labels identifying a superior quality (Label Rouge), environmental quality (organic farming) or quality linked to origin (PDO and PGI); (2) product descriptions highlighting a specific feature such as 'on-farm processed' or 'mountain produce'; (3) certification of products aimed at applying normative standards. For official labels, professionals voluntarily undertake to set up and monitor a quality-focused approach individually (organic farming) or collectively (PDO, PGI, Label Rouge). Independent and competent bodies carry out regular checks, and the public authorities supervise the system. Fresh beef and lamb under quality schemes represent about 6% and 15% of French meat production. Geographical indications identify a product as originating from a region, when a given and unique trait is attributable to this region. Protected Designation of Origin (PDO) was firstly developed mainly for dairy products. The integration of local breeds into PDO includes all PDO ewe cheeses, the majority of PDO meat, about half of PDO cow cheeses and a third of PDO goat cheeses. The breed may contribute to the product's specificity or may be mainly a means of differentiation and a marketing claim. The evolution of demand results from changes in: (1) demographic composition and way of life of consumers; (2) characteristics of agriculture and food products; and (3) preferences of consumers for specific attributes (e.g. taste, health and locality). For beef, French consumers seem to favour a beef eating-quality guarantee. The market outcome of certification programmes depends upon consumer awareness, understanding and confidence in high quality labels.

Keywords: designation of origin, quality labels, consumers' perception, consumers' attitudes

Introduction

At the beginning of human history, products of animal origin (harvested by hunting, fishing and milking) were considered as noble food contributing to growth, strength, health and longevity. As agriculture developed, the major objective was to satisfy the nutritional needs of humans quantitatively. This objective has been achieved in developed countries, and especially in the European Union (EU), which is self-sufficient for most animal products. The great change in our society is thus that the farming and agri-food sectors are faced with a saturation of general food markets in Europe and consequently with an increasing demand by consumers for high-quality products produced under animal-friendly conditions and with respect for the environment. The major questions currently are thus how to define quality, and how to improve the quality of animal products to satisfy emerging consumer requirements. Whereas animal production was originally focused on quantity; it has now shifted towards delivering high and consistent quality, together with improved safety. These are important issues in the European food industry. Quality used to be considered in relation to physical product quality (sensory, nutritional, technological and ethics traits). It is also important to emphasise

that not only consumers, but also international and national legislation consider demands on quality and safety as priorities (probably due to the perceived demand of consumers by the policy makers). Last but not least, the increasing demand for quality and safety traits has induced a proportional increase in the desire to control, monitor, trace and track products throughout the food supply chain. Traceability was established in response to this, and is expected to ensure quality and safety at the consumer end. Although this is not immediately apparent, traceability is now included in quality attributes and related guarantees. Since the concept of quality is becoming more sophisticated, the first part of this paper deals with the description of quality concepts and official quality marks in France while the second part describes consumer attitudes towards these quality marks.

Quality concepts and official quality marks in France

Issues

The development of quality marks in France was initially motivated by the desire to protect renowned geographical names and by the need for sustainable development of agriculture. The issue is to maintain or even possibly increase the production of high quality products and hence to maintain the presence of producers and farmers in the French rural areas.

The French scheme of marks for identifying product quality and origin aims to (1) enable producers and other stakeholders to increase the value of their products by encouraging diversity and specificities of products in association with local environments; (2) give consumers the possibility to choose quality foods with a special character and good taste, produced in an animal-friendly way and with respect for the environment. Thus the scheme encourages the development of rural areas and national regions, making it possible to (1) preserve biodiversity, local expertise and natural resources, and maintain variety in the landscape; and (2) maintain the dynamics of rural areas through activity of local producers around common projects by mobilizing them around collective organizations for future progress. In this way, the implementation of a policy for marks identifying product quality and origins is expected to contribute to the socio-economic dynamics of local communities. It can be seen as a beneficial tool enabling regions to highlight more effectively the value of certain specific forms of traditional production (INAO, 2010a). Finally, the scheme allows producers to differentiate their produce both locally and nationally and also, to an increasing extent, internationally.

Principles

The foundation of the French scheme of marks identifying product quality and origin is a joint commitment of the State and industry professionals (farmers, processors) to guarantee quality of food for consumers that meets their expectations and offers them more choice with more information to guide their final purchases. The development of such a scheme is based on the assumption that consumers attach great importance to taste, to the pleasure of eating, to traditional gastronomy, and to sustainable development of agriculture.

The scheme is based on three core principles:

1. Industry professionals undertake voluntarily to put in place and monitor a quality-focused approach either individually (for organic farming only) or collectively (for all the other quality marks).
2. Quality of a product must be defined in a set of specifications drafted by professionals and validated by the public authorities. These specifications detail the specific features of the product, the rules for its production and processing, and also the rules to check that producers do indeed follow the specifications.
3. Public authorities supervise implementation of the scheme.

The French Ministry of Agriculture defines the policy on food quality and controls the scheme of marks identifying product quality and origin. It is the supervisory authority for the 'National Institute for Origin and Quality' (INAO), a public agency which examines applications of professionals to be recognised through any official quality mark (except product conformity certification), monitors adherence to organic farming rules and supervises all inspections. Generally, the INAO is thus responsible for management of marks for the identification of product quality and origin. It possesses a standing council, national committees dealing with specific domains (wine, protected designations of origin for agri-food products, the Label Rouge quality mark, organic farming and others) and an approval and inspection board. All of these bodies bring together representatives from producers, consumers, qualified experts and members of official departments and agencies. The Agence Bio, a public agency, is responsible for the development and promotion of organic farming. Thus, to summarize, the basis of the French scheme for quality marks is linked to the fact that the public authorities validate the recognition procedures for value-added product descriptions and product certification schemes (INAO, 2010a).

Three EU schemes known as PDO (protected designation of origin), PGI (protected geographical indication) and TSG (traditional speciality guaranteed) promote and protect names of quality agricultural products and foodstuffs. These EU schemes encourage diverse agricultural production, protect product names from misuse and imitation and help consumers by giving them information concerning the specific character of the products:

- PDO covers agricultural products and foodstuffs which are produced, processed and prepared in a given geographical area using recognised know-how.
- PGI covers agricultural products and foodstuffs closely linked to the geographical area. At least one of the stages of production, processing or preparation must take place in the area.
- TSG highlights the traditional character, either in the composition or means of production

'Appellation d'Origine Contrôlée', 'Appellation d'Origine Protégée' and Protected Designation of Origin

The concept of designation of origin and geographical indication is based on a combination of the characteristics of the natural environment where production takes place and human factors such as the know-how of producers. This combination is considered as the key which determines the final product quality.

The first designations of origin were created in 1905 and called in French 'Appellation d'Origine'. The first AOC ('Appellation d'Origine Contrôlée') was created in 1935 with the establishment of the former 'Institut National des Appellations d'Origine' (INAO). The AOC designates products originating in a given region or location where their quality or characteristics are essentially due to the local environment. It is the result of a combination of a form of production and processing, and a determined geographical area involving the interaction of, among other things, natural, climatic, physical and human factors giving the product a specific character (concept of '*terroir*', Figure 1). The AOCs mainly apply to wines, spirits and dairy products, but also to olive oil, fruit and vegetables, meat and honey (INAO, 2010a).

Since 1992, indications of origin have gradually become an integral part of the EU food quality policy. Based on the EU regulation published on the 3 January 1994, it was established that PDO ('Appellation d'Origine Protégée' or AOP in French) is the European equivalent of the AOC for all products other than wine. From 2008 onwards, AOC wines are also PDO.

The PDO protects a region, a defined location or, exceptionally, a country, where these designate a product whose characteristics are due to a geographical environment and whose production *and* processing *and* preparation, are carried out in the defined geographical area. In other words, the PDO

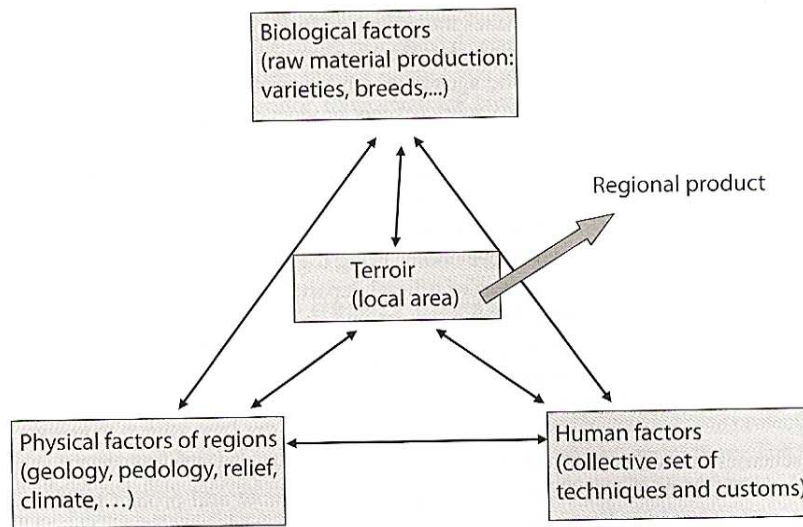


Figure 1. The concept of 'terroir' which is the basis of designation of origin.

identifies a raw or processed agricultural product that is authentic and typical of a clearly-defined geographic region of origin, that is well-known or even renowned (it cannot be created since it recognizes an existing, long-lasting form of production), has specific characteristics and represents specific know-how, and is subject to regulatory procedures of approval and control.

The PDOs are governed by Council Regulation (EC) No 510/2006 concerning the protection of geographical indications and designations of origin for agricultural products and foodstuffs. In France, examples are *Piment d'Espelette*, *Miel de Corse*, *Pomme de terre de l'Île de Ré*, *Lentille verte du Puy*, *Poulet de Bresse*, *fromage Comté*, *Beurre d'Isigny* and *Brie de Meaux*.

In France, the integration of the breed type of animals (local breeds) within the official rules for products under PDO has increased since the 1990s. Nowadays it includes all PDO ewe cheese, the majority of PDO meat and, based on tonnes produced yearly, about half of PDO cow cheese production and a third of PDO goat cheese production. In cheese production, the share of dairy cows and dairy ewes contributing to PDO production is estimated at about 7% and 33%, respectively. In many cases, the breed contributes to the product's typicity and does strengthen the notion of origin but, in certain other cases, the breed may only be a marketing argument (Lambert-Derkimba *et al.*, 2006). From data recorded in 2007-2008, it was shown that the highest added-values for cheeses (i.e. prices of cheeses from +72-124% compared to similar non-labelled products) were for PDO cheeses strongly associated with local breeds (*Livarot*, *Ossau-Iraty*, *Abondance*, *Reblochon*, *Langres*, *Beaufort*).

Protected Geographical Indication (PGI)

The PGI refers to products originating in a geographical area for which a defined level of quality, reputation or other characteristics may be attributed to this geographical origin. In other words, the PGI identifies a raw or processed agricultural product that gets its quality, reputation or another characteristic from a given geographical region of origin, that is produced or processed or prepared in this given geographical area of origin and that is manufactured under conditions that are subject to specific control procedures. PGIs have existed since 1992 and they are covered by the same EU Regulation as PDOs – Council Regulation (EC) No 510/2006 of 20 March 2006. The PGIs apply to agricultural and food sectors (in particular to poultry, beef and ovine meat, fruit and vegetables,

among others) and since August 2009 also to wines. Some examples of PGI in France are *Emmental de Savoie*, *jambon de Bayonne*, *pruneau d'Agen*, *clémentine de Corse*, *riz de Camargue*, *poularde jaune d'Anceis*, *haricot tarbais*, *mirabelle de Lorraine*, *poulet jaune des Landes*. Examples from abroad are *Dorset blue cheese* (UK), *Greussener salami* (Germany), *turrón de Alicante* (Spain) and *mel do Alentejo* (Portugal).

The main difference between the PGI and PDO schemes is a less stringent code of practice for PGI, especially in the raw material procurement area, which allows factory-scale production for PGI, while PDO is closer to agricultural origin and small-scale production (Table 1). The contribution and value of different geographical origin marks in France are shown in Table 2.

Traditional Speciality Guaranteed (TSG)

The TSG provides protection for products of a traditional nature that are not (or are no longer) linked to their geographical origin. In other words, TSG identifies a raw material of specific composition, method of production and/or method of processing for human consumption (it is often a recipe) with a traditional name (in use for at least one generation), with well-known specific characteristics,

Table 1. Main characteristics of PDO and PGI products.

Protected Designation of Origin (PDO)	Protected Geographical Indication (PGI)
Relationship with the local area (terroir): There is a very close relationship between origin and quality/typicity of the product.	Relationship with the local area (terroir): There is a looser relationship between origin and quality/typicity of the product.
The product is exclusively determined by its origin	The product is mainly determined by its origin
All of the production and processing operations take place within the geographical area, e.g. for AOC meat, the animal is born, bred and slaughtered within the geographical area and the major part of the food it eats comes from the geographical area (for example, Maine-Anjou PDO meat comes from animals born, bred and slaughtered in the area, and 80% of the food the animals consumes comes from the geographical area)	The production or processing operations take place within the geographical area (e.g. PGI Aveyron lamb is not necessarily slaughtered in the geographical area and other than its mother's milk, the food it consumes does not necessarily come from the geographical area. However, the system of rearing with its mother in a sheepfold which has earned it its reputation, must take place within the geographical area)
It is possible to prove that each production/processing operation that takes place within the area influences the final product	There are one or more phases in production for which no effect on the product can be proved
The product presents specific characteristics connected with a defined area (e.g. Mont-Saint-Michel salt meadow lamb)	The product shows characteristics and a name related to the area of production. In most cases, these characteristics are connected with the processing method (e.g. Bayonne ham)
Regulation 510/2006 PDO designates an agricultural product of foodstuff, 'the quality or characteristics of which are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors, and the production, processing and preparation of which take place in the defined geographical area'	Regulation 510/2006 PGI is an agricultural product or foodstuff 'which possesses a specific quality, reputation or other characteristics attributable to its geographical origin, and the production and/or processing and/or preparation of which take place in the defined geographical area'

Table 2. Key figures related to geographical origin marks in France (INAO, 2010b).

	Number of labels	Number of producers	Relative importance (in 2008)		Value (€ billion)
Designation of origin (wines)	394	75,000	57% of overall vineyard area	82% in value	11 (wines) 2 (alcohol)
PDO milk products	49	21,000	16% of all ripened cheese	24% in value	1.5
PDO agro-industry	41	11,000			0.16
PGI agro-industry	89	12,000			1

and that is subject to controls (or inspections). The TSGs apply to cheeses, meat-based products, beer, cakes and biscuits.

TSG is not currently developed in France (only 5 applications are being processed at present among which are *le gâteau Basque* and *la moule de bouchot*), but is present for different products in other European countries, e.g. *Mozzarella* (Italy), *Serrano* ham (Spain), traditional farm-fresh turkey (United Kingdom), *vieille Gueuze lambic* and *vieille Kriek* beers (Belgium), *Kalakukko* (a Finnish stuffed bread), *Falukorv* (a Swedish sausage). There are a total of 30 such products in Europe. In 2009, le '*Boeuf de tradition élevé à l'herbe*' (grass fed beef) was recognised in common by UK, Ireland and France (INAO, 2010b). The TSG product must be either manufactured using traditional raw materials, or based on a traditional composition or method of production and/or processing. The TSGs are governed by Council Regulation (EC) No 509/2006 of 20 March 2006 on agricultural products and foodstuffs as traditional specialities guaranteed (INAO, 2010a).

Organic products

The indication 'Agriculture Biologique' (AB) which means 'Organic Farming' certifies that the product derives from a mode of production and processing that is protective of natural balances and animal welfare as defined in a highly stringent set of specifications backed by systematic controls. Organic farming is a production system label identifying a raw or processed agricultural product that respects natural cycles and rhythms (environmental balance) and does not employ synthetic chemicals. Its uniqueness is that it is an individual (not collective as for PDO, PGI or TSG), but officially-declared producer initiative, is subject to organisation-led controls or inspections, and is compatible with some of the official labels.

A wide range of organic farm and food products, both fresh and processed, is available from various outlets e.g. specialist stores and supermarket chains, direct farm sales, open-air markets and over the Internet. In France, these products are identified by the 'AB' mark. The first official recognition of organic farming in France dates back to the agricultural reform law of 1980, and later, at European level, in a Regulation adopted in 1991, supplemented in 1999 and revised in June 2007 (Council Regulation (EC) No 834/2007 and No 889/2008). In 2001, Agence Bio, a public agency, was set up and given the task of contributing to the development and promotion of this form of production (INAO, 2010a). Currently, the French production of organic products is lower than the domestic consumption of such products, meaning a substantial amount of organic produce on the French market is imported. The work of the 'Grenelle de l'Environnement', a consensus conference regarding environmental issues, recommended in September 2007 that France should develop the consumption of organic food products in collective catering with the objective of reaching 10% of organic foods in menus by 2010 and up to 20% by 2012.

Label Rouge

The agricultural quality label or Label Rouge certifies that the product possesses a specific set of characteristics establishing a level of quality higher than that of a similar product of the standard type. In other words, Label Rouge identifies a raw or processed agricultural product that has characteristics determining a 'superior quality' level (compared with 'standard' products) as indicated by hedonic tests, that guarantees a set of specific characteristics defined in technical aspects (specific to each industry), and that is subject to controls or inspections. Two aspects play an important role in the Label Rouge namely palatability and quality associated with the image of the products. For some products, where palatability is difficult to assess routinely (such as meat), the relative importance of the product image becomes higher. The label is awarded to poultry, meat, delicatessen meats, dairy products, marine products, fruits and vegetables. Some examples are: fattened pullets, free-range hen eggs, canned sardines, veal meat from suckling calves, cooked ham, farm churned butter, smoked salmon, and others.

The principle underlying the label was given official recognition in the agricultural reform law of 5 August 1960. At all stages in its production and processing the product must satisfy regularly updated controls and requirements regarding quality and taste, these being based on the establishment of sensory profiles and the use of hedonic testing at the end of the process. As Label Rouge is the most widely recognised product quality predictor in France, it may provide benefits for primary producers and retailers. Label Rouge is a French-specific mark but producers or retailers from other countries can use it to sell their products in France thanks to controls approved by France even if done by non-French organisations.

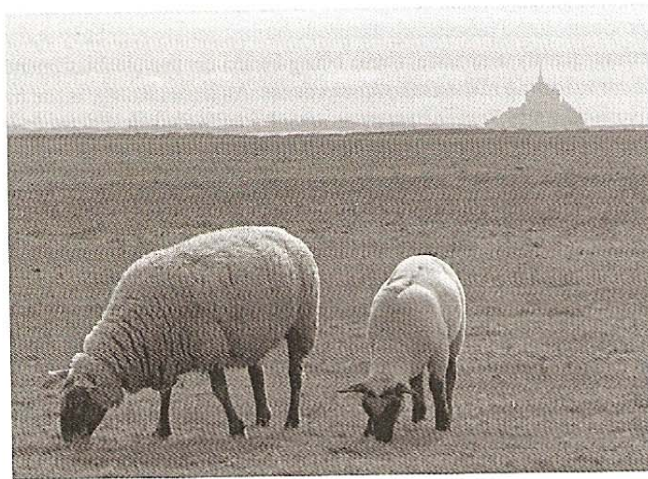
When French consumers see the Label Rouge quality mark they know they are getting a superior quality product. Records show that more than 500 registered specifications for the Label Rouge are on the market, mostly in the poultry industry. The scheme covers nearly 50,000 producers: poultry farmers, livestock farmers, dairy producers, market gardeners, oyster breeders, sea salt producers and fishermen, among others. In fact, 31 different product categories (meat, poultry, delicatessen pork meat, eggs, fruit and vegetables, cereals – wheat flour, fisheries, aquaculture, dairy products, honey, soft drinks and others) are supported by the Label Rouge. The reputation and the commercial impact of Label Rouge are more important for some products such as poultry, and less so for red meat. The annual net sales generated by Label Rouge labelled products amount to around €1.2 billion (INAO, 2010b). French and EU logos for various official quality marks are shown in Figure 2.

Product conformity certification and other commercial marks

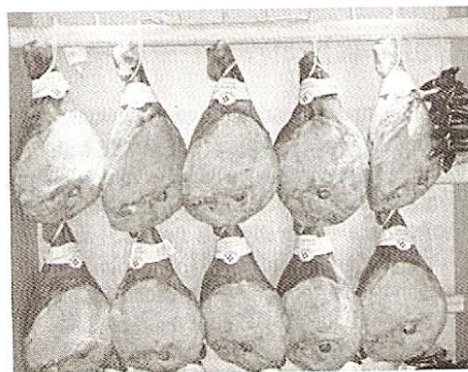
These quality marks are not official. In this case, products are differentiated from a standard product by at least two specific characteristics. This approach can be individually-led (in contrast with official quality marks). Product Conformity Certification (PCC) provides confidence that specific products will meet their contractual requirements. Inspection is performed by an independent third-party organisation, which is under the responsibility of the Ministry of Agriculture. Generally, this approach is quick and simple, as it only requires straightforward registration with a national authority (no recognized official procedures). Consequently, PCC products are less expensive than products with official quality marks. The PCC products have boomed during food-health crises and the role of supermarket chains in the development of PCCs has been important. The PCC is a success mainly for animal products.

Besides all these indications, a plethora of non official labels also exist (e.g. product labelled as General Competition, chosen as 'Best Product of the Year' or 'Flavour of the Year'). They represent a marketing and differentiation approach that may achieve prominence (depending on how successfully they are advertised), for instance, mountain produce, farmhouse product. Their scope also often extends beyond on-farm processed foods (e.g. 'Best-in-Category', 'Product of the Year').

	Protected designation of origin (PDO)	Protected geographical indication (PGI)	Traditional Speciality Guaranteed (STG)	Organic farming	Label Rouge
EU					
France					



Example of AOC: 'Agneau Pré-salé du Mont-Saint-Michel'



Example of PGI: 'Jambon de Bayonne'



Example of Label Rouge with also a PGI mark: 'Poulet Noir' (photo Clairly Voltz)

Figure 2. French and EU logos for official quality marks and some examples of products.

Overview of the quality marks market

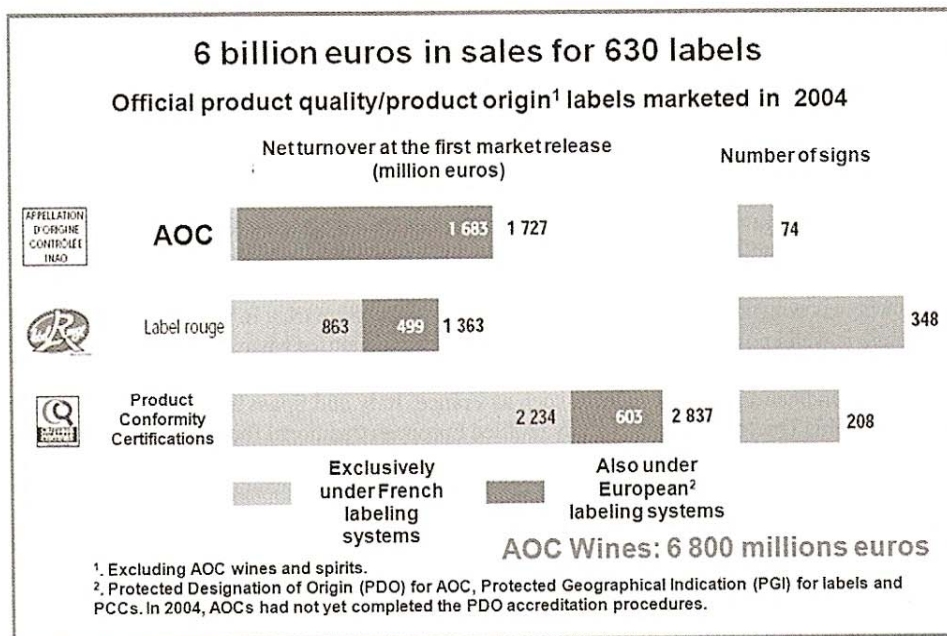
France is the second country after Italy in terms of numbers of quality marks linked to origin (Table 3) and the third country in value for PDO/PGI marks in Europe (2,586 million Euros) after Italy (5,205 million Euros) and Germany (3,612 million Euros) (http://www.foodquality-origin.org/Gineva/11june/eu_pdo_pgi_en.pdf).

In France, the highest numbers for PDO and PGI marks are for fresh meat and cheeses and then for fruits, vegetables and cereals, the other products having less than 10 items with PDO or PGI marks. The situation is different in other countries with the highest quality marks market (Table 3).

As shown in Figure 3 with data from 2004 (Agreste Primeur, 2006), the number of quality marks under the PDO/AOC system is quite low but the net turnover in € million is quite high compared to the Label Rouge (with a high number of marks but a lower net turnover). Almost all AOC products are also covered by the European labelling system whereas most of the Label Rouge products

Table 3. Numbers of quality marks linked to origin in 2008 (from: http://www.foodquality-origin.org/Gineva/11june/eu_pdo_pgi_en.pdf).

	France	Spain	Italy	Germany
Total numbers of PDO/PGI marks	156	110	165	62
Fresh meat	52	13	2	3
Cheeses	45	19	34	4
Fruits, vegetables and cereals	27	29	52	3



Source: Agreste – 2004 survey on food and farming industry products sold under official product quality/origin marks

Figure 3. Official product quality/product origin labels marketed in France. The classification of quality marks is no longer up to date but the comparison of data is still valid (Agreste Primeur, 2006).

are exclusively covered by the French labelling scheme. The success of PCC products is more important in terms of net turnover and most of them are also exclusively covered by the French labelling scheme. The net turnover of quality marks for food products except wines is similar to the net turnover for wines only.

In the case of meat, 84 to 97% of the volume of French production has no official quality mark (Table 4). The most developed quality marks are Label Rouge, combined or not with PGI, and also certified products (PCC). The proportion of meat products under AOC or organic quality marks is low. Currently, French production of organic meat is much lower than domestic consumption, which means that a considerable quantity of organic meat must be imported.

Table 4. Key figures for official quality marks in the meat sector in France (source: Fil Rouge, 2010; Sylaporc, 2010).

	Label Rouge no PGI	Label Rouge + PGI	PGI alone	PCC + PGI	PCC no PGI	AOC/PDO	Organic	Sum	Conventional	Total
Beef (tonnes)	18,390	6,658		4,070	32,200	1,418	10,921	73,657	1,249,343	1,323,000
%	1.39	0.50		0.31	2.43	0.11	0.83	5.57	94.4	
Veal (tonnes)	3,481	5,790			21,310		930	31,511	166,589	198,100
%	1.76	2.92			10.76		0.47	15.91	84.1	
Lamb (tonnes)	2,725	2,130	80	2,927	3,780	82	642	12,366	71,534	83,900
%	3.25	2.54	0.11	3.49	4.51	0.10	0.77	14.76	85.3	
Pork (tonnes)	49,985	18,656	455				5,592	74,688	2,155,712	2,230,400
%	2.24	0.84	0.02				0.25	3.35	96.7	

Consumer attitudes

Consumer awareness and expectations

Recent studies within the EU-funded integrated project Truefood have shown that awareness of the PDO system is quite good among European consumers, especially in France, Italy and Spain (Figure 4). Traditional food consumption patterns are stronger in the South than in the North of Europe whereas consumers from the North of Europe place more trust in commercial brands. The PGI system is well known in Italy but not so much in other countries whereas the TSG system is the less well known. Generally, consumer awareness is in line with the market presence of products with geographical indications, with countries such as France, Italy and Spain taking the lead positions. Furthermore, this Truefood consumer study profiled European traditional food consumers as typically middle-aged to elderly who are health-conscious, ethnocentric, food connoisseurs, attached to familiar characters in their food choice and who enjoy cooking (Vanhonacker *et al.*, 2010). Foods with quality marks were also found to be particularly popular among the so-called traditional food consumers segment.

In the specific case of beef taken here as an example, a qualitative consumer study was carried out with beef consumers in France, Spain, United Kingdom and Germany to assess their interest in a beef eating-quality guarantee. Such a system would be well accepted by European beef consumers at least for some European consumer groups, although not unconditionally. Participants expressed some reservations related to the possible upgrading of lower value cuts, too much standardisation,

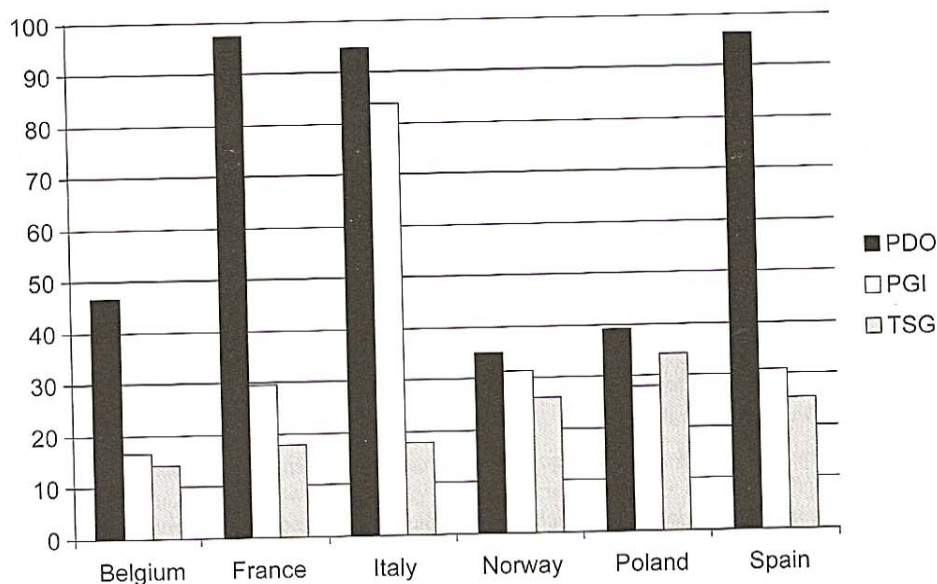


Figure 4. European consumer awareness of PDO, PGI and TSG (%; n=800 per country) (Verbeke et al., 2012; Truefood consumer survey 2007; Vanhonacker et al., 2010).

high cost of implementation, overload of information, and the fact that tenderness is to some extent subjective. They further require the system to be simple, sufficiently documented and independently controlled. Consequently, this work indicates good opportunities for the development of a beef eating-quality guarantee system in Europe to better satisfy consumers, increase beef consumption and industry profitability and also to improve competitiveness of the European beef industry (Verbeke et al., 2010). Such a system exists in Australia which has developed the Meat Standards Australia (MSA) grading scheme to predict beef quality for consumers. Many qualities of the MSA system have been recognized in France since this system was judged original, relevant and sufficiently mature in its application. It is based on a scientifically-based prediction of beef quality rather than relying on tradition and perceptions of quality. It is credible, flexible and open-ended. However, the final delivery of precise quality grades to consumers is still lacking at retail level due to only partial implementation of the system in Australia. Its adaptability to France would be difficult due to the complexity of the French beef industry and market. But the programme would certainly induce much-needed changes to preserve and better develop the beef sector in France and eventually in Europe (Hocquette et al., 2011).

Consumers' perceptions

From a national survey in 2007 (Figure 5), it is clear that the official quality marks do not have the same meaning for all products. Organic vegetables are perceived as more expensive and healthier relative to standard vegetables than other products. In addition, they are perceived as tasty, safe, environmentally friendly and traditional products. The taste and safety of Label Rouge products are recognized for poultry, but these products are also expensive compared to others. As with organic vegetables, organic eggs are perceived as expensive. They differ from conventional eggs not in taste but in method of production. Except for renowned names (*Roquefort*, *Comté*), PDO cheeses have no strong advantages and their quality matches their medium price.

	Traditional products	Better taste	Safe	Environmentally friendly	Healthier	More expensive
AOC wines	+	-	-	-	-	+
Certified products	-	-	+	-	-	++
Products with a distinction	+	+	-	+	-	++
PDO cheeses	+	+	+	-	-	++
Organic eggs	+	+	+	+	+	+++
Label Rouge poultry	+	++	++	+	+	+++
Organic vegetables	++	++	++	+++	++	+++

Figure 5. Consumers' perception of food products in France (from Tavoularis, 2008).

Products with any non-official label but which are nevertheless renowned are perceived as expensive but produced in a traditional way. The PCC products are expensive but safe. Quality of AOC wine is variable. The AOC sign is not associated with quality but with the origin of the products. The PCC products and AOC wines, which are the least expensive, are successful compared to other products although their perceived intrinsic quality is moderate compared to other PDO products, organic or Label Rouge products (Tavoularis, 2008).

Consumer behaviour

Because of a perception of excessive price rises in the food consumption sectors and also because of a strong desire to buy modern products associated with the new information and communication technologies, consumers are at risk of making choices to the detriment of some food products, notably the more healthy foods. The share of the household expenses devoted to food products has fallen steeply since 2002. Announcements by the public press of increases in prices of food products because of the increase in prices of raw materials are leading to an amplification of this phenomenon (Tavoularis *et al.*, 2007).

Moreover, consumers face an overload of information and often receive conflicting information, e.g. related to the nutritional value versus possible toxicological risks of particular foods (e.g. seafood). The main factor determining the choice of consumers increasingly concerns their immediate desires rather than their real long-term needs. The younger generations especially are more and more oriented towards immediate satisfaction (Tavoularis *et al.*, 2007).

Since 2000, after the second Bovine Spongiform Encephalopathy (BSE) crisis, the criterion of a competitive price comes in second position after the guarantees of hygiene and safety (Sans *et al.*, 2008). In spite of the improvement in economic conditions between 2005 and 2007, sensitivity towards food prices has increased in the food consumption sector. When asked 'These last few months, did you compare prices between shops?' the proportion of people questioned who answered 'more than usually' increased from 24% in 2005 to 34% in 2007 (Tavoularis *et al.*, 2007).

Furthermore, the concept of food quality is slowly moving towards appearance and price. Indeed, although taste still plays a major role in food representations and choices, the appearance of the product and its price are more important among those factors considered by consumers as easily-recognisable quality predictors. Consumers are also more concerned about health issues and more recently about protection of the environment and animal welfare issues. In this context, the indication

of an official quality mark plays a relatively minor role compared to the previous factors, although more important than brands, packaging, awards or advertising (Figure 6). This is especially true for younger generations which are more concerned about the price than about official quality marks (Tavoularis *et al.*, 2007).

However, trust in the quality marks is mainly strong for all the marks, labels or certifications (which are unofficial quality marks). Indeed, in 2007, 85.8% of French people trusted in products with a PDO mark, 82.8% trusted in Label Rouge products, 65.6% trusted in products originating from organic farming, 61.4% trusted in products having a specific distinction and 45.6% trusted in certified products. On average, the image consumers have of official quality marks is as good as or perhaps even better than that of brands. It also seems clear that the oldest marks have the strongest credibility. Nevertheless, when we consider only those people who know the quality marks, certified products enjoy the same level of trust (65.5%) as the Label Rouge (66.8%) or specific distinctions (65.0%) (Tavoularis *et al.*, 2007).

As a consequence of consumers' trust, expectations, perceptions and behaviour, about 60% of French people in 2007 were willing to pay a higher price for meats or for poultry with an official quality mark¹. For all the other products, less than 50% of French consumers were ready to pay a higher price, as was the case for cheeses, eggs and delicatessen foods. There were even fewer (less than 40%) willing to pay more for certain types of milk, wine or ready-made meals if they carried an official quality mark.

The main drivers of food product purchases have remained, over the years, guarantees of hygiene and safety (due in part to the BSE crisis some years ago) and also a competitive price (Figure 7). The French origin of the product and the renown brought by official quality marks or a trusted brand are only among the second group of factors driving food product purchases (Tavoularis, 2008). Nevertheless, quality marks can play an important role in shaping future consumer behaviour and decision-making owing to their possible role as a heuristic or easy decision making rule in situations where consumers are facing information asymmetry, information overload or conflicting information (Verbeke, 2005).

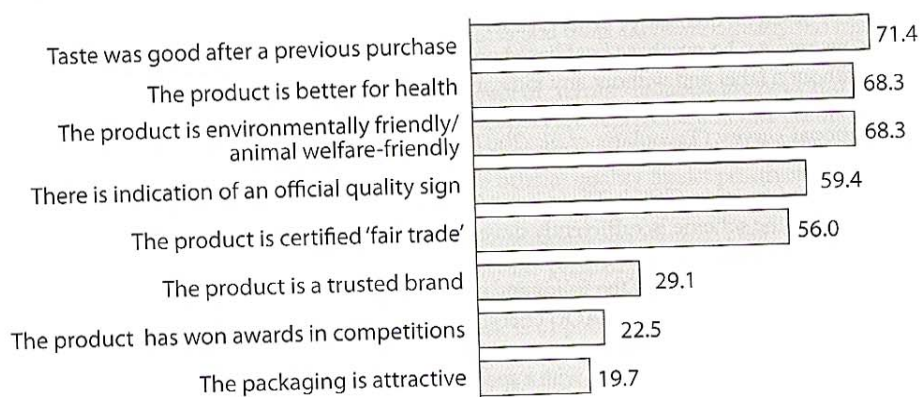


Figure 6. Consumers' willingness to pay for food products in France (in %). Source: National Food Trends - French Ministry of Agriculture and Fisheries

¹ However this measurement is based on verbal response only (Tavoularis *et al.*, 2007).

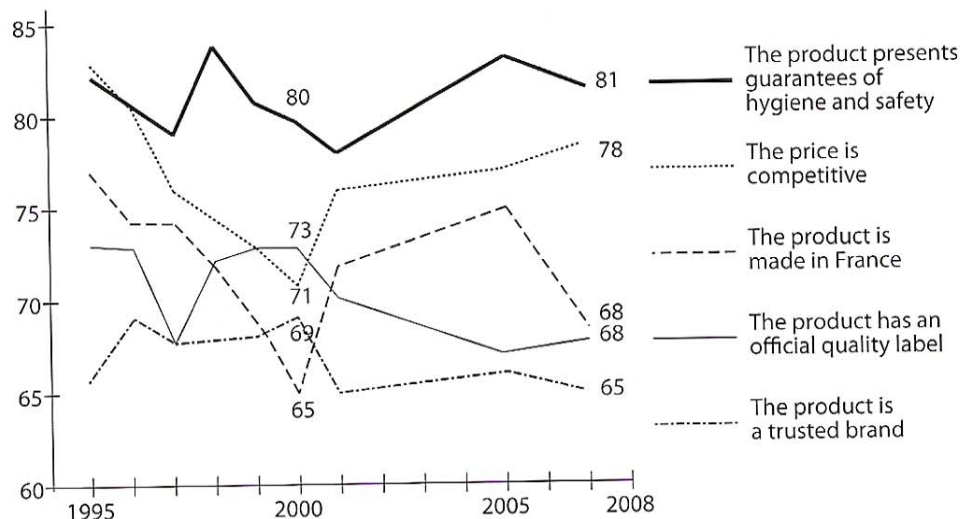


Figure 7. Reasons driving product purchases in France (from Tavoularis, 2008). Numbers are answers of consumers (in %).

Consumer typology

A survey was undertaken by French researchers after the BSE crisis with 383 respondents in the Auvergne region (in the centre of France), where half of all Label Rouge beef is produced. The objective was to measure the relative importance of each of the following attributes involved in beef consumer preference: price, animal type, breed and label. The most salient finding was that price was still the major choice criterion during the beef purchasing process. Detailed results highlight four different consumer clusters regarding fresh beef buying behaviour: (1) consumers who purchase beef based on quantitative criteria (32.1%) by buying the least expensive meat; (2) consumers who purchase Label Rouge-quality Charolais beef while refusing high prices (24.6%); (3) consumers who purchase beef based on qualitative criteria (23.1%) with medium price and a preference for organic food; (4) consumers who purchase beef based on price only (price seen as a meat quality predictor) (20.2%), without a label and without any indication of beef breed (Giraud and Amblard, 2003).

A larger national survey (Tavoularis *et al.*, 2007) also identified six distinct groups of consumers (Figure 8).

1. *Confident and trusting (29%)*: These consumers know the official quality marks, trust them and think that the scheme is sufficiently developed. They generally have enough income to pay for more products with official quality marks (for eggs, fruits, vegetables, cheese, wine, milk). They have a positive image of the following products in decreasing order: organic eggs, organic vegetables, Label Rouge poultry, AOC cheeses, products with other labels, AOC wines, certified products (PCC). These consumers are more likely than the general population to buy organic products, products of French origin, with a specific label, produced traditionally or with guarantees for safety, or that are environmentally friendly. They are more often than not consumers who do not face budget restrictions on a regular basis.
2. *Defiant (19%)*: These consumers know the official quality marks but do not necessarily trust them. Furthermore, they are not keen to pay more than they pay today for products under official quality marks. These consumers are defiant but not narrow-minded. They know there are too many labels but not too many products of quality. They are not sensitive to brands, to the French origin or to the environment aspect. The price is also not particularly important. Men, young people and people of the upper social classes are more important in this consumer group.

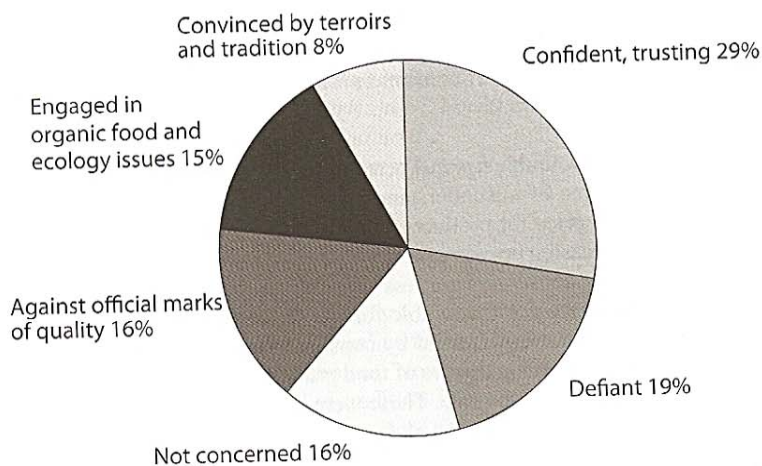


Figure 8. Consumer attitudes towards official quality marks in France (Tavoularis et al., 2007).

3. *Not concerned (16%)*: These consumers do not know the official quality marks very well. Food consumption is not their first concern. They say they do not want to pay more for products under official quality marks. This group includes more elderly people, single men or women, and less well-educated people.
4. *Engaged in organic food and ecology issues (15%)*: These consumers are convinced of the benefits of official quality marks and would favour new marks. They trust organic products and products with any mark of renown. They also recognize that organic products and Label Rouge products are of better quality. The first reasons why they buy food products are the ecological aspect, the French origin of the product or any official quality mark on the product. For them, the concept of 'terroir' is very important for quality. They are willing to pay more for the presence of any quality mark. Retired people, couples without children or less well-educated people are well represented in this group.
5. *Against official signs of quality (13%)*: These consumers are persuaded that official quality marks do not bring any positive aspect to food products and think there are already too many quality marks on the market. They do not trust them and do not want to pay more for them. The French origin, the organic way of production, the concept of 'terroir' or labels are not valid motivations for purchase. More men, craftsmen and storekeepers are represented in this group.
6. *Convinced by terroirs and tradition (8%)*: These consumers associate quality with origin, 'terroir' and traditions. They perceive all products with official quality marks positively but place more trust in certified products or products with marks indicating their well known status. They are more concerned with safety, French origin, and traditional way of production. They are willing to pay more for such products and understand why the price of products may change according to the quality marks they carry, their origin, the season, the climate and the method of production. For them, a cheap product with no quality mark is of poor quality. Manual workers and poorly educated people are more represented in this group of consumers.

Conclusions

The French food product market is highly differentiated and very segmented due to the presence of many official quality marks under the French and/or the European labelling systems indicating high quality (Label Rouge), environmental quality (organic farming), or quality linked to origin (AOC, PDO) or provenance (PGI) which co-exist with many other distinctions and certified products. Although quality labels can play an important role in shaping food consumption decisions by providing consumers with easy selection and decision criteria, the proliferation of schemes and

labels makes the situation very complex with a probable risk of information overload for consumers. Consequently, the various quality marks do not have the same significance for all products and have to take into account the various groups of consumers who differ in their expectations, awareness, perception and thus behaviour.

Generally, consumers have a favourable *a priori* perception of products that carry an official quality mark, but they express a degree of misunderstanding on the real guarantees offered by official quality marks. Clearly, a high price for products with an official quality mark is a negative factor for purchases. In addition, increasing price sensitivity hampers products that carry an official quality mark and younger age-bracket consumers are less sensitive to the presence of an official quality mark. These two observations are not favourable for the further development of official quality marks in the near future, despite a real demand by consumers and stakeholders in the food chain for quality guarantee systems. The main drivers of food product purchases in France over the years have remained safety and a competitive price. These were and will continue to be more important than the origin, the brand and/or the quality level depending on the product.

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