DO PDO AND PGI FOODSTUFFS HAVE VALUE ADDED TO STAKEHOLDERS?

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ABSTRACT

Key words: Protected Designation of Origin, Protected Geographical Indication, Geographical Indications, food law, value-added, stakeholders

Objective: The objective of this research is to gain insight in the aspects that influence the value-added harvested by consumers and producers regarding GI products, to investigate whether this level of value-added is contributing or hampering the development of Greek markets of products with Geographical Indications, and to give advice on measures that can be taken to support and stimulate the markets for GI foodstuffs.

Methods: Desk research including European food legislation and internet sites from European Union, EU Commission, National authorities and RASFF has been performed in order to elucidate the legal system and specific market trends related with the Geographically Indicated foodstuffs. Furthermore, empirical analysis including data derived from questionnaires and interviews from the related stakeholders (consumers, consumer associations, authorities) has been followed in the direction of the main objective.

Findings: The theoretical-legal background of products with Geographical Indications is outlined in the present study. Protection has been put in place for high-quality products with geographical indications. By installing application and registration procedures, installing controls by public authorities and establishing mandatory labelling requirements the market for registered GI-products is separated from conventional foods. Moreover, after the literature analysis of GI market in EU, it was observed that due to several reasons the premium that is harvested by Greek producers is relatively low, compared to their counterparts abroad. Furthermore, the Greek stakeholders’ perception about the products with Geographical Indications regarding advantages and disadvantages and the possible value added is depicted in the present project.

Conclusions: The present thesis assesses the value-added connected to GI-products, the factors influencing it and the ways to increase it. Extra sales (turnover) are generated from consumers and come to the benefit of businesses, while the same businesses are confronted with extra costs (registration, operational and material costs). Only if this balance is in favor of the benefits, will businesses expand their portfolio of GI-products and will public authorities see the economic and social goals connected to them reached. Finally, recommendations for implementation with probable positive results for the further development of products with Geographical Indications are being proposed. These recommendations include better communication to consumers about the advantages of GI foodstuffs, the labelling, the transparency of product quality and the intensity of controls. Moreover, public authorities should reduce the application costs and the costs of controls so that businesses will enjoy a higher net-value added.
Management summary

Products with Geographical Indications have been a controversial issue, especially last years. There, still is a lack of insight in the motives for creation, application and buying of products with GI. Products with protected GI’s will only be produced if the difference between sales value that is cashed less the extra costs that have to be made is positive. If this were not the case, businesses will be inclined to bring conventional foods to the market. So the positive and negative aspects of GI’s compared to conventional foods will affect the behaviour of stakeholders like food businesses, consumers and public authorities. On the one hand these kind of products not only may help businesses (e.g. from isolated areas of Europe) to achieve better prices for their products and to promote them easier, but also give the chance to consumers to be well informed and to enjoy foodstuffs with a certain quality. On the other hand, however, consumers may be against these products as the prices for them normally are higher compared to similar conventional products.

In this research, a combination of desk and empirical research took place. The desk research contributed in answering the sub-questions 1, 2 and 3. It was held by analyzing the related EU legislation and a set of information obtained by scientific articles and internet sites from European Union, EU Commission, National authorities and RASFF. The empirical research contributed in answering the sub-questions 4, 5 and 6 and it was related to a case study referred to products with Geographical Indications in Greece. Particularly, questionnaires were composed and made available for consumers, consumer associations and businesses to get insight in the factors that, from their perspectives, influence the value that is attached to products with Geographical Indications. Furthermore, expert interviews with “Agrocert” which is part of “Dimitra” (Hellenic Agricultural Organization) were carried out in Greece. With these interviews we envisage to support our arguments in the answers to the sub-questions 7 and 8. All the above mentioned were made in order to help us answering the key research
question, which namely is: “To what extend do PDO (Protected Designations of Origin) and PGI (Protected Geographical Indications) foodstuffs affect the willingness to pay and buy by consumers, the net-value added cashed by businesses and support the public policies oriented at the maintenance of regional, value-added, high-quality production with geographical indications?”. The sub-questions and their results are described briefly in the section below.

1) **Which were the motives for the EU legislator to create PDO and PGI products?**

The most important motives that EU considered in order to establish this kind of legislation were:

- To ensure the fair competition for farmers and producers of agricultural products and foodstuffs having value-adding characteristics and attributes
- To provide reliable information to consumers pertaining to such products
- Respect for intellectual property rights
- The integrity of the internal market
- Reward fairly the effort of producers who produce a diverse range of quality products

2) **What are the legal requirements for approval of a Geographical Indication?**

As far as the requirements for a foodstuff to be registered in the system of Geographical Indications are concerned, there are 2 types of requirements. The first type is about possible conflicts among names (certain names for which the foodstuff is not eligible to obtain due to conflicts and overlaps with names of other categories of products) and the second requirement regards the product specifications (such as description of the product, definition of the geographical area, data proving that the product originates from that specific area, etc.)
3) How the market for Geographical Indications is structured, what is in general the value-added experienced by food businesses in the EU and what specifically is the relative position of Greek food businesses in this respect?

In general, GI products were sold 2.23 times higher (on average) than the same quantity of non-GI products. That means that the average value premium rate in the EU 27 for GI products was 2.23 and regarding to the sales markets, PDO/PGI agricultural products and foodstuffs are mostly sold in their national markets (78% of sales).

Greece was placed in the 7th position among the 27 EU MS in the sales of GI products on 2010 and the ratio % sales value / % number of GIs for Greece that we created (in chapter 3.4) was 0.5

It was obvious that Greece performs worse and creates less to value-added than competing countries.

4) Is the Greek consumer willing-to-pay extra for GI products and willing to buy them, and what factors influence this willingness?

Consumers and consumer organisations only to one extent: connect products with GIs with better quality, a Geographical Indication constitute a criterion for buying a product and are willing-to-pay for a product. However, consumer associations, which represent ‘normal’ consumers at the public level, overestimate the willingness-to-pay by consumers for quality attributes and have an exaggerated impression of the perception of these attributes by the average consumer.

Moreover, for as far as the awareness on GI products is concerned, consumer associations are more aware of it compared to ‘normal’ consumers. This could be attributed to the fact that the nature of consumer associations is to be involved with several kinds of products, so, the probability to know GI products is higher.

Factors that affect negatively the willingness of consumers are:
- the low remarkability (visibility) of labelling and symbols;
- the relatively low perception of higher quality of GI-products;
- the relatively low trust in public controls.
Surprisingly, consumer organisations have a different and more positive impression as to the last two mentioned points.

5) **Do Greek food businesses harvest a net value-added on GI products and what are the main factors that influence it?**

While competing countries sell internationally, Greek businesses are predominantly dependent on local sales. This, in combination with small-scale production, has a negative effect of production scale and therefore leads to higher costs.

Although GI symbols are helpful for the information of consumers, they are not very remarkable on average. This has a negative effect on sales levels and the willingness-to-pay by consumers. That implies that even if consumers are aware of Geographical Indications, still it is not easy for them to detect on the labelling if a product is authorized and this affects negatively the businesses.

In addition, the significance of traceability was confirmed by the businesses. Since traceability is obligatory for all the food business (not only for GI businesses) and due to the fact that is a tool for businesses to ensure not only the safety and but also the origin of the primary ingredients (and subsequently their quality), then it could be considered as an integral part of GI food businesses.

6) **What is the Greek public authorities’ perception about the current value and future of GI foodstuffs?**

Since consumers (mainly) and a certain amount of producers (secondary) agree that the remarkability of GI symbols is low, the best strategy from the authorities’ point of view is to try to change the GI-symbols regime, so that they become more remarkable (visible).

Moreover, labelling of products with Geographical Indications is being monitored by three services in Greece. The EFET (Greek Food Authority), the relevant ministry, and the Agrocert. So to change the labelling regime the different public stakeholders should coordinate
their behaviour and forward a joint proposal to European public authorities.

Lastly, authorities should give their efforts in two more themes. The better communication of the advantages of GI foodstuffs to consumers and the reduction of the applications costs & the costs of controls.

7) To what extend are the expectations and intentions (addressed in q. 4, 5 and 6) complementary or conflicting?

The expectations from all the stakeholders should be complementary. GI products should contribute to net value-added of businesses, which is the difference between extra sales (price x volume) and extra costs. The price that is collected by businesses is dependent on the consumers’ willingness to pay and buy. In turn, this is dependent on perceived quality of the product compared to conventional products. And again in turn, quality is dependent on the reliability of application procedures and controls. Finally, only if businesses are inclined to put GI products on the market, public goals like rural development, fair income and high-quality traditional production will be reached.

8) What policy changes and recommendations can be advised on a Greek and/or EU level, to bring the interests of consumers, producers and public authorities more in line with each other and improve the current involvement of businesses that are producing and marketing products with Geographical Indications?

The best thing from the authorities’ point of view is to try to change the regime of GI symbols, so they will be more remarkable (visible). Simultaneously, producers and FBO should consider the authorities as an auxiliary entity and not as an enemy, because the long term advantages of compliance with the GI requirements only positive results might be have on businesses.

Some policy recommendations are the following:
• The labelling and transparency of product quality and the intensity of controls should better be communicated to the consumers
• Improvement the information on availability of raw material ingredients in GI products
• Better communication of the advantages of GI foodstuffs to consumers
• Reduction of the application costs and the costs of controls so that businesses will enjoy a higher net-value added
DEFINITIONS/ABBREVIATIONS

PDO: Protected Designation of Origin\(^1\)

PGI: Protected Geographical Indication\(^2\)

TSG: Traditional Speciality Guaranteed\(^3\)

FBO: Food Business Operator \(^4\)

Control bodies: the competent authority or authorities responsible for official controls carried out to verify compliance with the legal requirements related to the quality schemes established by Regulations.\(^5\)

Labelling: means any words, particulars, trademarks, brand name, pictorial matter or symbol relating to a foodstuff and placed on any packaging, document, notice, label, ring or collar accompanying or referring to such foodstuff\(^6\)

AGROCERT: Agricultural Products Certification and Supervision Organization in Greece. Is a Private Law Legal Entity operating for the public benefit under the supervision of the Ministry of Rural Development and Food (L. 2637/98)\(^7\)

EFET: The Hellenic Food authority. Was established by virtue of L. 2741/GG 199/28-09-1999. It is a public entity supervised by the Ministry of Rural Development and Food.\(^8\)

TRACEABILITY: the ability to follow the movement of a feed or food through specified stage(s) of production, processing and distribution\(^9\)

‘TRADITIONAL’ means proven usage on the domestic market for a period that allows transmission between generations; this period is to be at least 30 years\(^10\)

\(^1\) Article 5[1] of Regulation 1151/2012
\(^2\) Article 5[2] of Regulation 1151/2012
\(^3\) Article 2[1] of Regulation 509/2006
\(^4\) Article 3[3] of Regulation 178/2002
\(^5\) Article 36 of Regulation 1151/2012
\(^6\) Article 3[4] of Regulation 1151/2012
\(^7\) http://www.agrocert.gr/pages/category.asp?lang=en
\(^8\) http://www.efet.gr/portal/page/portal/efetnew/efet/mission
\(^9\) ISO 22005, Traceability in the feed and food chain — General principles and basic requirements for system design and implementation, 2007
‘SPECIFIC CHARACTER’ in relation to a product means the characteristic production attributes which distinguish a product clearly from other similar products of the same category\textsuperscript{11}

‘CERTIFICATE OF SPECIFIC CHARACTER’ shall mean recognition by the Community of the specific character of a product by means of its registration in accordance with this Regulation\textsuperscript{12}

\textbf{MS}: Member States

\textbf{OPs}: Origin Products

\textbf{QFPs}: Quality Food Products

\textbf{SMEs}: Small and Medium Enterprises

\textbf{IPR}: Intellectual Property Rights

\textbf{TRIPS}: The Agreement on Trade Related Aspects of Intellectual Property Rights

\textsuperscript{10} Article 3[3] of Regulation 1151/2012

\textsuperscript{11} Article 3[5] of Regulation 1151/2012

\textsuperscript{12} Article 2[3] of Regulation 2082/1992
CHAPTER 1: Problem and goal

Preamble: The first chapter of the study contains the research background, the problem definition, the research objective and the research questions (the key research question and the sub questions). Furthermore, the material & methods of the study and the research framework are explained.

1.1 Research background

Different regions in Europe produce for many years a big variety of foodstuffs with unique processing and traditional characteristics related to the locality of these areas. Geographical Indications (GI) is a term that the EU legislation put forward, not only in order to protect these kind of local and traditional foodstuffs (when they are linked to a geographical region, due to reputation, local ingredients or production method), but also in order to help the producers of these products to gain value-added. Value-added is defined in this study as the difference between the extra turnover (price x volume) compared to conventional foods and the extra costs they incur. For several products, producers can apply for a GI status when there is a clear relationship between the characteristics of the foodstuff and the distinct geographical area. It is not necessary for these products to be unique, but some or all of their attributes should be a result of the impact of the specific region to the final product. 13

In 1992, the European Union established Regulation 2081/92 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs and the Regulation 2082/92 on certificates of specific character for agricultural products and foodstuffs. These 2 regulations were the predecessors of the regulations 509/2006, 510/2006 and ultimately the regulation 1151/2012. The purpose of Regulation 2081/92 was to protect the designations, while the objective of Regulation 2082/92 was mainly the protection of traditional recipes. Although traditional recipes are not geographical indications in a strict sense, Traditional Specialities Guaranteed

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13 Food Industry Development Division, Department of Agriculture, Ireland, May 2012
products are being regulated also under the Reg. 1151/2012 on quality schemes. Maybe because traditional production is in the majority of cases region-connected.

The previous regulations and especially the regulation 1151/2012 on quality schemes aim to help producers of agricultural products and foodstuffs to communicate the product characteristics and farming attributes of those products and foodstuffs to buyers and consumers, thereby ensuring:

(a) Fair competition for farmers and producers of agricultural products and foodstuffs having value-adding characteristics and attributes;

(b) The availability to consumers of reliable information pertaining to such products;

(c) Respect for intellectual property rights; and

(d) The integrity of the internal market.¹⁴

Protected Designations of Origin and Protected Geographical Indications constitute a part of the quality schemes of the Reg. 1151/2012 and they could be considered as a type of intellectual property. Until now, according to the EU food legislation, these two Geographical Indications have the following main characteristics:

- **Protected Designation of Origin (PDO):** where the product must be produced, processed and prepared in the geographical area and where the quality or characteristics are essentially due to that area.

- **Protected Geographical Indication (PGI):** where the product must be produced or processed or prepared in the geographical area and where a specific quality reputation or other characteristics are attributable to that area

The other part of the quality schemes is the Traditional Specialities Guaranteed (TSG): where the product must be traditional (25 years/handed down through generations) or established by custom.

¹⁴ Article 1 of Regulation 1151/2012
Although quality schemes are related with artisan production, both artisan and industries may be entitled to bear Geographical Indications on their products. In order to be entitled for a Geographical Indication, a group of producers or farmers (it will be analyzed extensively in the following chapters) should apply for it. Nevertheless, it is crucial to remark that any producer, within the defined geographical area, who complies with the requirements, can use the Geographical Indication, whether he was or was not a member of the applicant group.\textsuperscript{15}

In European Union, after the food crisis that occurred in the last years (many scandals took place), consumers tend to be more suspicious with the foodstuffs. It may be that foodstuffs with Geographical Indications are considered of higher quality and safety than conventional foods by the consumers. That is why consumers might be inclined to pay an extra price for the products or be convinced to buy them, which consequently will contribute to the earned value-added by producers. If producers earn extra value-added, they are more inclined to adjust their production and produce products with GI’s. If this would be the case, the general public goal of protecting small-scale, traditional, geographically-bound production would be reached.

The countries with the most products with Geographical Indications are the Mediterranean.\textsuperscript{16} One of these countries is Greece and a special focus on Greek products with Geographical Indications is going to take place in this research.

\textsuperscript{15} Food Industry Development Division, Department of Agriculture, Ireland, May 2012

\textsuperscript{16} European’s Commission newsletter, PDO and PGI Agricultural products, a 14.2 billion euro turnover for over 800 products
1.2 Problem definition

Products with Geographical Indications have been a controversial issue, especially last years. There, still is a lack of insight in the motives for creation, application and buying of products with GI. Products with protected GI’s will only be produced if the difference between sales value that is cashed less the extra costs that have to be made is positive. If this were not the case, businesses will be inclined to bring conventional foods to the market. So the positive and negative aspects of GI’s compared to conventional foods will affect the behaviour of stakeholders like food businesses, consumers and public authorities. On the one hand these kind of products not only may help businesses (e.g. from isolated areas of Europe) to achieve better prices for their products and to promote them easier, but also give the chance to consumers to be well informed and to enjoy foodstuffs with a certain quality. On the other hand, however, consumers may be against these products as the prices for them normally are higher compared to similar conventional products.

Consumers

The extra price may be paid by consumers if they perceive these products to be superior to conventional foods. Factors that affect consumer behaviour is their insight in the quality characteristics of the foodstuff, the level to which they recognise GI’s and the trust they have in the positive, but hidden characteristics of the product. It should be reminded that foods have credence characteristics. The positive aspects of GI-products are therefore represented by the logo on the package and controlled by public authorities. Trust in what the logo represents is therefore also dependent on the confidence they have in controlling agencies. The problem is that we do not know whether consumers are willing to pay and/or buy extra for/of products with Geographical Indications, given the uncertainties that may be connected to them. If there is a lack of willingness-to-pay or buy, there it is not clear in first instance what measures public authorities can take or what legal changes can be made to improve the situation.
Producers

Despite a higher price and volumes it may be that producers do not earn extra value added because they have to make extra costs. Sources for extra costs are the application costs they have to bear, the adjustments to be made in the production processes, the extra price to be paid to acquire suitable primary materials and the administrative costs they have to bear connected to regular checks and controls by public agencies. Only if the net value-added is positive, they will be inclined to adjust their production processes or continue producing on a regional or traditional scale. The problem is that we do not know whether the producers in Greece reach a surplus, calculated as difference between extra sales and extra costs, and thus we do not know whether the production of foodstuffs with protected GI-indications is sustainable in Greece.

Public authorities

Public authorities, on a regional as well as European level, play a crucial role in facilitating producers to catch value-added and convince consumers that GI’s have superior characteristics in comparison with conventional foods. The source for many regulatory costs (like those for application and regular controls) can be traced back to regional and/or EU law and governance. Positive stimuli, like marketing campaigns, may be initiated by regional and national authorities. However, national and/or regional authorities might also use the legal framework to protect their market(s) and thus pursue goals which may violate the functioning of European and/or international markets. The problem is that we do not know to what extend Greek authorities support or jeopardize the goals put forward when the European protected GI-legislation was put in place.

Products with Geographical Indications are a broad topic with different perspectives. Recently, with the financial crisis that occurs in Europe (and globally) these products had already been discussed and also conflicts among countries began. So, from this point of view, Geographical Indications is a challenging issue with positive and negative impacts to the stakeholders. Knowing that positive and negative impacts from Geographically Indicated
products exist not only from economical but also from societal and cultural point of view in the food arena, it is useful and interesting to investigate the factors that affect the potential value added of GI products.

1.3 Research objective

The objective of this research is to gain insight in the factors that influence the value-added harvested by private stakeholders (consumers and producers) as to GI products, to investigate whether this level of value-added is contributing or hampering the development of Greek markets of products with Geographical Indications, and to give advice on measures that can be taken to support and stimulate the markets for GI foodstuffs.

1.4 Research questions

The key research question is the following:

To what extend do PDO (Protected Designations of Origin) and PGI (Protected Geographical Indications) foodstuffs affect the willingness to pay and buy by consumers, the net-value added cashed by businesses and support the public policies oriented at the maintenance of regional, value-added, high-quality production with geographical indications?

In order to cover all the aspects of this key research question, the following sub questions have to be answered. They can be split up in a legal systematic part, a market analysis, a stakeholder analysis and policy review.

A: The legal system:

1) Which were the motives for the EU legislator to create PDO and PGI products?
2) What are the legal requirements for approval of a Geographical Indication?
**B: Market analysis:**

3) How the market for Geographical Indications is structured, what is *in general* the value-added experienced by food businesses in the EU and what *specifically* is the relative position of Greek food businesses in this respect?

**C: Stakeholder analysis**

4) Is the Greek consumer willing-to-pay extra for GI products and willing to buy them, and what factors influence this willingness?
5) Do Greek food businesses harvest a net value-added on GI products and what are the main factors that influence it?
6) What is the Greek public authorities’ perception about the current value and future of GI foodstuffs?

**D: Policy recommendations**

7) To what extend are the expectations and intentions (addressed in q. 4, 5 and 6) complementary or conflicting?
8) What policy changes and recommendations can be advised on a Greek and/or EU level, to bring the interests of consumers, producers and public authorities more in line with each other and improve the current involvement of businesses that are producing and marketing products with Geographical Indications?

**1.5 Methodology**

In order to carry out this master thesis research, a desk research and an empirical research took place.

**DESK RESEARCH**

The desk research contains a combination of information (from different sources). First of all, the related European food legislation was analyzed and provided us information to answer sub-questions 1 and 2. In addition, the
literature research and the internet sites from European Union, EU Commission, National authorities and RASFF gave us additional information for the market research (question 3).

EMPIRICAL RESEARCH

In order to achieve the objective of this project, a case study has been carried out. More specifically, the case study referred to products with Geographical Indications in Greece. This selection was made due to the author of this study’s easier approach with stakeholders, better communication in the native language, personal experience and the fact that Greece has a huge variety of foodstuffs with Geographical Indications.

Questionnaires were composed and made available for consumers, consumer associations and businesses to get insight in the factors that, from their perspectives, influence the value that is attached to products with Geographical Indications. This was considered the best option to obtain an as big as possible amount of data in order to answer the sub-questions 4, 5 and 6.

Moreover, a database on the results of the official controls that took place by “Agrocert” (Greek control entity) was consulted. This data was used to define specific problems related to products with geographical indications (question 6). Lastly, expert interviews with “Agrocert” which is part of “Dimitra” (Hellenic Agricultural Organization) were carried out in Greece. With these interviews we envisage to support our arguments in the answers to the sub-questions 7 and 8. The interview method was selected as most appropriate, because Agrocert is the most experienced entity not only to answer the questions that had been formed, but also to give further explanations.

1.6 Research framework

In this subsection, a brief description of the structure and content of the study is given. In chapter 1 (Problem and goal of the research) the reader
finds the research background, the problem definition, the research objective and the research questions (the key research question and the sub questions). At the same time, the material & methods of the study and the research framework could be found as well.

The next chapter includes the legal aspects analysis of Geographically Indicated agricultural products and foodstuffs. In this chapter we describe the legal environment of Geographical Indications: the obligations of applicants and businesses, technical factors demanded by the rules and the procedures of registration. On top of this, a reference to traceability takes place, as it is one of the most important aspects for products with GI (not only for checking the authenticity or possible frauds of these products, but also for safety reasons).

In chapter 3 (Market Review of GI products), firstly a general description of the GI market is carried out, as to the sales, the prices and quantities of GI products at the national and EU level. Secondly, an exploration of the differences in value-added between GI and conventional (non-GI) products will take place. We will investigate whether Greek businesses cash more or less value-added compared to the rest of the European Union. If less value-added is earned, this is an indication that Greek policy should stimulate the improvement of this field. Because the results from the comparison between GI and non-GI products will show that GI products have a higher value premium rate, this made GI products very appealing for frauds and the authorities should play an important role.

The next chapter (Chapter 4) is the Empirical analysis related to consumers, businesses and public authorities. In this chapter, we will investigate the factors influencing and perceptions of factors influencing the value-added of GI foodstuffs, by addressing consumers, businesses and public authorities. In order to achieve this we present the results of two survey questionnaires. The first questionnaire was shared to Greek consumers and Greek consumer associations and the second questionnaire was shared to Greek businesses involved in the production of products with Geographical Indications. At the same time we conducted expert interviews with the Greek competent authority (Agrocert). Moreover, in this chapter, we will compare the
differences in answers between Greek consumers and Greek consumer associations in order to investigate the possible differences.

In the last chapter of the study (Conclusions / Recommendations) will be pointed out the main conclusions of the research as well as provide recommendations to positively influence the main factors that at present have a negative impact on value-added by Greek firms. Chapters 6 and 7 contain the references and the annexes of the study.
CHAPTER 2: Legal aspects of Geographically Indicated agricultural products and foodstuffs

Preamble: In this chapter we describe the legal environment of Geographical Indications. The obligations of stakeholders, the legal requirements, technical factors determined by the rules and the procedures of registration are listed below. On top of this, a reference to traceability is made, as this is one of the most important aspects for products with GI (not only for checking the authenticity or possible frauds of these products, but also for safety reasons).

2.1 The development of Geographical Indications concept

A Geographical Indication (GI) is a distinctive sign used to identify a product as originating in the territory of a particular country, region or locality where its quality, reputation or other characteristic is linked to its geographical origin. A Geographical Indication indicates a specific place, or region of production, that determines the characteristic qualities of the product which originates from that place. It is crucial that the product derives its qualities and reputation from that place. Since those qualities depend on the place of production, a specific "link" exists between the products and their original place of production.

According to the European commission, there are 4 schemes of Geographical Indications for which EU legislation provides protection:

- Wines (Regulation 1234/2007)
- Spirits (Regulation 110/2008)
- Agricultural products and foodstuffs (Regulation 1151/2012)
- Aromatized wine products (Regulation 1601/91)

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20 COUNCIL REGULATION (EC) No 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation)
In this paper the 3rd category is going to be analyzed (Agricultural products and foodstuffs) because it's the biggest category and the most important related to economic, societal and scientific point of view.

In 1992, it was the first time that legislation about the protection of food names on a geographical basis was established in EU. According to this legislation, foodstuffs whose authenticity and origin can be guaranteed are being rewarded (according to requirements) with one of the next two characterizations: Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI). Under this system, products which receive the Geographical Indication are protected against imitation in the whole EU. Producers that register their products under one of the above mentioned categories of GIs (one of the above mentioned characterizations) benefit from having a raised awareness of their product throughout Europe. This may help them to take advantage of consumers’ increasing awareness of the importance of regional and specialty foods.23

The EU PDO/PGI Regulation 1151/2012 (and the preexisting Regulations 2081/92 and 510/2006) was designed in order to protect geographical indications and designations of origin for agricultural products and foodstuffs while the TSG regulations (2082/92 and 509/2006) created in order to certificate the specific character of agricultural products and foodstuffs.

We could say that the purpose of the PDO/PGI rules (now only Regulation 1151/2012 is valid) is to provide EU varied protection to names of agricultural products and foodstuffs that have a close relationship to their geographic area of production24 and the mainly purpose of TSG regulations is the protection of traditional recipes.

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22 COUNCIL REGULATION (EEC) No 1601/91 of 10 June 1991 laying down general rules on the definition, description and presentation of aromatized wines, aromatized wine-based drinks and aromatized wine-product cocktails
24 Evaluation of the CAP policy on protected designations of origin (PDO) and protected geographical indications (PGI), London Economics, November 2008
Below are being analyzed the categories of the quality schemes as defined in European food legislation. The following EU schemes give courage to a diverse agricultural production and protect product names from misuse and imitation and at the same time they inform consumers about the specific character of these products.

In more detail, the 2 categories of Geographical Indications are the following:

**Protected Designation of Origin (PDO)**

According to REGULATION (EU) No 1151/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 November 2012 on quality schemes for agricultural products and foodstuffs, ‘designation of origin’ is a name which identifies a product:

(a) Originating in a specific place, region or, in exceptional cases, a country;

(b) Whose quality or characteristics are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors; and

(c) The production steps of which all take place in the defined geographical area.

Some famous products of this category are: Feta cheese from Greece, Parmigiano-Reggiano cheese from Italy and Roquefort cheese from France.

**Protected Geographical Indication (PGI)**

According to Regulation 1151/2012 26 ‘geographical indication’ is a name which identifies a product:

(a) Originating in a specific place, region or country;

(b) Whose given quality, reputation or other characteristic is essentially attributable to its geographical origin; and

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25 Article 5(1) of Regulation 1151/2012
26 Article 5(2) of Regulation 1151/2012
(c) At least one of the production steps of which take place in the defined geographical area.

Some famous products of this category are: olive oil «Lakonia» from Greece, vinegar « aceto balsamico di Modena» and the Spanish pork sausage « Chorizo riojano ».

The other category of the quality schemes, which is no so related with this study, is the **Traditional Specialities Guaranteed (TSG)**. In this category there only few products and most of them are not so popular, but an Italian cheese which is famous under this scheme is «Mozzarella».

**Products covered by the previous schemes**

Most foods intended for human consumption can apply for registration in one of the above mentioned schemes. In Annex I of Regulation 1151/2012\(^{27}\) and in Annex I of the Treaty it is defined precisely which products could apply for GI registration. Some examples of these kinds of products are the following: meat, dairy products, fish products, fats and oil, honey, fruits and vegetables, wine of fresh grapes, beer, beverages made from plant extracts, cork, bread, pasta, pastries, cakes, biscuits and confectionery.

**Different Categories of Status that can be applied for\(^{28}\):**

At the next page we present in a diagram a distinction of the quality schemes in two categories.

In the first category, (category i) are the quality schemes that are linked to a particular territory, namely PDO and PGI.

In the second category, (category ii) is the quality scheme which is related to a particular production method, that is to say TSG.

\(^{27}\) Annex I of Regulation 1151/2012, see Annex 2.1.1

\(^{28}\) Department of Agriculture, Food and the Marine, Food Industry Development Division, Protecting Geographical Food Names, Ireland, May 2012
**Diagram 1:** Separation of the quality schemes according to the Reg. 1151/2012

- **i) Protection of Geographical Indications and Designations of Origin**
  - **Product must be** produced and processed and prepared in the geographical area (PDO)
  - **Quality or characteristics essentially due to that area**
  - PDO means a name of a region, an area or even a country in exceptional cases

- **ii) Traditional Speciality Guaranteed Regulation**
  - **Product must be** produced or processed or prepared in the geographical area (PGI)
  - **Specific quality, reputation or other characteristics attributable to that area**
  - The geographical link is not a core attribute but production must take place in a defined geographic area

- **Name must be** specific in itself or express the specific character of the foodstuff (TSG)
  - Must be traditional or established by custom. Distinguishing features of the product must not be due to the geographical area where it is produced. Not entirely based on technical advances in the method of production.
  - Traditional means usage for a minimum of 25 years showing techniques handed down between generations
Link with the geographical area

For Products with Geographical Indications it is necessary to have a link with this particular geographical area. It should be displayed in what way the product’s attributes caused by the geographical area and what are the natural, human and other elements which configure its specialty to the product. In addition, it should be mentioned in the description in what way the methods of production are different from others and also which is the contribution of that method to the specific and unique character of the product.

What makes a product special?

There are several factors which influence the product (foodstuff) so as to be special (compared to similar products). Some of these factors are associated with the geographical area and some of these factors concern the product as it is (e.g. traditional processing steps). Some of the characteristics of the defined geographical area which probably could affect the product are pedo-climatic features, topography, climate, soil, rainfall, exposure to sun, altitude, temperature, etc.  

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29 Department of Agriculture, Food and the Marine, Food Industry Development Division, Protecting Geographical Food Names, Ireland, May 2012
2.2 Motives for the public authorities to create GI products

In 1992, the European Union established Regulation 2081/92\(^{30}\) on the protection of geographical indications and designations of origin for agricultural products and foodstuffs and the Regulation 2082/92\(^{31}\) on certificates of specific character for agricultural products and foodstuffs. These two regulations were the predecessors of the regulations 509/2006\(^{32}\), 510/2006\(^{33}\) and 1151/2012\(^{34}\). The purpose of Regulation 2081/92 was to protect the designations, while the objective of Regulation 2082/92 was mainly the protection of traditional recipes. Since 1992, more than 20 years had already passed; so on 21 November of 2012 the European Parliament and the Council of the European Union created Regulation 1151/2012 on quality schemes for agricultural products and foodstuffs.

In order to create the Regulation 1151/20012, European Parliament and the Council of the European Union had in mind two articles of the Treaty on the Functioning of the European Union (TFEU) and in particular Article 43(2) and the first paragraph of Article 118.

To be more specific, Article 43(2) says: « The European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, shall establish the common organization of agricultural markets provided for in Article 40(1) and the other provisions necessary for the pursuit of the objectives of the common agricultural policy and the common fisheries policy» and the first paragraph of Article 118 says: « In the context of the establishment and functioning of the internal market, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish measures

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\(^{30}\) COUNCIL REGULATION (EEC) No 2081/92 of 14 July 1992 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs

\(^{31}\) COUNCIL REGULATION (EEC) No 2082/92 of 14 July 1992 on certificates of specific character for agricultural products and foodstuffs

\(^{32}\) COUNCIL REGULATION (EC) No 509/2006 of 20 March 2006 on agricultural products and foodstuffs as traditional specialities guaranteed

\(^{33}\) COUNCIL REGULATION (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs

\(^{34}\) REGULATION (EU) No 1151/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 November 2012 on quality schemes for agricultural products and foodstuffs
for the creation of European intellectual property rights to provide uniform protection of intellectual property rights throughout the Union and for the setting up of centralized Union-wide authorisation, coordination and supervision arrangements.»  

The motives for creation of products with Geographical Indications (from Public authorities’ perspective) are mentioned in article 1 of Regulation 1151/2012:

1. This Regulation aims to help producers of agricultural products and foodstuffs to communicate the product characteristics and farming attributes of those products and foodstuffs to buyers and consumers, thereby ensuring:

(a) Fair competition for farmers and producers of agricultural products and foodstuffs having value-adding characteristics and attributes;

(b) The availability to consumers of reliable information pertaining to such products;

(c) Respect for intellectual property rights; and

(d) The integrity of the internal market.

2. This Regulation establishes quality schemes which provide the basis for the identification and, where appropriate, protection of names and terms that, in particular, indicate or describe agricultural products with:

(a) value-adding characteristics; or

(b) value-adding attributes as a result of the farming or processing methods used in their production, or of the place of their production or marketing.  

From the above mentioned motives, it is perceived that EU consider value-adding characteristics and value adding attributes of agricultural

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35 Articles 43(2) and 118 of the Treaty on the Functioning of the European Union (TFEU)
36 Article 1 of Reg. 1151/2012
products and foodstuffs as a fundamental element which could help them to fulfil their goals related to GI foodstuffs.

The European Parliament and the Council of the European Union had in mind several objectives when designing Regulation 1152/2012. The most important factors that were considered are the following. They are listed exactly as they are in the Regulation:37

- The quality and diversity of the Union’s agricultural, fisheries and aquaculture production is one of its important strengths, giving a competitive advantage to the Union’s producers and making a major contribution to its living cultural and gastronomic heritage. This is due to the skills and determination of Union farmers and producers who have kept traditions alive while taking into account the developments of new production methods and material.

- Citizens and consumers in the Union increasingly demand quality as well as traditional products. They are also concerned to maintain the diversity of the agricultural production in the Union. This generates a demand for agricultural products or foodstuffs with identifiable specific characteristics, in particular those linked to their geographical origin.

- Producers can only continue to produce a diverse range of quality products if they are rewarded fairly for their effort. This requires that they are able to communicate to buyers and consumers the characteristics of their product under conditions of fair competition. It also requires them to be able to correctly identify their products on the marketplace.

- Operating quality schemes for producers which reward them for their efforts to produce a diverse range of quality products can benefit the rural economy. This is particularly the case in less favoured areas, in

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37 Recitals 1,2,3,4,18,23 and 39 of the Reg. 1151/2012
mountain areas and in the most remote regions, where the farming sector accounts for a significant part of the economy and production costs are high. In this way quality schemes are able to contribute to and complement rural development policy as well as market and income support policies of the common agricultural policy (CAP). In particular, they may contribute to areas in which the farming sector is of greater economic importance and, especially, to disadvantaged areas.

- The specific objectives of protecting designations of origin and geographical indications are securing a fair return for farmers and producers for the qualities and characteristics of a given product, or of its mode of production, and providing clear information on products with specific characteristics linked to geographical origin, thereby enabling consumers to make more informed purchasing choices.

- An agricultural product or foodstuff bearing such a geographical description should meet certain conditions set out in a specification, such as specific requirements aimed at protecting the natural resources or landscape of the production area or improving the welfare of farm animals.

- In order to avoid creating unfair conditions of competition, any producer, including a third-country producer. For traditional specialities guaranteed produced within the Union, the Union symbol should be indicated on the labelling and it should be possible to associate it with the indication ‘traditional specialty guaranteed’.

For our research it is of key importance to conclude that the policy put forward envisages that:
- businesses should be rewarded fairly;
- for bringing high-quality products with Geographical Indications to the market;
• the quality of which is valued by consumers and attributes income to the businesses;
• and in this way regional, high-quality and traditional production are fostered.

Reverse thinking leads to the conclusion that if consumers do not recognise the extra value of GI-products, businesses will not profit from their efforts and will not apply for or even stop producing products with special protected characteristics. The formal application and registration procedures is one category of factors that on the one side protects the value of such products, but on the other side contributes to regulatory burdens. These are addressed in the next subsection.

2.3 Requirements for application and procedures for registration

2.3.1 Generic nature, conflicts with names of plant varieties and animal breeds, with homonyms and trade marks

According to article 6 of the Regulation 1151/2012, foodstuffs with Geographical Indications are not eligible to obtain a name from one of the next categories:

• Names that have become generic;
• Names that conflict with the name of a plant variety or an animal breed because it is likely to mislead the consumer about the true origin of the product;
• A name wholly or partially homonymous with names that have already been registered under this Regulation (1151/2012). Here there is an exemption: a name wholly or partially homonymous with names that have already been registered, could be registered only if there is sufficient distinction in practice between the conditions of local and traditional usage and presentation of the homonym registered subsequently and the name already entered in the register, taking into account the need to ensure equitable treatment of the producers concerned and that consumers are not misled.
• A PDO or PGI may not be registered where the reputation and the length of time it has been used are liable to mislead the consumer as to the true identity of the product.\(^{38}\)

### 2.3.2 Product specification

According to article 7 of the Regulation 1151/2012, agricultural products or foodstuffs, in order to obtain a PDO or PGI characterization, must comply with the product specification, which must include the following aspects:

• The name of the PDO or PGI;
• The description of the product, including an indication of the raw materials and its main physical, chemical, microbiological and organoleptic characteristics;
• The definition of the geographical area;
• Data proving that the product originates from that specific area;
• Description of the method of obtaining the product, if appropriate, the authentic and unvarying local methods as well as information concerning packaging that takes place in the defined geographical area in order to ensure the quality, the origin or to ensure control;
• The name and address of authorities or bodies that verify compliance with the provisions of the product specification;
• The connection between the quality or characteristics of the product and the geographical environment
• Any specific labelling rule for this product.\(^{39}\)

### 2.3.3 Application for registration

According to article 49 of the Regulation 1151/2012, applications for registration may only be submitted by groups who work with the products

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\(^{38}\) Article 6 of the Reg. 1151/2012  
\(^{39}\) Article 7 of the Reg. 1151/2012
(producers or processors) with the name to be registered. In exceptional cases, when 2 conditions are fulfilled [according to Art. 49(1)], a single natural or legal person may be treated as a group. Moreover, if the application concerns a trans-border geographical area, several groups from different Member States or third countries may submit a joint application for registration.\(^\text{40}\)

The application for registration must include:

- The name and address of the applicant group;
- The product specification;
- A single document setting out the main aspects of the product specification and a description of the link between the product and its geographical area of origin.

Applications are made to the Member State on whose territory the geographical area is located. The Member State examines the application and carries out a national objection procedure, guaranteeing that the application is sufficiently publicized and allowing a reasonable period within which any natural or legal person having a legitimate interest and established or resident on its territory may lodge an objection. When the Member State considers that the application is acceptable, it forwards the single document\(^\text{41}\) to the Commission together with a declaration stating that all the necessary conditions have been met.

Where an application for registration concerns a geographical area in a third country, it has to be sent to the Commission either directly or through the authorities of that country\(^\text{42}\)

\(^{40}\) Article 49 of the Reg. 1151/2012
\(^{41}\) This is the EU application. It is a condensed version of the Summary Specification which contains the areas that will be examined by the Commission
\(^{42}\) http://europa.eu/legislation_summaries/internal_market/businesses/intellectual_property/l66044_en.htm
2.3.4 Examination by the Commission

According to article 50 of the Regulation 1151/2012, the Commission shall scrutinize any application that receives, in order to check if the applications meet all the necessary conditions of the respective scheme. This check must be carried out within a period of six months. Where this period is exceeded, the Commission shall indicate in writing to the applicant the reasons for the delay. In addition, at least each month, the Commission publishes the list of the names for which registration applications have been submitted, as well as their date of submission. If the conditions are fulfilled, the Commission publishes in the Official Journal of the European Union (OJ) the single document and the publication reference of the product specification. If the conditions are not met, the Commission will reject the application for registration.\footnote{Article 50 of the Reg. 1151/2012}

2.3.5 Objections

According to article 51 of the Regulation 1151/2012, within three months from the date of publication in the Official Journal of the European Union, the authorities of a Member State or of a third country, or a natural or legal person having a legitimate interest and established in a third country may lodge a notice of opposition with the Commission. Furthermore, any natural or legal person having a legitimate interest, established or resident in a Member State other than that from which the application was submitted may lodge a notice of opposition with the Member State in which it is established within a time limit of three months.

- The Commission shall forward the notice of opposition to the authority or body that lodged the application without delay.
- If a notice of opposition is lodged with the Commission and is followed within two months by a reasoned statement of opposition, the Commission shall check the admissibility of this reasoned statement of opposition.

\footnote{Article 50 of the Reg. 1151/2012}
• Within two months after the receipt of an admissible reasoned statement of opposition, the Commission shall invite the authority or person that lodged the opposition and the authority or body that lodged the application to engage in appropriate consultations for a reasonable period that shall not exceed three months.

• At any time during these three months, the Commission may, at the request of the applicant extend the deadline for the consultations by a maximum of three months.\(^{44}\)

If no agreement is reached, the Commission takes a decision, bearing in mind traditional fair practice and the actual likelihood of confusion.\(^{45}\)

\(^{44}\) Article 51 of the Reg. 1151/2012
Picture 2.3: Scheme with the procedures for registration

EU products
- Definition of the product according to precise specifications
- Analysis by national authorities
- Examination by the Commission (max. 6 months)
- First publication EU official Journal
- Opposition period (3 months) + 2 months for reasoned statement
- Registration

Non-EU products
- Definition of the product according to precise specifications
- Geographical indication is protected in country of origin
- Rejection if application not complying with EU legislation
- If opposition, consultations between parties (3 months + 3 max). If no agreement decision by the Commission

At producer group level

At national level

At European level

http://ec.europa.eu/agriculture/quality/schemes/
2.3.6 Names, indications and symbols

In article 12 of the Regulation 1151/2012 it is mentioned that PDO and PGI Indications may be used by any operator marketing products conforming to the corresponding specification. Also, for products originating from EU and they are registered as protected designation of origin or a protected geographical indication, in accordance with the procedures laid down in Regulation 1151/2012, the Union symbols associated with them shall appear on the labelling. In addition, the registered name of the product should appear in the same field of vision. The indications ‘protected designation of origin’ or ‘protected geographical indication’ or the corresponding abbreviations ‘PDO’ or ‘PGI’ may appear on the label as well.\(^{47}\)

2.4 Labelling of GI products

In this sub-chapter, we analyze the requirements about labelling of the GI products, according to the Food Information Regulation 1169/2011\(^ {48}\) and Regulation 1151/2012. As to the distinction of Geographically Indicated foodstuffs from conventional foodstuffs, labelling is a key instrument to signal the differences and in this way protect the extra value connected to protected GIs. If the labelling is unclear or not recognized by consumers, it will not affect consumers’ purchasing behaviour; as a consequence, businesses are not stimulated to produce such products.

For as far as the labelling of GI products is concerned, apart from the mandatory particulars that should be included in the labelling (e.g. on the package) according to the Regulation 1169/2011\(^ {49}\), in the case of products originating in the Union that are marketed under a protected designation of origin or a protected geographical indication or traditional specialty guaranteed registered in accordance with the procedures laid down in Regulation 1151/2012, the Union symbols associated with them shall appear on the labelling. In addition, the registered name of the product should appear

\(^{47}\) Article 12 of the Reg. 1151/2012


\(^{49}\) Article 9 of Regulation 1169/2011, see Annex 2.5.1
in the same field of vision. The indications ‘protected designation of origin’ or ‘protected geographical indication’ or the corresponding abbreviations ‘PDO’ or ‘PGI’ may appear on the labelling. In addition, it may also appear on the labelling the depictions of the geographical area of origin and text, graphics or symbols referring to the Member State and/or region in which that geographical area of origin is located.\textsuperscript{50}

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{PDO_symbol.png}
\caption{Union Symbol for Protected Designation of Origin products}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{PGI_symbol.png}
\caption{Symbol of Greek control body}
\end{figure}

Article 26(3) of the regulation 1169/2011 it could be applied in some cases in PGI (and TSG products). In that case, where the country of origin or the place of provenance of a food is given and where it is not the same as that of its primary ingredient:

(a) The country of origin or place of provenance of the primary ingredient in question shall also be given; or

(b) The country of origin or place of provenance of the primary ingredient shall be indicated as being different to that of the food.\textsuperscript{51}

The terms ‘protected designation of origin’, ‘protected geographical indication’ and ‘traditional specialty guaranteed’ or the associated EU symbols must be included not only on the labelling of products originating in the EU,

\textsuperscript{50} Articles 3 and 4 of Regulation 1151/2012
\textsuperscript{51} Article 26(3) of Regulation 1169/2011
but also to products originating in third countries and sold under these designations.\textsuperscript{52}

Sometimes, GI products could be used as ingredients on certain foodstuffs and some case studies show that industry can manage this on an agreed basis between producers of PDO/PGI products and the processors. The use and labelling of GI products as ingredients in processed products does not appear to cause problems for producers.\textsuperscript{53} But, just like in the field of trademarks, fake products and misleading labelling tend to be a certain problem for producers of well-known GI products. For instance, Champagne producers are probably the most well known for their strict and wide-ranging enforcement campaigns against competing wine producers and other uses of this GI.\textsuperscript{54}

2.5 Official controls

Next to product requirements, applications and registrations as well as labelling requirements, official controls serve a key function in the web of protection that is created around products with GIs. Controls are necessary so that the value-added is earned only by the businesses that comply with all requirements. Should such protection fail, it makes no sense for the businesses to adjust processes and start or continue producing foodstuffs with Geographical Indications.

The competent authority or authorities responsible for official controls (control bodies) of every member state (according to article 36 of the regulation 1151/2012) should carry out investigations in order to verify

\textsuperscript{53} Evaluation of the CAP policy on protected designations of origin (PDO) and protected geographical indications (PGI), London economics, November 2008
\textsuperscript{54} Alessandro Francesco Sciarra and Louise Gellman, Geographical indications: why traceability systems matter and how they add to brand value, Jnl. Intellectual Property Law and Practice Advance Access, 22 February 2012
compliance with legal requirements with the above mentioned regulation\textsuperscript{55}. In Greece the authority which is responsible for that, named AGROCERT\textsuperscript{56}.

\textit{2.5.1 Responsibilities of AGROCERT (Greek control entity)}\textsuperscript{57}

The competent authorities of Member States should be in alert in order to prevent frauds especially from producers (or processors, retailers, etc.). The Greek control entity related to GI foodstuffs is Agrocert.

Based on the legal framework, the Agrocert is responsible for:

\begin{itemize}
  \item Monitoring the observance and the ensuring registration specifications of the products with PDO/PGI in collaboration with the Departments of Agricultural Economics Regional Units
  \item The certification of these products and the approval of the use of registered names and indications
  \item The training, compliance and disclosure of the Registry of Certified Business and Beneficiaries who use the PDO / PGI indications and finally,
  \item The control of proper use of these indications on the retail and wholesale points or on the points of disposal of PDO/PGI products.
\end{itemize}

Accordingly, the Entity has developed a control and certification scheme for companies that produce and/or package PDO and PGI or use the registered names/indications/the Community symbol and brand of AGROCERT. As far as the dairy products are concerned, dairies that produce, package and sell PDO cheese should be integrated in the above mentioned scheme.

\textit{2.5.2 The certification procedure}

Initially, the interested company shall submit to the Entity a request for inclusion in the System of Control and Certification for each PDO foodstuff. After the evaluation of the application a spot control of the certain business is

\textsuperscript{55} Articles 36, 37, 38, 39 and 40 of Regulation 1151/2012
\textsuperscript{56} AGROCERT, 2013, see \url{http://www.agrocert.gr/pages/category.asp?lang=en}
\textsuperscript{57} Quarterly publication of Greek agricultural Agency – Dimitra. Volume 2, April-May-June 2013
planned, the findings of which determine whether or not this certain business will receive the certification. In the first case, a contract between the Entity and the business is drawn up, so the business receives a certificate of use of this specific registered indication and at the same time the business is being recorded in the Registry of approved Businesses and Beneficiaries of use of PDO/PGI Entity's indications. Afterwards, the business's compliance with the applicable legislation is being checked annually and thus determined the renewal of the certification or if appropriate the recall of it. In the last case (recall of the certification), the application of the business is being closed and controlled business can re-apply when the reasons for withdrawal have been lifted. The same procedure is being followed when the business do not receive the certification after the first on spot control evaluation. Simultaneously with the on spot inspections, market audits at the disposal points of PDO/PGI foodstuffs take place as well.

A particularly important task of the Entity is to compile the Registry of the Beneficiaries that could use the PDO/PGI indications because ensures the provision of information to both relevant professional groups and consumers. The Registry is a public book with free access to all interested parties without the need to prove a legitimate interest in the use of it. (Website of AGROCERT: www.agrocert.gr).

Moreover, at regular time intervals, the Entity conducts sampling operations on PDO/PGI production units, processing units, manufacturing and/or packaging units, and in different places of wholesale and retail. The obtained samples are sent to the General Chemical State Laboratory and to accredited laboratories in order to determine the physicochemical and typical characteristics of the products, so as to be checked the compliance with their registration requirements. Audits in wholesale and retail places of PDO /PGI foodstuffs include the inspection of the labeling and any kind of advertising material, in accordance with the requirements of legislation. More specifically, is being checked the use of the registered name of certified or non-certified businesses and the proper display of: the registered PDO/PGI indication, the national identification mark (AGROCERT) with certificate number, the Community’s symbol and the control elements of the product.
In case that audit findings constitute sanction, a procedure of referral in primary commission of Irregularities & Offences Commission of the Ministry of Rural Development & Food take place. Irregularities recommend the referral of business usually involve misreporting by the manufacturer or packager or the improper fulfillment of the conditions that specified in the control contract and other written commitments by the company to the Entity. In addition, it is possible to record violations at the sale points or disposal points of the PDO/PGI foodstuffs. These violations are related to a) foodstuffs that bear the registered names, signs, symbols or labels in the labeling/presentation and advertisement although they have not complied with the requirements for registration, or b) foodstuffs with indications that mislead the consumers and constitute unfair competition.58

2.5.3 Cancellation of a product

In cases that:

a) Compliance with the conditions of the specification is not ensured

b) No product is placed on the market under the TSG, the PDO or the PGI indications for at least seven years.

The Commission may, on its own initiative or at the request of any natural or legal person having a legitimate interest, adopt implementing acts to cancel the registration of a PDO or of a PGI or of a TSG product.59

2.6 Traceability of GI products

A key characteristic of products with Geographical Indications is traceability of all ingredients. This traceability is necessary to enable public authorities to perform valid controls, which in turn are necessary to prevent that products do not come up to the required specifications or competing

58 Quarterly publication of Greek agricultural Agency – Dimitra. Volume 2, April-May-June 2013
59 Article 54 of the Reg. 1151/2012
businesses act opportunistically. Should this occur, the extra value which is connected to the inherent qualities of the foodstuff will gradually diminish.

According to 178/2002 Regulation [Article 3(15)] the definition of traceability is the following: ‘traceability’ means the ability to trace and follow a food, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of production, processing and distribution.60

There are two types of traceability61:

- Downstream traceability: Knowing a specific LOT Number of feedstock we can detect all the LOT Numbers of the products that have been produced by this.

- Upstream traceability: By the LOT Number of a product we know all data for raw materials and production conditions.

Although the prime design of traceability systems is related with safety issues, also it could provide producers with Geographically Indicated products with new tools to promote the authenticity of their products and added protection against fakes. On the one hand, consumers are increasingly keen to know about the origin of the foodstuffs that consume and they seem to be attracted by artisan and sustainable products. Moreover, they may be willing to pay a premium in case that they know where a product derives from or in case that they can trace the production of what they see on store shelves. One the other hand, producers are keen to promote their products, and also to prevent fakes and counterfeits from entering into the market.62

Traceability, under EU regulations, plays a fundamental role in certifications and control processes in GI products. Only by recording the origin of the several ingredients and tracking the production chain it is feasible for the certification and control bodies to verify, certify, and monitor if the final

60 Article 3 of regulation 178/2002
61 Theodorou Evangelos, Food traceability systems, Athens, 2010
product indeed has the expected link with its geographical origin and complies with the relevant specification and quality requirements.63

Article 18 of the General Food Law refers to traceability, but the wording of this article does not give the companies nor the supervisory authorities clear information on how to implement traceability.

**Traceability as an intrinsic feature of GI products and GI legislation**

GI products are the outcome of a unique combination of natural and human factors linked to the product’s geographical origin. We could say that each GI product has its own ‘DNA’ as a result of the factors’ combination. However, traceability of all components of GI-products leads to higher costs, so that the installment of full traceability is a negative factor at the cost-side of the value added.

For instance, behind the well-known Parmigiano Reggiano hard matured cheese (also known as Parmesan) – a PDO cheese-, there are strict production requirements, which require compliance with an amount of rules and standards aimed at assuring the existence of connection between the final product and the area of origin. Production, processing and preparation should take place into specific geographical area according to traditional & local methods (f.i.: milk for Parmigiano Reggiano cheese must come from cows reared within the area of origin and also the animal feed should be mainly fodder that produced in the specific area of origin too.) This cheese is matured in the defined area and all the other operations (such as grating, portioning and packaging) will have to take place in the defined area too.64

All the previous factors must be combined properly, and if so, this unique combination creates the GI’s ‘DNA’. Traceability systems are the only tool that could ‘decipher’ and verify the unique ‘DNA’ of this cheese.

In order to authenticate their products, holders of GI rights not only know the significance of traceability, but also are very careful to conform to all

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63 Traceability systems in more details could be found in the Annex 2.6.1

64 Alessandro Francesco Sciarra and Louise Gellman, Geographical indications: why traceability systems matter and how they add to brand value, Journal of Intellectual Property Law & Practice, 22 February 2012
related requirements. Otherwise, non-compliance with recordkeeping requirements may have adverse effects to GI FBO. Serious breaches of legislation may have as a consequence that the producer no longer is entitled to use the GI for a specific batch of products. Subsequently he cannot enjoy any associated premium price in the market. Apart from that, traceability could be a way to detect fake GI products at customs. Customs play an important role in the combat against fakes and this includes fake GI products.\(^{65}\)

As a recommendation for this sub-chapter, we suggest a thorough origin information of staple ingredient on the package of GI products. In that way, consumers’ concern about traceability and supply of ingredients and any other potential confusion about GI products will be eradicated. European Commission is the recipient of the above mentioned recommendation.\(^{66}\)

**2.7 Optional quality terms: Mountain products & products of island farming**

A second tier of quality systems, based on quality terms which add value, which can be communicated on the internal market and which is to be applied voluntarily, have been introduced with the Regulation 1151/2012. Those optional quality terms should refer to specific horizontal characteristics, with regard to one or more categories of products, farming methods or processing attributes which apply in specific areas. Until now, two optional quality terms are available: ‘the mountain products’ and ‘the products from island farming’.

According to Article 29 of the Reg. 1151/2012 the optional quality terms shall satisfy the following criteria:

(a) The term relates to a characteristic of one or more categories of products, or to a farming or processing attribute which applies in specific areas;

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\(^{65}\) Alessandro Francesco Sciarra and Louise Gellman, Geographical indications: why traceability systems matter and how they add to brand value, *Journal of Intellectual Property Law & Practice*, 22 February 2012

\(^{66}\) Evaluation of the CAP policy on protected designations of origin (PDO) and protected geographical indications (PGI), London Economics, November 2008
(b) The use of the term adds value to the product as compared to products of a similar type; and

(c) The term has a European dimension.

2.7.1 Mountain product

In short, mountain areas within the Union are those delimited pursuant to Article 18(1) of Regulation (EC) No 1257/1999. In addition, for third-country products, mountain areas include areas officially designated as mountain areas by the third country or that meet criteria equivalent to those set out in Article 18(1) of Regulation (EC) No 1257/1999\textsuperscript{67}.

Apart from the geographical requirements, the term ‘mountain product’ could be used if\textsuperscript{68}:

(a) Both the raw materials and the feedstuffs for farm animals come essentially from mountain areas;

(b) In the case of processed products, the processing also takes place in mountain areas.

2.7.2 Product of island farming

On 16 December of 2013 the European Commission adopted a report on ‘product of island farming’. According to this report, because islands tend to be very different, and because their qualities/characteristics are usually due to factors present on a given island, it seems unfulfilled to create specific characteristics mutual for all island products. So, EU Commission decided to protect island farming products against misuse, but since most of the island products are sold locally or within the Member State to which the island

\textsuperscript{67} Article 18(1) of the Reg. 1257/1999

\textsuperscript{68} Article 31 of the Reg. 1151/2012
belongs, they highlighted the possibility that the regulation of labelling claims could be better addressed at Member State level.\(^69\)

The term may only be used to describe the products intended for human consumption that are listed in Annex I to the Treaty, the raw materials of which come from islands. In addition, for the term to be applied to processed products, processing must also take place on islands in cases where this substantially affects the particular characteristics of the final product.\(^70\)

The term ‘product of island farming’ as optional quality term of agricultural products and foodstuffs not only could provide the products (foodstuffs) with added value, but also it could enhance their competitiveness in the markets according to the Union of Agricultural Cooperatives of Kyklades Islands (on 14 September 2013).\(^71\) Since Greece has around 200 inhabited islands and the only source of income for their inhabitants is tourism and food production, a possible successful application of this scheme (products of island farming) could boost their economy.

### 2.7.3 Objections to the requirements of optional quality terms

The Poultry Cooperative Union of Greece mentioned that one of the biggest problems related to the requirements for the acquisition of the claim ‘mountain origin’ is the rule which says that minimum the 50% of the feed production should be take place in the same mountainous region. This is quite difficult to be applied because the agricultural structure, the soil conditions (degraded soils) and the long winter in these regions do not favor the production of sufficient feed requirements of livestock.

Furthermore, the Poultry Cooperative Union noted that the EU’s proposals, respond better to farm structures in the Nordic countries where in the mountainous areas the feed production is sufficient because of the large pasture yields, the long period of grazing and the production of forage plants.

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\(^{70}\) Article 32 of the Reg. 1151/2012

\(^{71}\) Seminar organized by the Greek Association of Livestock and the Union of Agricultural Cooperatives of Kyklades Islands on 14 September 2013, Kythnos Island, Greece
(that is being favored by the soil conditions), but cannot be applied to conditions in Mediterranean ecosystems and structures of these rural areas.\footnote{Suggestion letter related to Reg. 1151/2012 from Poultry Cooperative Union of Greece to Ministry of Rural Development and Food, June 2013}

Although there are objections related to the optional quality terms, still, it’s conceivable that the production of quality and traditional products with high added value is a powerful competitive advantage for the Greek agricultural sector.

2.8 The Intellectual Property Right Character of GI products

GI-products maintain their value-added because of the protection that is provided, so that businesses of conventional foods cannot opportunistically make use of the positive -but hidden- quality attributes.

The European Parliament and the European Council, before establishing Regulation 1151/2012 on quality schemes for agricultural products and foodstuffs, had in mind that: the provisions of systems establishing intellectual property rights, and particularly of those established by the quality scheme for Designations of Origin and Geographical Indications or those established under trade mark law, should not be affected by the reservation of names and the establishment of indications and symbols pursuant to the quality schemes for traditional specialities guaranteed and for optional quality terms. Indeed, according to Article 43 of the Reg. 1151/2012 the quality schemes described in Titles III and IV (namely TSG products and products that bear the optional quality terms) shall apply without prejudice to Union rules or to those of Member States governing intellectual property, and in particular to those concerning designations of origin and geographical indications and trademarks, and rights granted under those rules.\footnote{Article 43 of the Reg. 1151/2012}

According to article 2(1) of the Regulation 608/2013, ‘intellectual property right’ could be: a trade mark, a design, a copyright or any related right as provided for by national or Union law, a geographical indication, a
patent as provided for by national or Union law, a supplementary protection certificate for medicinal products, a supplementary protection certificate for plant protection, a Community plant variety right, a plant variety right as provided for by national law, a topography of semiconductor product as provided for by national or Union law, a utility model in so far as it is protected as an intellectual property right by national or Union law, a trade name in so far as it is protected as an exclusive intellectual property right by national or Union law.\textsuperscript{74}

Apart from EU legislation, Geographical Indications are referred also in the TRIPS Agreement. The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) is an international agreement administered by the World Trade Organization (WTO). The TRIPS Agreement is a minimum standards agreement, which permits Members to provide more extensive protection of intellectual property rights if they so wish. WTO Members are free to regulate the appropriate method of implementing the provisions of the Agreement within their own legal system and practice. In articles 22 and 23 of the TRIPS Agreement is defined the protection of the Geographical Indications whereas exceptions are provided in article 24.\textsuperscript{75}

According TRIPS Agreement, Geographical Indications, a type of intellectual property right, are indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.\textsuperscript{76} Apart from that, Members of TRIPS Agreement should provide the legal means for interested parties to prevent:

(a) The use of any means in the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good;

\textsuperscript{74} Article 2(1) of the Ref. 608/2013
\textsuperscript{75} Study on the protection of geographical indications for products other than wines, spirits, agricultural products or foodstuffs. Directorate General for Trade of the European Commission, November 2009
\textsuperscript{76} TRIPS Agreement, Part II, Section 3, Article 22(1)
(b) Any use which constitutes an act of unfair competition within the meaning of Article 10bis of the Paris Convention (1967).

Moreover, in Article 24(3) of the TRIPS Agreement, it is mentioned that Members (Countries) shall not diminish the protection of geographical indications that existed in that Member immediately prior to the date of entry into force of the WTO Agreement.\(^77\)

In the European Union (EU), Geographical Indications and consequently Intellectual property Rights, could be applied to agricultural products and foodstuffs, as well as aromatized wine products, wines, and spirits. Non-agricultural GI products are also protected in some EU Member States through different legal instruments, such as consumer law, unfair competition law, trade mark law or sui generis GI systems.\(^78\)

Geographical indications may become a useful intellectual property right for developing countries since they could add value and promote rural socio-economic development. Most countries have a variety of local products that fulfil the requirements of Geographical Indications but only a few are already known or protected globally.\(^79\)

**Trademark Laws**

In EU, on the one hand, PDO/PGI and TSG products once they conflict with a prior, renowned and long-used trademark and their registration could mislead the consumers, then, cannot be registered. To make it more clear, an existing trademark may obstruct the registration of a GI product when the registration of this GI product will have as a result confusion between the new registered GI product and the existing trademark. On the other hand, a registered PDO/PGI/TSG product prevents the posterior registration of a contradictory trademark which is related to the same class of product. The national (or European) trademark offices should deny the application for

\(^77\) TRIPS Agreement, Part II, Section 3, Article 24(3)  
\(^78\) European Commission, see: http://www.iprhelpdesk.eu/taxonomy/term/148  
registration of a trademark if the submission’s date is after the submission’s date of the GI product.\textsuperscript{80}

In the United States a trademark or certification mark is defined as:

“Any word, name, symbol, device, or any combination, used or intended for use in commerce with the owner’s permission by someone other than its owner, to certify regional or other geographic origin, material, mode of manufacture, quality, accuracy, or other characteristics of someone’s goods or services, or that the work or labour on the goods or services was performed by members of a union or other organization” (U.S. Patent and Trademark Office). Trademark laws in the United States protect the name of a product (e.g. Wisconsin Cheddar). This could apply to any product and not only to those produced in certain regions\textsuperscript{81} (in contrast with the EU).

**Geographical Indications as club goods**

According to literature, GIs could be considered as «club goods» and that's the main difference with trademarks. Geographically Indicated products could be used by many companies at the same time (since they fulfil certain requirements), but on the other hand standard trademarks are possessed and could be used by a single firm.\textsuperscript{82} To make it more clearly, a Geographical Indication is like a joint property of all the producers within the defined area that produce the specific product according to the requirements whereas the trademark (brand) is an individual property.\textsuperscript{83}

\textsuperscript{80} Gragnani Matteo (2013): “The EU Regulation 1151/2012 on Quality Schemes for Agricultural Products and Foodstuffs”, EFL, pp. 376-385
\textsuperscript{81} House L. et al. (2009): “How do Different Countries use PDO/GI Standards: A Case Study Comparing Wisconsin Cheddar to Parmesan-Reggiano”, Food and Resource Economics Department at the University of Florida
\textsuperscript{83} Borg E. et al. (2013): “Collective brand strategy, entrepreneurship, and regional growth: The role of a protected designation of origin (PDO)”, Journal of World Economic Research, pp. 26-38
Synopsis: In this chapter we saw the theoretical-legal background of products with Geographical Indications. We saw that protection has been put in place for high-quality products with geographical indications. By installing application and registration procedures, installing controls by public authorities and establishing mandatory labelling requirements the market for admitted GI-products is separated from conventional foods. It remains to be seen in the further chapters, whether consumers grasp the extra value of these products and are willing to pay and buy. Especially, within the scope of this research (see chapter 1), it is important to know whether Greek consumers and businesses meet similar extra value, compared to other businesses in the EU. If this is the case, no further action is necessary, except the maintenance of general marketing of the products to keep the value-added at the achieved level. However, if this is not the case, the factors that affect the value-adding qualities of GI-products negatively should be addressed with adjustment of business and/or public policy. In the next chapter we will study first the total GI market in order to identify the main factors that create value and the way at present created value is spread over products and countries. Next, we will have to assess the relative position of Greek businesses in the market, to see whether these lag behind or catch an equal share of the value potential of protected GI foodstuffs.
Chapter 3: Market Review of GI products

Preamble: In chapter 3, firstly, a description of GI market takes place: the sales, the values and the diversity of the GI products in national and EU level. Secondly, an exploration of the differences in value-adding factors between PDO and non-PDO products will be carried out. The spread of value over product categories and countries are addressed, as well as the relative position of protected GI-foodstuffs from Greece. The factors that determine the creation of value added are summarized, so that a foundation is laid for specific empirical research on the impact of these factors on value-creating activities in Greece in the next chapter.

3.1 A brief overview on GI products in Europe

According to the European commission, there are 4 schemes of Geographical Indications for which EU legislation provides protection:

- **Wines** (Regulation 1234/2007)
- **Spirits** (Regulation 110/2008)
- **Agricultural products and foodstuffs** (Regulation 1151/2012)
- **Aromatized wine products** (Regulation 1601/91)

In 2010 the sales value of GI products throughout the world that had been registered in the EU 27 was estimated at €54.3 billion at wholesale stage in the region of production; an increase of 12% had been noticed between 2005 and 2010. The portion of the GIs in relation to the total food and drink sector in the EU27 was 5.7% (€956.2 billion, source: FoodDrinkEurope). In particular wines accounted for 56% of total sales (€30.4 billion), agricultural products and foodstuffs for 29% (€15.8 billion), spirit drinks for 15% (€8.1 billion) and aromatised wines for 0.1%. Domestic sales remained the main markets for GI products (60%), intra-EU trade accounted

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for 20% and extra-EU accounted for 19%. Over the period, extra-EU trade increased by 29%.85

As for the Member States (MS) France was the leading one, Italy was the second with a balance between the GIs registered in the different schemes and Germany and the United Kingdom were the two following. The next MS were Spain, Portugal, Greece, Austria, Ireland, Hungary and Poland. In 2010 the total sales value in each of the other remaining 16 MS was lower than €300 000.

In addition, a comparison on the value premium rate between products that bear a GI and non-GI products took place. The result of the comparison was that GI products were sold 2.23 times higher in terms of average prices) than the same quantity of non-GI products.86 So the question that has to be answered further on is whether Greek producers can harvest the same or even a higher premium, or perform less than the EU on average (see section 3.6)

3.2 Geographically Indicated products by scheme and Member State

European Commission conducted a survey as regards the products with Geographical Indications. The data collection included 2768 GIs in the 27 Member States of the European Union during 2010 and it referred to 4 regulations87:

1. Reg. (EEC) No 1601/91: aromatised wines (4 GIs, 0.1% of the European GIs)
2. Reg. (EC) No 510/2006: agricultural products and foodstuffs (867 GIs, 31.3% of the European GIs)
3. Reg. (EC) No 1234/2007: wines (1 560 GIs, 56.4% of the European GIs)
4. Reg. (EC) No 110/2008: spirits (337 GIs, 12.2% of the European GIs).

85 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
86 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
87 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
Bulgaria and Romania were not taken into account in the economic aggregates before their join in the EU in 2007.

**Table 1:** Number of GIs by MS and by scheme (2010)\(^{88}\)

<table>
<thead>
<tr>
<th></th>
<th>Wine</th>
<th>Agri. prod. and foodstuffs</th>
<th>Spirits</th>
<th>Aromatised wine</th>
<th>Total</th>
<th>%</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT</strong></td>
<td>521</td>
<td>193</td>
<td>39</td>
<td>1</td>
<td>754</td>
<td>27.2%</td>
<td>27%</td>
</tr>
<tr>
<td><strong>FR</strong></td>
<td>432</td>
<td>168</td>
<td>75</td>
<td>1</td>
<td>676</td>
<td>24.4%</td>
<td>52%</td>
</tr>
<tr>
<td><strong>ES</strong></td>
<td>131</td>
<td>126</td>
<td>28</td>
<td>0</td>
<td>285</td>
<td>10.3%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>GR</strong></td>
<td>147</td>
<td>86</td>
<td>19</td>
<td>0</td>
<td>252</td>
<td>9.1%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>PT</strong></td>
<td>40</td>
<td>111</td>
<td>19</td>
<td>0</td>
<td>170</td>
<td>6.1%</td>
<td>77%</td>
</tr>
<tr>
<td><strong>DE</strong></td>
<td>39</td>
<td>68</td>
<td>35</td>
<td>2</td>
<td>144</td>
<td>5.2%</td>
<td>82%</td>
</tr>
<tr>
<td><strong>RO</strong></td>
<td>50</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>69</td>
<td>2.5%</td>
<td>85%</td>
</tr>
<tr>
<td><strong>BG</strong></td>
<td>54</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>67</td>
<td>2.4%</td>
<td>87%</td>
</tr>
<tr>
<td><strong>AT</strong></td>
<td>29</td>
<td>13</td>
<td>13</td>
<td>0</td>
<td>55</td>
<td>2.0%</td>
<td>89%</td>
</tr>
<tr>
<td><strong>HU</strong></td>
<td>35</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>45</td>
<td>1.6%</td>
<td>91%</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>4</td>
<td>32</td>
<td>3</td>
<td>0</td>
<td>39</td>
<td>1.4%</td>
<td>92%</td>
</tr>
<tr>
<td><strong>CZ</strong></td>
<td>13</td>
<td>22</td>
<td>1</td>
<td>0</td>
<td>36</td>
<td>1.3%</td>
<td>94%</td>
</tr>
<tr>
<td><strong>BE</strong></td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>0</td>
<td>26</td>
<td>0.9%</td>
<td>95%</td>
</tr>
<tr>
<td><strong>SI</strong></td>
<td>17</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>25</td>
<td>0.9%</td>
<td>95%</td>
</tr>
<tr>
<td><strong>NL</strong></td>
<td>12</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>23</td>
<td>0.8%</td>
<td>96%</td>
</tr>
<tr>
<td><strong>SK</strong></td>
<td>8</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>22</td>
<td>0.8%</td>
<td>97%</td>
</tr>
<tr>
<td><strong>CY</strong></td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>14</td>
<td>0.5%</td>
<td>98%</td>
</tr>
<tr>
<td><strong>LU</strong></td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td>14</td>
<td>0.5%</td>
<td>98%</td>
</tr>
<tr>
<td><strong>PL</strong></td>
<td>0</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td>12</td>
<td>0.4%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>DK</strong></td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>0.3%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>LT</strong></td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0.3%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>IE</strong></td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>0.3%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>FI</strong></td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>0.2%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>SE</strong></td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>0.2%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>MT</strong></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0.1%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>LV</strong></td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0.1%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>EE</strong></td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.0%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1 560</td>
<td>867</td>
<td>337</td>
<td>4</td>
<td>2 768</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>% total</td>
<td>56.40%</td>
<td>31.30%</td>
<td>12.20%</td>
<td>0.10%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^{88}\) European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
3.2.1 Sales value of products under GI (all schemes)

In 2010 the estimation of sales value of GI products was €54.3 billion. The portion of this value accounted for by wines was (56%), by agricultural products and foodstuffs (29%), with spirits representing 15% and aromatised wines 0.1% as you could see in the tables 2 & 3 below.89

Table 2: Sales value by scheme in the EU 27 between 2005 and 2010 (M€)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>% 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wines</td>
<td>27 963</td>
<td>28 900</td>
<td>30 884</td>
<td>31 363</td>
<td>29 025</td>
<td>30 376</td>
<td>55.9%</td>
</tr>
<tr>
<td>Agri. prod. and foodstuffs</td>
<td>13 284</td>
<td>13 457</td>
<td>13 891</td>
<td>14 238</td>
<td>14 525</td>
<td>15 790</td>
<td>29.1%</td>
</tr>
<tr>
<td>Spirits</td>
<td>7 168</td>
<td>7 555</td>
<td>8 101</td>
<td>7 793</td>
<td>7 126</td>
<td>8 149</td>
<td>15.0%</td>
</tr>
<tr>
<td>Aromatised wines</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>48 446</td>
<td>49 943</td>
<td>52 907</td>
<td>53 425</td>
<td>50 707</td>
<td>54 346</td>
<td>100%</td>
</tr>
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</table>

Table 3: Evolution of the sales value by category in the EU27 between 2005 and 2010

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</thead>
<tbody>
<tr>
<td>Wines</td>
<td>3%</td>
<td>7%</td>
<td>2%</td>
<td>-7%</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Agri. prod. and foodstuffs</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>-2%</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>Spirits</td>
<td>5%</td>
<td>7%</td>
<td>-4%</td>
<td>-9%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Aromatised wines</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>3%</td>
<td>6%</td>
<td>1%</td>
<td>-5%</td>
<td>7%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The leading destination country with €3.4 billion of imports of EU GI products was the United States, (GIIs represented by 30% of total food and beverages imports from the EU). The next three countries that followed USA were Switzerland, Singapore and Canada, with €839 million, €829 million and €729 million respectively.90

In the period 2005-2010, the total structure of trade was almost stable with domestic market remaining the most significant one for GI products with

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89 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
90 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
60.1% of the total sales value, while intra-EU trade reached 20.4% and extra-EU trade 19.5%.\textsuperscript{91}

**Figure 1:** Sales value of GI products by destination in 2010.

There is a significant difference between MS considering the share of national GI in the national food and drink industry (see figure 2)\textsuperscript{92}:

1. In France the Gi sector represented by 14.5% of the food and drinks sector, due to the large share of its vineyard under PDO
2. The share of GI in Italy; Portugal; Greece was nearly 10%.
3. Three other countries with significant GIs were Austria, Hungary, UK and Slovenia.

Figure 2 shows, that Greece has a higher share of GI products than average in the EU. This means that such products are more significant for the Greek economy than average.

\textsuperscript{91} European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012

\textsuperscript{92} European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
3.3 Agricultural products and foodstuffs in Member States

3.3.1 Sales value by product category

In 2010, the overall sales value of agricultural products and foodstuffs with GI indications was €15.8 billion. Cheeses (39%), meat products (20%) and beers (15%) possessed the majority of the EU sales value. Moreover, fresh meat and fruit & vegetables represented respectively 8% and 6% correspondingly. Other products that possessed less than 1% were other products of animal origin, pasta, natural gums and resins, hay and essential oils.\(^93\)

\(^{93}\) European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
3.3.2 Cheese

In 2010, the approximate sales value of GI cheeses in the EU 27 was €6.3 billion and the sales volume was 866,000t. This represented 10% of the EU production. Italy, France and Greece possessed 90% of GI cheeses’ sales value and 88% of sales volume:

1. Italy: mainly Grana Padano and Parmigiano Reggiano.
2. France: Comté, Roquefort and Reblochon accounted for 38% of French GI cheeses’ sales value (40% of sales volume).

In Greece, the GI cheese sector was the most significant regarding the share of the national cheese market. In 2006, GI cheeses reached their peak and they represented 70% of the national cheese production, but due to the increase of the national cheese sector (by 34%) between 2005 and 2010, the percentage was decreasing and in 2010 GI cheeses were the 54% of the national cheese production.94

3.3.3 Meat products

In 2010, the sales value of the of meat products with GIs (in the EU 27) was estimated €3.2 billion. In this category cured meat counted for 74% of sales value and 62% of sales volume and cooked meat counted for 26% of sales value and 38% of sales volume.95

3.3.4 Beer

Germany, the Czech Republic and the United Kingdom are the Member States that produce beers under GI. The significant percentage of 95% of the sales value of this sector is represented by Germany with 12 beers under GI.96

94 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
95 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
96 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
3.3.5 Fruit, vegetables and cereals

The sales value of fruit, vegetables and cereals under GI in the EU 27 in 2010 was estimated to €978 million and the sales volume to 922 500t. The most important category with 84% of the sales volume and 65% of the sales value was fruit. Italy and France were the main MS in this sector with 34% and 20% respectively. Next came the United Kingdom and Spain.\(^97\)

3.3.6 Fresh fish, molluscs and crustaceans

In this sector the United Kingdom and France although they had a limited number of GIs, they were the most important countries with 88% of the sales volume and more than 90% of the sales value. Spain, Ireland and the Czech Republic accounted for percentages between 1 and 8% of the sales volume and between 1 and 5% of the sales value. The smallest rates regarding to this sector (less than 1% each of the sales volume and value) were represented by three Member States; Germany, Greece and Italy.\(^98\)

3.3.7 Olive oil

The olive tree (Olea europea L.) is among the oldest cultivated plants in the world. Mediterranean countries produce 98% of the global production of olive oil, which means approximately 2.5 million tonnes per year. Greece is ranked in the third position in olive oil production (after Spain and Italy) and the total number of olive trees is around 130 million, of which 112 are compact olive groves, producing, annually, about 350,000 tons of olive oil.\(^99\)

Trends and prospects of Greek PDO and PGI olive oils

In Greece, there are 28 types of olive oils as a PDO or PGI. The fact that all of these are being produced within the country, illustrates the high

\(^{97}\) European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012

\(^{98}\) European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012

\(^{99}\) Quarterly publication of Greek agricultural Agency – Dimitra. Volume 3, July-August-September 2013
degree of diversification of the domestic production. The domestic consumption is one of the highest in the world and absorbs most of the domestic production. Only about 20% of the total domestic production reaches at the standardization level, while the corresponding figures for Spain and Italy are 50% and 75%.

Although the position of Greek branded olive oil on the domestic market is excellent, it lacks access to international markets, so that the opportunities to earn value-added from exports are limited. According to several studies, the Greek branded olive oil has not a satisfactory presence in foreign markets. The first position in this category belongs to the Italian olive oil, which is followed by the Spanish (with increasing trends). The fact that 37% of the total Greek production is exported in bulk mainly to Italy (about 85%), is a significant loss of revenue from the added value that a standardized product has. Moreover, according to McKinsey’s report (2013), the surplus value that Greece loses is 1 euro per kilo, which is being exploited by Italy after exporting the olive oil again in a packed form. At the same time, the capacity of the standardization units is large (theoretically exceeds the total olive oil production of the country) but due to market conditions and the low penetration in foreign markets, has very low utilization rate of potential. However, the contribution of olive oil in total exports of Greece is important.

Foodstuffs with high quality and nutritional value, like the Greek PDO/PGI olive oils, have the potential to achieve increased demand, higher prices, higher incomes and therefore international competitiveness. And let's not forget that we are talking about a place where the legislative framework for the certified food and the proper labeling has a history of 2,500 years as evidenced by a marble inscription found at 425 BC (museum of Thassos) «…ως δ’ αν εμ πιθας οίνων πρήται την ωνήν κυρίην είναι, αν τος πιθος σημήνηται» which means: «… for anyone who buys wine in jars, purchase is valid if the jars are labeled» (Law for certification of wine in ancient Greece in 425 BC).100

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100 Quarterly publication of Greek agricultural Agency – Dimitra. Volume 3, July-August-September 2013
3.3.8 Other agricultural products and foodstuffs

Apart from the above mentioned categories – which are the most important – there are also other classes of agricultural products and foodstuffs like: Bread, pastry, cakes, confectionary, biscuits, essential oils, hay, mustard paste, natural gums and resins, natural mineral & spring waters, product of animal origin (eggs, honey, etc.), other products of the Annex I of the Treaty (spices, etc.) and pasta.

The leading products of this category were: German biscuits and mineral waters, Italian vinegars and French butter, pasta and ciders. At the same time, Spain, the Czech Republic, the United Kingdom, Greece and Sweden each accounted for less than 9% of the sales value of this category while Poland, Belgium, Portugal, Cyprus, Finland, Slovakia and Austria each represented less than 1% of the sales value.  

3.3.9 Extra data about Greek Geographically Indicated products:\textsuperscript{102}:

Registered names in Greece and distribution of them according to product type:

The registered names of Geographically Indicated foodstuffs involve 97 products (70 PDO products and 27 PGI products)\textsuperscript{103} of which:

27 Olive Oils (16 PDO and 11 PGI)

21 cheeses (all of them are PDO)

29 fruits-vegetables-nuts (15 PDO and 14 PGI)

11 table olives (10 PDO and 1 PGI)

2 meats (PDO)

7 Other foodstuffs (6 PDO and PGI 1)

\textsuperscript{101} European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012

\textsuperscript{102} This data was obtained by Agrocert during the expert interviews

\textsuperscript{103} This data is for 2012. Right now there are 101 GI foodstuffs
For the following GI products no interest (applications) has been expressed by companies until now, despite the written notification to rural cooperatives and organizations from both competent ministry and Agrocert:

<table>
<thead>
<tr>
<th>Olive Oils</th>
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<tbody>
<tr>
<td>1</td>
<td>Κεφαλονιά (Kefalonia)</td>
</tr>
<tr>
<td>2</td>
<td>Σάμος (Samos)</td>
</tr>
<tr>
<td>3</td>
<td>Άγιος Μαθαίος Κέρκυρας (Agios Mathaios Kerkyras)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Olives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Θρούμπα Χίου (Throumpa Chiou)</td>
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</table>

<table>
<thead>
<tr>
<th>Fruits –Vegetables – Nuts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Κούμ Κουάτ Κέρκυρας (Coum couat Kerkyras)</td>
</tr>
<tr>
<td>2</td>
<td>Φυστίκι Μεγάρων (Fistiki Megaron)</td>
</tr>
<tr>
<td>3</td>
<td>Πορτοκάλια Μάλεμε Χανίων Κρήτης (Oranges Maleme Chanion Crete)</td>
</tr>
<tr>
<td>4</td>
<td>Φασόλια γίγαντες ελέφαντες Κάτω Νευροκοπίου (Fasolia gigantes Kato Neurokopiou)</td>
</tr>
<tr>
<td>5</td>
<td>Φασόλια κοινά μεσόσπερμα Κάτω Νευροκοπίου (Fasolia koina Kato Neurokopiou)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cheeses - Other</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ξύγαλο Σητείας (Ksigalo Sitias)</td>
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</table>

3.4 Sales value by Member State

In total, the estimation for the sales value of agricultural products and foodstuffs under GI was €15.8 billion in 2010. Italy, Germany and France were the three countries that obtained 78% of the total sales value.

At the same time Spain, Greece and Portugal gathered only 11.5% of sales value for 38% of the GIs.\(^{104}\) Also, it’s worthy to mention that companies producing PDO and PGI products are mainly Small and Medium Enterprises (SMEs).\(^{105}\)

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\(^{104}\) European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012

\(^{105}\) Belletti G. Et al. (2007): “ The roles of geographical indications (PDO and PGI) on the internationalisation process of agro-food products”, University of Florence, Italy
To get insight in the significance of sales value per GI, we use the ratio % sales value / % number of GIs for each country. Then we will able to compare the percentage of sales value (of GI foodstuffs) that a country possess in EU with the percentage of GIs’ number that the same country produce. With this ratio we can assess to what extent the GI foodstuffs of each country are exploited economically or more simply we could see if the number of GIs in a country is in line with the sales value of these products. From the above mentioned figure, after comparing the percentages we have the following numbers: The ratio in Germany is 2.62, in UK 1.75, in Italy 1.72 and in France 1 while at the same time the ratio in Greece is 0.5, in Spain 0.4 and in Portugal only 0.038. It is obvious that countries like Germany, UK and Italy achieve to be more profitable than Greece, Spain and Portugal.

3.4.1 Importance of GI products (all schemes) in Greece

Greece was placed in the 7th position among the 27 EU MS in the sales of GI products on 2010. The Greek GI products mainly consist of cheese (around three quarters), wine (less than 20%), spirits (less than 10%) and
olive oil (less than 5%). **Regarding the total sales value, Feta cheese is the most important Greek GI product.** The significance for value-added is vested in the fact that GI agricultural products and foodstuffs are increasing since 2005 and also is by far the most populous category (in absolute number) compared with the other two categories (table 4).

**Table 4:** Greek GI sales value by scheme (M€).

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</thead>
<tbody>
<tr>
<td>Wines</td>
<td>210</td>
<td>227</td>
<td>301</td>
<td>222</td>
<td>188</td>
<td>203</td>
<td>19%</td>
<td>-3%</td>
</tr>
<tr>
<td>Agri. prod. &amp; food.</td>
<td>610</td>
<td>618</td>
<td>606</td>
<td>622</td>
<td>711</td>
<td>753</td>
<td>71%</td>
<td>23%</td>
</tr>
<tr>
<td>Spirits</td>
<td>69</td>
<td>93</td>
<td>90</td>
<td>84</td>
<td>120</td>
<td>102</td>
<td>10%</td>
<td>48%</td>
</tr>
<tr>
<td>Total</td>
<td>888</td>
<td>939</td>
<td>997</td>
<td>929</td>
<td>1 019</td>
<td>1 058</td>
<td>100%</td>
<td>19%</td>
</tr>
</tbody>
</table>

**Identification of barriers that prevent value added in GI foodstuffs in Greece**

As we calculated before, the ratio % sales value / % number of GIs in Greece is low compared with other countries. That means that several barriers exist and the GI market in Greece is not so profitable.

**3.4.2 Cost Differences between PDO and non-PDO products**

As indicated earlier, cost differences might explain the relative low net value-added of Greek GI-products. Sometimes consumers value more the brand of the product instead of the PDO label. A study based on the French Brie cheese industry, which contains both PDO and non-PDO products took place. From a production technology point of view, the main difference between the manufacturing of PDO Brie and non-PDO Brie is that the PDO is done with exclusively manual techniques while the other not. Having this in mind, the study showed us the following things:

- The PDO Brie producers faced an extra production cost because of the technological limitations that the PDO recipe required (manual
techniques took place). That means that the manual labour-intensive technology amplified the expenses of PDO Brie production.

- At the same time, according to an evolution chart of Brie production, the total production of PDO Brie remained almost the same while on the other hand, the non-PDO Brie production was always increasing as years were passing by.

- Furthermore, in the same article it is stated that non-PDO producers have a larger production capacity. Also, non-PDO producers have a bigger amount of employees and achieve a lower average cost, but it should be mentioned that although PDO producers have a higher average cost of production, they sell their products at a higher wholesale price on average.106

The drawbacks of PDO foodstuffs according to the article from Brie cheese industry are not actual drawbacks for GI foodstuffs, as they could not apply to them due to different philosophy. The philosophy of GI foodstuffs is not consistent with the profit maximization and the perceptions of modern economy. The philosophy of GI foodstuffs is different. The European Parliament and the Council of the European Union, when they were regulating GI foodstuffs (Reg. 1151/2012), they had in mind several things like the following107:

“Operating quality schemes for producers which reward them for their efforts to produce a diverse range of quality products can benefit the rural economy. This is particularly the case in less favoured areas, in mountain areas and in the most remote regions, where the farming sector accounts for a significant part of the economy and production costs are high.”

106 Benitez D. et al. (2005): “PUBLIC LABELING REVISITED: The role of technological constraints under protected designation of origin regulation”, Paper prepared for presentation at the Congress, ’The Future of Rural Europe in the Global Agri-Food System’ (European Association of Agricultural Economists), Copenhagen

107 Recitals 2,4 and 23 of the Reg. 1151/2012
“aimed at protecting the natural resources or landscape of the production area or improving the welfare of farm animals”

“Citizens and consumers in the Union increasingly demand quality as well as traditional products. They are also concerned to maintain the diversity of the agricultural production in the Union. This generates a demand for agricultural products or foodstuffs with identifiable specific characteristics, in particular those linked to their geographical origin.”

Moreover, the majority of the registered PDO foodstuffs are processed goods (cheese, meat, etc.), that require the use of agricultural raw materials. The quality of the final GI foodstuff, depended on both agricultural product and processing procedure. For this reason, farmers and processing firms get involved in the certification process. Moreover, value could be added to the entire production chain by the GI label.\textsuperscript{108}

3.5 Value premium of GI products

In general, GI products were sold 2.23 times higher (on average) than the same quantity of non-GI products\textsuperscript{109}. That means that the average value premium rate in the EU 27 for GI products was 2.23. In figure 4 are depicted the value premium rates for the 3 schemes\textsuperscript{110}.

\textsuperscript{108} Zohra Bouamra-Mechemache and Jianyu Yu (2011): “Quality Choice, Competition and Vertical Relationship in a Market of Protected Designation of Origin”, Toulouse School of Economics (Gremaq, INRA)

\textsuperscript{109} * According to the article, Value premium = Σ (GI volume x GI price) - Σ (GI volume x non GI price) and Value premium does not reflect value added and profitability of the GI schemes because it does not take into account the economic impacts of compliance with GI specifications.

\textsuperscript{110} European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
At the same time, it was noticed that between PDO and PGI foodstuffs, the PDO percentage premium was higher than PGI’s. This was expected, on the grounds that PDO’s production is more demanding than PGI’s.\(^{111}\)

In figure 5 are depicted the value premium rates within the agricultural products and foodstuffs scheme.\(^{112}\)

As we can see, meat products (whose sales value accounted for 20% of the sales in agricultural products and foodstuffs scheme) have the highest average value premium rate, which is 1.80 and with the value premium rate of 1.79 olive oils come to the second place. Beers’ and cheeses’ rates are close to average (1.55), while the other products have smaller value premium rates.


\(^{112}\) European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
Here, we should point out that cheese, which is the most important sector in terms of EU sales value (40% of agricultural and foodstuffs scheme sales value), has a value premium rate of 1.59 which although is close to the average of agricultural products and foodstuffs, still is much more lower compared with the average rate of all schemes. Geographical Indicated cheeses from Italy, France and Greece accounted for 90% of the EU sales value in GI cheese sector and Greece alone, accounted for 11% in the total sales value of cheeses under GI. The value premium rate of Greek cheese was 1.32. The average non-GI price (source: Greek agriculture Ministry and COMEXT) was higher than the Italian and French ones; but the average GI price was lower.\textsuperscript{113} As it is conceivable, due to ¾ of the total sales of Greek GI products are cheeses (and feta is by far the first), this could also be an explanation for relatively low value-added in GI Greek products.

In some mountain regions, dairy farmers have a tendency in cheese production with characteristic product quality schemes on the basis of localised agro-food systems (LAFS). As far as the milk production price is concerned, such initiatives have shown variable success. On the one hand, PDO Comté in France, PDO Gruyère in Switzerland and PDO Parmigiano Reggiano in Italy are some of the success stories, but on the other hand some others not only did not show any advantage (e.g. PDO Cantal) but at the same time they had among the lowest prices for raw milk at farm level.\textsuperscript{114}

Finally it's useful to see the value premium rates of products with minor importance (table 5). As we could notice, they have heterogeneity (from 1.29 to 2.96). With a close look at table 5 and figure 6, we could say that processed products have higher rates compared to raw products.\textsuperscript{115}

\textsuperscript{113} European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012

\textsuperscript{114} Jeanneaux Ph. et al. (2010): “Raising rivals’ costs strategy: test on two LAFS in Europe”, PAPER PREPARED FOR THE 116TH EAAE SEMINAR "Spatial Dynamics in Agri-food Systems: Implications for Sustainability and Consumer Welfare", Parma (Italy)

\textsuperscript{115} European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
In Greece, apart from cheeses which could be considered as processed products, most of the other GI foodstuffs are raw (olives, fruits, vegetables, herbs) and the olive oil which could not considered as a processed foodstuff. This contributes to a smaller premium rate in Greece compared with other countries which have more processed GI foodstuffs and consequently is another reason that affects negatively the ratio % sales value / % number of GIs.
3.6 Why do Greek GI-products create less value compared to EU in total?

It appears that Greek GI-products create less to value-added than their European counterparts. Tentatively, several causes may be mentioned, which in the remainder of this thesis have to be studied more intensively. From the previous analysis it follows that:

- Greek protected products with GIs are consumed more regionally, and less exported than is the case with other GI-countries;
- The low “sales/number of Gi’s” indicator signals that total sales per GI is relatively low, which can be explained by the limited scale of production outlets.

Other factors that could contribute to the relative low contribution of protected GIs to the created value in the economy are the following:

- Consumers might not be willing to pay extra/buy extra for/of a GI-product because they focus on low price instead of high quality (especially this period of the financial crisis);
- Consumers don’t trust the official controls in this kind of foodstuffs and since food have credence characteristics, finally consumers don’t buy them.

According to an article\textsuperscript{116} about the effectiveness of PDO labeling and its acceptance by consumers in Greece, the results indicated that although consumers consider PDO labels positively, for which they are willing to pay a premium price, higher than that for a commercial indication, however, the existence of the PDO label compared to price is only important for certain buyers. A possible explanation for that could be the fact that consumers are not totally aware of the value-added of these foodstuffs or the fact that due to the bad financial situation of the country although people are aware for the

advantages of these foodstuffs, still they are not willing to pay a premium. We will investigate this through the questionnaires to consumers (in chapter 4).

Another probable reason for which Greek consumers do not buy or pay for GI foodstuffs, could be the low visibility of the GI symbols (logos). As it is indicated above, certain segments of the buyers consider PDO label as more important compared to the price. But even this category of buyers, if they are not able to identify the GI symbol on the label, consequently they will not buy the GI foodstuff.

Moreover, in specific products the costs of raw materials are high (for example due to low availability of raw materials) and the compliance with the GI regime adds an extra cost to the final product. So, in certain cases it’s inevitable that costs of GI products are high for the Greek consumers (having in mind also that the country suffers from a financial crisis). So, high costs of GI-production may explain low profit levels of food business involved in it.

3.6.1 Consumers’ awareness on PDO and PGI products

One of the factors that might explain the relatively low value-added of Greek GI-products is the lack of consumers’ awareness. The significance of this factor is elaborated upon in this subsection.

According to a survey that took place\textsuperscript{117} at the consumer level (at the shop location), respondents seems to perceive PDO beef as of higher overall quality compared with the two other types of beef. Moreover, respondents assessed PDO beef as better than the other beef types for nearly all the sensory attributes (taste, tenderness, juiciness).

In another study that took place in 6 European countries\textsuperscript{118} (Belgium, France, Italy, Norway, Poland and Spain), two thirds (68.1\%) of the total sample stated to be aware of PDO, whereas the reported awareness of PGI and TSG was 36.4\% and 25.2\% respectively. French, Italian and Spanish consumers were significantly more aware of PDO, whereas relatively few

\textsuperscript{117} Banović M. et al. (March 2010): “Are consumers beef quality perceptions in accordance with objective beef quality?”, The 84th Annual Conference of the Agricultural Economics Society, Edinburgh

Belgian, Norwegian and Polish consumers claimed to be aware of PDO. In countries with a robust tradition with the quality scheme of Geographical Indications, consumers seem to be aware about Geographical Indications and especially of PDO foodstuffs. Another interesting fact, related to socio-demographics, is that a higher awareness is reported among men and older consumers for each of the 3 quality schemes.

In order to have a better image about the barriers to earning value-added in GI foodstuffs, several questions related to that will be asked in the questionnaires in chapter 4. The problem of limited exports is further substantiated in the next subsection.

3.6.2 Exports of agricultural products and foodstuffs

Regarding to the sales markets, PDO/PGI agricultural products and foodstuffs are mostly sold in their national markets (78% of sales) as we could see in figure 7 below.

Figure 7 – Extra-EU exports of GI in agricultural products and foodstuffs scheme by destination (2010)

\[119\] European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
Due to the fact that the majority of the GI production intended to domestic market we could considered it as another reason that affects the small ratio (% sales value / % number of GIs) in Greece. The salaries and in general the cost of living is lower in Greece compared with the west Europe. GI products are not an exception in that and consequently their sales value are lower comparing with similar Geographically Indicated foodstuffs of other countries. So, even if Greece, analogically according to the cost of living, had the same profit from the sales of GI foodstuffs, still the absolute number in the sales of value would have been smaller.

Table 6: Extra-EU exports of GI in agricultural products and foodstuffs scheme by MS (2005 and 2010) in M€

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th></th>
<th></th>
<th>2010</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total sales</td>
<td>Extra-EU</td>
<td>% Extra-EU</td>
<td>Total sales</td>
<td>Extra-EU</td>
<td>% Extra-EU</td>
</tr>
<tr>
<td></td>
<td>market</td>
<td>exports</td>
<td>exports</td>
<td>market</td>
<td>exports</td>
<td>exports</td>
</tr>
<tr>
<td>Italy</td>
<td>4 735</td>
<td>320</td>
<td>7%</td>
<td>5 982</td>
<td>629</td>
<td>11%</td>
</tr>
<tr>
<td>Germany</td>
<td>3 029</td>
<td>66</td>
<td>2%</td>
<td>3 375</td>
<td>96</td>
<td>3%</td>
</tr>
<tr>
<td>United</td>
<td>1 134</td>
<td>60</td>
<td>5%</td>
<td>1 059</td>
<td>91</td>
<td>9%</td>
</tr>
<tr>
<td>Kingdom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>796</td>
<td>29</td>
<td>4%</td>
<td>869</td>
<td>50</td>
<td>6%</td>
</tr>
<tr>
<td>Czech</td>
<td>72</td>
<td>6</td>
<td>8%</td>
<td>187</td>
<td>41</td>
<td>22%</td>
</tr>
<tr>
<td>Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>610</td>
<td>31</td>
<td>5%</td>
<td>753</td>
<td>40</td>
<td>5%</td>
</tr>
<tr>
<td>France</td>
<td>2 416</td>
<td>23</td>
<td>1%</td>
<td>3 045</td>
<td>21</td>
<td>1%</td>
</tr>
<tr>
<td>Denmark</td>
<td>99</td>
<td>15</td>
<td>15%</td>
<td>106</td>
<td>16</td>
<td>15%</td>
</tr>
<tr>
<td>Austria</td>
<td>112</td>
<td>8</td>
<td>7%</td>
<td>139</td>
<td>10</td>
<td>7%</td>
</tr>
<tr>
<td>Portugal</td>
<td>59</td>
<td>9</td>
<td>15%</td>
<td>73</td>
<td>10</td>
<td>14%</td>
</tr>
<tr>
<td>Others</td>
<td>223</td>
<td>3</td>
<td>1%</td>
<td>202</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td><strong>13 284</strong></td>
<td><strong>570</strong></td>
<td><strong>4%</strong></td>
<td><strong>15 790</strong></td>
<td><strong>1 007</strong></td>
<td><strong>6%</strong></td>
</tr>
</tbody>
</table>

At the same time, the exports of Greece to Extra-EU countries, not only remains stable between 2005 and 2010, but also Greece has one of the smallest percentages in this category.

As we could see in figure 8, cheeses accounted for almost half of the total sales value of the Extra –EU exports.120

Figure 8: Extra-EU export by class in the agricultural and food scheme (2010)

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120 European Commission, “Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI)”, Final report, October 2012
United States was the country where almost half of extra-EU exports of PDO/PGI agricultural products and foodstuffs (€480 million) went to. The next three countries were Switzerland (€114 million), Canada (€65 million), and Japan (€42 million).

According to Mora (2007)\textsuperscript{121}, two interesting reasons that probably have an influence on sales of GI foodstuffs abroad are the following:

Firstly, it was noticed that the main consumption regions of GI products overseas are places where host large amount of immigrants from the country that produce this specific GI foodstuff. Secondly, the most popular regions to tourists (from the country that produce the GI foodstuff) are among the regions with the most exported products. For example, it's not accidental the fact that from Italy, PGI Tuscan olive oil, Pecorino Romano PDO cheese and Terre di Siena PDO olive oil, all come from Tuscany which is one of the most popular regions to tourists.

\textsuperscript{121} Cristina Mora (2007): “International Marketing and Trade of Protected Designation of Origin Products”, University of Parma, Italy
3.7 Benefits of Geographically Indicated foodstuffs according to the European Commission

After the comparison between GI and non-GI products, it is obvious that Geographically Indicated foodstuffs offer a range of advantages to several stakeholders\textsuperscript{122}.

**Consumer benefits**

- Quality assurance: it’s a guarantee for the consumer that he’s buying a genuine product with certain qualities

**Producer benefits**

- **Open system:** the use of the GI name is **open to all producers** complying with the product specification (contrary to the trade mark system limiting the use of a trade mark name to the owner of the trade mark)
- **Fair competition:** only producers that comply with the product specification can use the name
- **Protection:** the use of the name on the market is being controlled by each Member State’s competent authorities
- **Price premium:** according to studies, GI products are sold (in average) 2.23 times higher than comparable non-GI products
- **Promotion:** EU promotion funds for quality products, will be considered as a benefit for GI producers

**Societal benefits**

- **Link of valuable products with rural areas:** production cannot take place in another area
- **Reconnection between consumers and producers**
- **Protection of tradition**

**Environmental benefits**

Connection of traditional products with landscapes and cultivation systems

As it is conceivable, the benefits of GI products to producers made them very appealing for frauds. For this reason, the competent authorities of each member state should be vigilant and they should control the whole system as much as possible.

Synopsis: In this chapter, according to related literature, a description on the markets for GI products took place. The market for GI-products in the EU was described in general, with special attention to the relative position of Greek PDO and PGI. It could be observed that the premium that is harvested by Greek producers is relatively low, compared to their counterparts abroad. One of the factors that explains this, is the local sales and meagre exports of GI-products by Greek companies. Also the relatively small scale of production is a contributing factor. High costs of production can be regarded as a negative factor affecting profitability of businesses selling GI-products. Other influential factors could be isolated on the basis of existing literature, like consumer awareness and the cost effects of official controls.

In the following chapter (ch. 4) through questionnaires and interviews we will investigate the impressions on the factors affecting value-added of GI products from the perspective of Greek consumers and consumer organisations, Greek producers and Greek authorities. So, in the next chapter we will try to assess if the data of Greek stakeholders are in accordance or not with the identified factors and preliminary conclusions in this descriptive chapter 3.
Chapter 4: Stakeholder analysis: an empirical review

**Preamble:** In the previous chapter (ch. 3) a description was provided of the GI market in general and of the position of Greece in it in particular. In this chapter, we investigate the impressions stakeholders have of the factors that influence harvesting value-added connected to GI foodstuffs in Greece. More specifically, we look into the perceptions of consumers, food businesses and authorities and try to understand the determining factors for the creation of value. In order to achieve that, we designed two questionnaires; one for consumers and one for the food businesses. At the same time, we conducted expert interviews with a Greek competent authority (Agrocert) to ascertain that our empirical findings are valid. Finally, we check whether our tentative impression about determining factors of value-added is correct, to see where policy makers could intervene to improve the system (chapter 5).

### 4.1 Methods – operationalization of the study

In order to answer sub-questions 4, 5 and 6 we created two different questionnaires. The first questionnaire was submitted to both consumer associations and random consumers and the second questionnaire was sent to Food Business Operators.\(^{123}\)

For the creation of both questionnaires we not only took into consideration the existing literature, but also the guidance of experts in the field (people who work in the control entity, people who work on applications for registration and producers of PDO/PGI products). In the below mentioned table (table 7), there are listed the questions asked and connected them to the research questions 4, 5 and 6.

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\(^{123}\) Both questionnaires could be found in annex 4.1.1
Table 7 (Research variables operationalisation)

<table>
<thead>
<tr>
<th>point in the literature</th>
<th>chapter of the thesis</th>
<th>question to which it contributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>definition of Geographical Indication</td>
<td>2.1</td>
<td>q.3 of questionnaire 1</td>
</tr>
<tr>
<td>are GI products special</td>
<td>2.1</td>
<td>q.8 of questionnaire 1</td>
</tr>
<tr>
<td>GI products offer reliable information to consumers</td>
<td>2.2</td>
<td>q.4, q.5 and q.6 of questionnaire 1/q.11, q.12 and q.13 of questionnaire 2</td>
</tr>
<tr>
<td>value-adding attributes of GI foodstuffs</td>
<td>2.2</td>
<td>q.1 and q.9 of questionnaire 1/q.10 of questionnaire 2</td>
</tr>
<tr>
<td>cultural and gastronomic heritage of GI foodstuffs</td>
<td>2.2</td>
<td>q.12 of questionnaire 1/q.14 of questionnaire 2</td>
</tr>
<tr>
<td>GI foodstuffs help in the maintenance of EU agricultural diversity</td>
<td>2.2</td>
<td>q.12 of questionnaire 1/q.14 of questionnaire 2</td>
</tr>
<tr>
<td>GI products should be correctly identified on the marketplace</td>
<td>2.2</td>
<td>q.4 and q.5 of questionnaire 1</td>
</tr>
<tr>
<td>Reward of producing in less favoured areas</td>
<td>2.2</td>
<td>q.3, q.4 and q.7 of questionnaire 2</td>
</tr>
<tr>
<td>Requirements for application and procedures for registration</td>
<td>2.3</td>
<td>q.1, q.2, q.8 and q.15 of questionnaire 2</td>
</tr>
<tr>
<td>How effective the official controls are</td>
<td>2.5</td>
<td>q.7 of questionnaire 1/q.16 of questionnaire 2</td>
</tr>
<tr>
<td>Traceability on GI products</td>
<td>2.6</td>
<td>q.17 and q.18 of questionnaire 2</td>
</tr>
<tr>
<td>Structure of trade for GI products</td>
<td>3.2</td>
<td>q.5 and q.6 of questionnaire 2</td>
</tr>
<tr>
<td>Cost differences between GI and non-GI products</td>
<td>3.5</td>
<td>q.2 and q.10 of questionnaire 1/q.10 of questionnaire 2</td>
</tr>
<tr>
<td>Value premium of GI products</td>
<td>3.6</td>
<td>q.8 of questionnaire 1/q.9 and q.10 of questionnaire 2</td>
</tr>
<tr>
<td>EU Commission consider GI foodstuffs as genuine</td>
<td>3.7</td>
<td>q.13 of questionnaire 1</td>
</tr>
<tr>
<td>EU Commission consider that GI foodstuffs protect the tradition</td>
<td>3.7</td>
<td>q.11 and q.12 of questionnaire 1/q.14 of questionnaire 2</td>
</tr>
</tbody>
</table>

The questionnaires were created with Google Drive and all the detailed procedures about designing the questionnaires, sharing the questionnaires, exporting the data and processing the data, can be found in the annex 4.1.2.

4.2 Greek consumers’ perception on value-added of GI foodstuffs

In order to investigate the Greek consumers’ perception of the value of GI-products in an efficient and effective way, we created a survey questionnaire (called questionnaire 1). It was submitted to both consumers and consumer associations. Specifically, 310 consumers and 12 consumer associations took part in this survey. Although the number of consumers (310) that participated in the survey was significant, we tried to get a more reliable result by asking for the opinion of consumer associations (located throughout
the country). At the same time, we wanted to investigate potential differences in perception on value-added between consumers and consumer associations, so a comparison between their answers was performed.

Below are presented the diagrams (with percentages) with the responses from the 310 different consumers. After the diagrams, short explanations with the most important findings that we could generate will take place.

### 1. To what extent does the quality of food affect your decision to buy them?

- **Very Much**: 38%
- **Much**: 50%
- **Moderately**: 11%
- **Little**: 1%
- **Not At All**: 0%

The question 1 above shows that to a major extend consumers perceive quality as a decisive factor to buy the product (88% in the range much-very much).

### 2. To what extent does the price of food affect your decision to buy them?

- **Very Much**: 19%
- **Much**: 50%
- **Moderately**: 28%
- **Little**: 3%
- **Not At All**: 0%

The question above shows that the majority of consumers value the price much-very much in making purchasing decisions. So we see that the price/quality ratio will be very important for the buying decision. Since a high price is connected to high quality, it is not evident on beforehand how consumers will choose.
As already indicated the level of awareness of Geographical Indications is a factor to be considered in explaining the value-added. Question 3 shows that 59% are moderately to not-at-all informed what products with GI are.

As far as the question 4 is concerned, consumers seem not to recognise certification marks well on average. 76% say they moderately to not-at all recognise certification marks. Only 8% were very much capable to understand them, while 19% of them are not able to understand the certification marks at all.
From question 5 it follows that the place and print on the labelling might contribute to the low recognition of certification marks.

Next to low recognition, question 6 exemplifies that trust in geographical indications is moderate – absent with consumers. 61% of consumers lack trust to a certain level.
Question 7 shows that one of the factors that influence the lack of trust is official controls, which in the eyes of a majority of the consumers do only moderately – not at all guarantee the quality attributes behind the GIs.

Question 8 shows that 64% of the consumers moderately to not-at-all are influenced by geographical indications in buying a foodstuff. This lack of willingness-to-buy may be connected to the low visibility and the lack of trust in controls.
Question 9 shows that geographical indications are only distinctive in respect of quality attributes for half of the consumers questioned.

In line with the lack of perception of quality of a lot of consumers, also the willingness-to-buy is moderate – not at all. (71%)

The following questions 11, 12 and 13 are supplementary questions which can confirm a certain quality of GI foodstuffs. The traditional production, the extent that GI foodstuffs contribute in the maintenance of tradition and the degree that consumers perceive GI foodstuffs as authentic, could probably affect the value added of these foodstuffs.
Regarding question 11, almost half of the respondents (49%) consider GI foodstuffs as very much/much traditional, whereas 37% consider them from moderately traditional.

The percentage of the respondents who believe that GI foodstuffs could help very much to much in the maintenance of tradition is 67%.

Finally, 56% of those asked believe that GI foodstuffs are from moderately – to not at all authentic. Although GI foodstuffs have already used
by many generations in the Greek cuisine, however a remarkable proportion of respondents did not consider them as traditional or authentic. This indicates the lack of the awareness or the lack of trust from consumers to Geographically Indicated foodstuffs.

Apart from consumers, we gave the same questionnaires to 12 Greek consumers associations. Below are listed their answers with diagrams (percentages) and short explanations:

1. To what extent does the quality of food affect the decision to buy them?

- Very Much: 67%
- Much: 33%
- Moderately: 0%
- Little: 0%
- Not At All: 0%

2. To what extent does the price of food affect your decision to buy them?

- Very Much: 0%
- Much: 67%
- Moderately: 33%
- Little: 0%
- Not At All: 0%
First of all, the associations value price and quality heavier than consumers. In addition, consumer associations seem to be very aware about Geographical Indications (88% know very much/much what a Geographical Indication is). This can be explained by the fact, that they are professionals and they are in contact with GI products more often than the average consumer.

Although 50% of the respondents are very capable in recognition of the certification marks on products with GI, however, none believe that these...
symbols are very remarkable on the label. Moreover, 75% of the respondents believe that remarkability of GI symbols on the labels is moderate.

83% of those asked trust much/very much the Geographical Indications symbols and the same percentage (83%) applies to the respondents who believe that official controls could guarantee adequately the products with Geographical Indications. This is different from the consumers, which on average show a level of lack of trust towards official controls. An explanation could be that consumer associations are better aware of the controls that have been put in place, compared to the less informed average consumer.
Table 8 shows that consumer organisations are much more positive about the value-added potential of GIs that the average consumer is.

Consumer organisations have a very positive idea about the quality attributes of GI-products, possibly because they – as professionals - have insight in the production methods and controls behind the product. This is where consumers have to rely on credence.
In line with the assessment of superior quality, consumer organisations think that consumers are willing to pay much (75%) or moderately (25%) for the product. We conclude that consumer organisations overestimate the positive attitude of consumers towards GI-products.

As far as the quality attributes are concerned in questions 11, 12 and 13 consumer associations tend to overestimate again the traditional production, the extent that GI foodstuffs contribute in the maintenance of tradition and the perception that GI foodstuffs are authentic. As a result the value-added of GI foodstuffs increasing with these quality attributes.

More specifically, 90% of the consumer associations find GI foodstuffs very traditional.

100% of the respondents believe that products with GI could help very much/much in the maintenance of tradition.
And 83% of the respondents find GI foodstuffs very much to much authentic.

Comparison between Greek consumers and Greek consumers associations

Both categories have similarities and differences. First of all, both of them seem to be more affected by the quality than by the price of the foodstuffs. As far as the awareness on GI products is concerned, consumer associations are more aware on that. This could be attributed to the fact that the nature of consumer associations is to be involved with several kinds of products, so, the probability to know GI products is higher. At the same time, consumers associations could recognise the certification marks better than the average consumer (19% of the consumers are not able at all to recognize the certification marks, but on the other hand all the responses that we received from the associations appeared as capable to recognize these marks).

In question number 5, about the remarkability of GI symbols (on the label), the majority of both categories answered that the remarkability is moderate and a lot of respondents in both categories replied that remarkability is low (little) and 13% of the consumers said that these symbols are not remarkable at all. From this question it is understood that the remarkability of GI symbols is low (even the experienced consumers associations have difficulties to find out the symbols on the label.) As far as the trustworthiness
in both GI symbols and official controls, consumer associations trust them more. This could be due to the fact that associations know better the procedures of the official controls and this seems to be enough to increase their confidence on them. We could say that somehow consumer associations are biased since they are experts in this field.

Consumers and consumer organisations only to one extent they connect products with GIs with better quality. At the same time, GI’s are a criterion for buying a foodstuff only to a part of consumers and consumer associations and this is confirmed also by the fact that only a certain amount of them are willing-to-pay for a GI foodstuff. However, consumer associations, which represent ‘normal’ consumers at the public level, overestimate the willingness-to-pay by consumers for quality attributes and have an exaggerated impression of the perception of these attributes by the average consumer. This might be due to the fact that people in consumer associations are more conscious on consumer habits. Probably they care more about the quality of the foodstuffs or they are more aware about the advantages that a GI foodstuff possesses compared to a conventional.

4.3 Greek food businesses’ perception on advantages and disadvantages connected to foodstuffs with GI

In order to investigate the Greek food businesses’ impressions related to products with Geographical Indications we created a questionnaire (questionnaire 2) that was submitted to several businesses involved with foodstuffs with Geographical Indications. Specifically, the questionnaire was answered by 55 different companies which altogether have 16653 producers/processors.
Below are presented the responses (diagrams with the percentages) and short explanations with the main things that we could conclude from the answers.

1. How difficult is the production process of your product?

- Very Much: 15%
- Much: 40%
- Moderately: 36%
- Little: 4%
- Not At All: 5%

2. How time consuming is the production process of your product?

- Very Much: 16%
- Much: 47%
- Moderately: 25%
- Little: 7%
- Not At All: 4%

For the first 2 questions, “how difficult the producing process of your product is” and “how much time consuming the producing process of your product is”, we received a big range of different replies. In both cases the biggest percentages were in the answers much and moderately and the third most popular answer was very much. From this we could understand that the production process depends on the kind of foodstuff, but in most cases, the processes for Geographically Indicated foodstuffs are not that easy and they need time.
In one of the most important questions of the survey, “Until what extent the agriculture of your area does affect your products?” 80% of the respondents stated that local agriculture has a big impact on their production (specifically 45% said very much & 35% much). This sounds logical on the grounds that we speak about products like PDO where the raw materials should be produced in the specific/defined area. The agriculture of an area is tightly linked to the quality of raw materials, something which affect the final quality and therefore the value-added of these products. The fact that 4% of the respondents said that the local agriculture does not have any effect on their products has a double explanation. Either 4% of the respondents produce PGI products where the raw materials don’t have to be necessarily from the defined area and could be imported from other places (PGI products must be produced or processed or prepared in the geographical area), either the production method which is used for the preparation of foodstuff is of a high importance and not so much the raw material.

4. How easy can you find the raw materials in your area?
In the question “How easy could you find the raw materials in your area?” the answers had big variation. Specifically, 7% said very much, 26% much, 45% moderately, 13% little and 9% not at all. It seems that the majority of producers has difficulties to a major or minor extend in sourcing materials, which affects the cost level and therefore the net value added. We refer to the Greek “Feta” cheese (PDO) as an example. The milk of this cheese should be produced in a defined area of Greece (from sheeps’ and goats’ milk under a specific ratio). Because the sales of Feta cheese are really high and at the same time in some cases we have reduction of livestock, the requirements about the origin of the milk will be difficult to be fulfilled. This will lead to lower production rate of feta cheese. One solution that has proposed in order to overcome the lower production rate of the raw materials is to place Feta in the PGI regime instead of PDO. That will mean that the raw material will come from other places, other than the defined area. But since Feta is the most important GI product in Greece, the stakeholders are quite sceptics about a probable change in the GI regime. But anyway, the Greek Government should take care about this issue. One good solution (without changing the GI regime of feta) is to subsidize or to give motives to new farmers to deal with the farming of sheeps and goats in specific areas of Greece in order to produce enough milk for the production of feta.

5. How easily could you place your foodstuffs on the Greek market?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Much</td>
<td>7%</td>
</tr>
<tr>
<td>Much</td>
<td>25%</td>
</tr>
<tr>
<td>Moderately</td>
<td>36%</td>
</tr>
<tr>
<td>Little</td>
<td>22%</td>
</tr>
<tr>
<td>Not At All</td>
<td>9%</td>
</tr>
</tbody>
</table>

![Bar chart showing the percentage of responses to the question about placing foodstuffs on the Greek market.](chart.png)
On the question, “How easily can you place your foodstuffs on the Greek market?” and how easily can you place your foodstuffs outside Greek market?” we see that the Greek GI foodstuffs could be placed easier in the domestic market. This is in line with the dominantly local sales we noticed in the previous chapter (PDO/PGI agricultural products and foodstuffs are mostly sold in their national markets, at 78% of the sales). This is not necessarily a negative sign, as the consumption pattern of a country differs a lot from the consumption pattern of another country. That is why certain foodstuffs are being sold mainly (or only) in the countries that they produce them. However, it could be that the price level against which the products are sold domestically are lower compared to exports. This might explain the better performance of Italian and other countries as shown in chapter 3.

7. To what extent do the foodstuffs with Geographical Indications help in the development of your business?
From the question “To what extent do the foodstuffs with Geographical Indications help in the development of your business?” we could not draw a general safe conclusion since the percentages were spread (4% very much, 35% much, 22% moderately, 20% little and 19% not at all). But in the question if they want to develop new foodstuffs with Geographical Indications in the future, 74% of the producers said ‘yes” and only 13% said “no”. So, that means that the majority would like to be involved with GI products in the future, despite the fact that they do not have a positive idea about the contribution to the development of the business. Negatively interpreted, this could mean that they join into GI-production because they fear to be excluded otherwise. Positively interpreted they see innovation opportunities in developing new GI products that in the long run could pay off, although not leading to immediate profits.
The great specificity (typicalness) of GI products in all their aspects could be seen also in questions 8 and 10. In the question 10, “Until what extent do foodstuffs with Geographical Indications help producers to increase their income?” the replies show us that this is not something standard and probably depends on several factors (type of product, the production of the year, the consistency of producers, competition and many more...). And in the question “Why do you think that consumers prefer your products?” (question 8), the answers are indicative of the condition: 33% said the quality and the price together, 26% said the quality, 22% the quality and the traditionalism together, 9% the quality and the support to local products, 4% the traditionalism and the support of local products, and from 2% had the answers, something else, traditionalism and the quality and something else. One thing that we could notice here, is that quality is being involved (alone or in combination with something else) in 92% of the responses. That means that businesses believe that GI products, are quality products (consumers have the same perception about that).
The producers are similar in their judgment on GI-labelling compared to consumers. From the answer of both it can be inferred that the labelling and recognition of GI-products can be improved.

12. To what extent the Geographical Indication symbols (labels) are remarkable on their label?

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Little</th>
<th>Moderately</th>
<th>Much</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage</strong></td>
<td>5%</td>
<td>29%</td>
<td>25%</td>
<td>31%</td>
<td>9%</td>
</tr>
</tbody>
</table>

13. To what extent do you think that the Geographical Indication symbols (labels) help the information of consumers?

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Little</th>
<th>Moderately</th>
<th>Much</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage</strong></td>
<td>42%</td>
<td>22%</td>
<td>20%</td>
<td>13%</td>
<td>5%</td>
</tr>
</tbody>
</table>

For as far as the labels in GI products are concerned, the conclusion that we could derive is that GI labels are not so satisfying, but the GI symbols are satisfactory remarkable on the packages (something which is in contrast with the view of consumers). But, however, consumers and a certain amount of producers agree that the remarkability of GI symbols is low.
In the question “Until what extent do the foodstuffs with Geographical Indications help in the maintenance of the tradition?” 68% of the respondents said much/very much, something that reflects the awareness they have that they produce something which is a part of the culture and tradition and which implies that they produce foodstuffs with value-added.

From the question “How easily is to get the certification of a Geographically Indicated foodstuff from the competent authorities?” we could
understand that this is not an easy task for FBO, since 26% said “not at all” and 45% said “moderately”. Only 4% replied that it’s very easy to obtain such a certification. The non-easy certification may be one of the reasons that GI products are successful until now, but contributes to regulatory burdens and is therefore a negative factor on the cost side. The certification is not given to everyone, but only to the ones that really deserves it. This is positive for protecting the value-added of single GI-products. At the same time the responses on the question “How effective do you think that the official controls are for the guarantee of the G.I. foodstuffs?” were distributed in the whole range of the possible answers.

The last two questions were related to traceability. From the answers in both questions, the significance of traceability (that we discussed in chapter 2) was confirmed. To be more specific, 74% finds traceability very important in the stages of production of foodstuffs with Geographical Indications and 85%
of the respondents said that traceability systems help (finding and fixing potential problems) to a significant degree in the proper production of the GI foodstuff.

Finally, in question 19 we asked for the number of producers that are including in the business (e.g. the number of individual producers which constitute the masticha’s agricultural cooperative of Chios etc…). The answers came from a broad range of different companies and cooperatives. For example, answers came from dairy companies, from olive-oil companies and cooperatives, from raisins’ producers, from masticha’s agricultural cooperative of Chios, from pistachio’s producers, from fruits’ producers and from other producers of Geographically Indicated products. The total number of producers that participated in our survey (directly or indirectly) was 16653.

4.4 Results of the official audits carried out by Greek competent authority

Official controls may contribute to the costs of protected GIs. To get insight in the frequency and characteristics of these controls, in this subsection the controls executed by Agrocert are reviewed. The official audits for Geographically Indicated products is a crucial step. The success of schemes is largely due to the proper functioning of the monitoring authorities.

The results of the official controls which are listed below were obtained from Agrocert (the Greek competent authority) during our interview in January 2014. The data was from year 2012 and is separated in three categories:

i) **Businesses** of PDO/PGI foodstuffs of plant origin

ii) **Businesses** of PDO/PGI foodstuffs of animal origin

iii) **Audits on places** of wholesale and retail of PDO/PGI products

Agrocert’s policy did not allow us to have access in all the information of their controls, but at least they gave us a brief overview in those three categories.
i) Businesses of PDO/PGI foodstuffs of plant origin

After the controls (administrative or on the spot) took place, applications that were terminated were for the following reasons:

- Due to a change of name
- Consignment duplicates applications for the same indication
- They were outside of the production area from the product that they were applying for
- Due to cessation of business operations
- Due to voluntary withdrawal of business from PDO/PGI system
- Due to not sending the required documentation requested by our entity
- Failure to dispatch the necessary corrective actions
- Due to prolonged non movement of the product and lack of interest in pursuing certification

Overall, 548 companies for 763 products had a valid certification for GI foodstuffs within the year 2012.

In addition, in 2012 were registered in the European Union on behalf of Greece the following products: «Prasines Elies Chalkidikis-PDO (Πράσινες Ελιές Χαλκιδικής-ΠΟΠ) », «Beans Vanilies Feneos-PGI (Φασόλια Βανίλιες Φενεού-ΠΓΕ)» and «Mandarin Chiou-PGI (Μανταρίνι Χίου-ΠΓΕ)»

Moreover, 37 companies submitted 63 applications for access to the audit and certification system of Agrocert for the product «Prasines Elies Chalkidikis-PDO (Πράσινες Ελιές Χαλκιδικής-ΠΟΠ) ».

124 The Greek letters appear here because they included in the official registration names of these products
ii) Businesses of PDO/PGI foodstuffs of animal origin

In the Administrative audits that took place during the year of 2012 were involved 383 companies for 657 products. On 31.12.2012, there were 65 businesses without valid certificate for 87 products due to the following reason: the renewal process certification did not completed.

Furthermore in 2012 the Entity received two applications of respective companies for the product “ΑΥΓΟΤΑΡΑΧΟ ΜΕΣΟΛΟΓΓΙΟΥ”. The evaluation process of applications was in progress (until the day that made the report from which they gave us the data).

iii) Audits on places of wholesale and retail of PDO/PGI products

During the year 2012 the Entity conducted audits in wholesale and retail places of PDO/PGI products, in order to ascertain compliance with the registration requirements and the proper use of indication so as to avoid the misleading of consumers. The results were the following:

During the audits in wholesale and retail places, it was found that there were firms, that sold products which had in their labels the registered names, the signs, the symbols or marks of PDO-PGI foodstuffs, but these companies were not integrated in the control and certification system of AGROCERT.

Finally it is worth mentioning that the labeling of products with Geographical Indications is being monitored by three services in Greece. The EFET (Greek Food Authority), the relevant ministry, and the Agrocert (control body for foods with Geographical Indications). Also should be stated the fact that some third countries want a different context of labeling compared to the one that EU use and this might have an effect in GI products as well.
4.5 Expert Interviews with the Greek public authorities, so as to ascertain that our empirical findings are valid

For this part of the project our purpose was to learn about the authorities’ point of view related with GI foodstuffs. Misperceptions of public authorities with respect of sources of value-added for GI-products can jeopardize the functioning of the systems. More specifically we wish to know their perception about possible benefits to producers and problems, including costs that producers face. Moreover, we wanted to know if there is space for new products with GI in Greece in the sense that also new businesses involved with GI foodstuffs could emerge in the future. In addition we wanted to know if consumers have embraced the idea of GI products in the eyes of public authorities, and what from the perspective of public authorities producers may expect as to the further development of the GI-product markets. Finally, we would have been very interested to obtain data about the number of the businesses that are involved in the system and reasons – from the public authority perspective- for which companies enter or leave the system.

In order to make this step feasible, expert interviews took place at Agrocert's central offices in Athens, in January of 2014. Specifically, the staff members that were interviewed are: Mr. Spyros Stachtiaris (Agriculturalist) and Georgios Gkoumas (Food Scientist). The expert interviews were conducted according to the instructions of Harvard Kennedy School and below are listed the questions that we asked and the corresponding answers that we received from the interviewed scientists.

Initially, we asked them to give us some answers to certain queries which are complemented with the information we acquired from the questionnaires:

**Question 1)** Have foodstuffs with Geographical Indications (as a capitulary) become accepted by consumers?

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125 Contact details at the appendix 4.5.1
126 Harvard Kennedy School, Shorenstein center on Media/Politics and Public Policy (is a Harvard University research center), “Interviewing a source: Rules of the road; talking with officials and experts”, January 2013
Answer: The institution has been accepted, from the viewpoint that consumers recognize and trust it. Comment of author: this answer is only moderately in line with consumers’ responses reported earlier.

Question 2) Are GI-products beneficial (long term) for producers and food businesses to produce such products?

Answer: It depends! Sometimes we could say that it’s beneficial for producers to be integrated into the system of products with Geographical Indication but some other times not. In general, it is more likely that integrated producers not only have higher production costs but they also make a greater effort to comply with all relevant standards that foodstuffs with Geographical Indication require. The two main factors that determine the success of a certain year are 1) the year of production (especially in products of plant origin, the quantity of production and the amount of the harvested raw material can differ significantly year by year) 2) the production of Spain and Italy in the same year. Comment of author: the availability of produce in the market determines the price and therefore has effect on the value-added.

In Greece, foodstuffs like olive oils, cheeses and olives are the most Geographically Indicated products and the two aforementioned countries (Spain and Italy) support a large part of their production to these products. So, strong competition exists among these 3 countries.

Apart from that, several times subsidies are given for production of foodstuffs with Geographical Indications, which means that a wise management of these revenues is a benefit for producers / businesses.

Moreover, we could say that the whole procedure of the production of foodstuffs with Geographical Indications forces producers / businesses to organise their business better (compared to production of conventional foods). The concept of GI products is oriented at helping the local society.

Finally, the trend that exists in the market has an inevitable effect on producers / food businesses.

Question 3) What kind of problems do the Greek GI producers face during the production process of the products?
Answer: a) In Greece, in specific cases the reduction of livestock often leads to the reduction of the raw materials that producers could use in order to produce foodstuffs with Geographical Indications. As a result, it becomes difficult for them to produce certain G.I. foodstuffs if they don’t have the required raw materials.

Thereafter, we made some questions related to the future of GI products in Greece and in an international level.

Comment of author: scarcity of materials limits output and drives up commodity prices, to the expense of net value-added.

Question 4) If there is space for new products with GI in Greece and in which category (PDO or PGI) would be easier / convenient to join.

Answer: There is space for new GI foodstuffs in Greece (recently, the last Greek foodstuff that was registered is “Santorini cherry tomato” by sequence number 101). The great heterogeneity of the geographical terrain of Greece, the favorable climate and the long gastronomical tradition could lead to the development of new GI foodstuffs.

In addition, in Greece there could occur many opportunities for development of foodstuffs with optional quality terms (mountain products & products of island farming)\textsuperscript{127}. These two categories are different from the PDO, PGI and TSG, but within the same legal framework.

Finally, as far as the TSG foodstuffs are concerned, the legal framework that governs them is weak. For this reason, this category of Geographical Indicated products did not proceed that much. Two typical problems which have been highlighted by producers and are related to TSG products are the following: i) It is difficult to prove that both components and the practice of production/processing/composition are traditional. ii) Due to the publication of the recipes that each interested person possesses, it becomes easy for everyone to learn and copy the recipe.

Comment of author: Copying behaviour and difficulties to proof traditional production limit the value of property rights vested in GIs.

\textsuperscript{127} Articles 31 & 32 of the Reg. 1151/2012
Question 5) What is the future of the three categories (PDO, PGI, TSG) in Greece?

Answer: Currently in Greece about 7% of the registered Geographically Indicated foodstuffs are not produced. According to the legislation, if a product is not produced in depth of seven years could be dismissed by the Commission. Furthermore, the competent authorities should make a very good investigation in the area before giving the approval for a registration of a GI foodstuff to someone, because this registration, will forces the other producers who were using the same name to their product until that time either to enter within the system of Geographical indications, or to change the name of their product.

For example, producers of olive oil from the region of Messara (Crete), once the product was registered as a PDO (Messara) can either keep the name of their product by entering in the Geographical Indication system (with all that this implies for them) or to change the name of their product (they are not allowed to sell their product as Messara olive oil).

Question 6) Conflicts among countries for patenting products (f.i. feta) at European and International level

Answer: What businesses try to do globally, is instead of applying for a Geographical Indication, they try to obtain trademarks by region. Under this regime, companies could ensure their products anywhere in the world and not only within the European Union (that Geographical Indications are valid).

Synopsis: In this chapter we saw the Greek stakeholders’ perception about the products with Geographical Indications regarding advantages and disadvantages and the possible value added. Consumers, consumer associations, businesses, producers and the authorities gave us useful information in order to understand their opinion about products with Geographical Indications. From all these information that we have obtained (from this and previous chapters) we will draw conclusions and recommendations in the following chapter (ch. 5).

128 Article 54(1b) of the Reg.1151/2012
Chapter 5: Conclusions/Recommendations

Preamble: This is the final chapter of the thesis, where the main conclusions of the research are highlighted. The present thesis assesses the value-added connected to GI-products, the factors influencing it and the ways to increase it. Value-added is defined as the difference between extra sales and extra costs. Extra sales (turnover) are generated from consumers and come to the benefit of businesses, while the same businesses are confronted with extra costs (registration, operational and material costs). Only if this balance is in favor of the benefits, will businesses expand their portfolio of GI-products and will public authorities see the economic and social goals connected to them reached. Recommendations for implementation with probable positive results for the further development of products with Geographical Indications are being proposed at the end of this chapter. Finally, points for improvement and suggestions for further research are included in the discussion section.

5.1 Motives of the EU legislator to create PDO and PGI products (sub-question 1)

In chapter 2 it was explained with details not only the motives that EU considered in order to create the legislation related to the foodstuffs with Geographical Indications, but also all the requirements a company should fulfill if it wishes to be registered in the GI system.

In the Regulation 1151/2012 on quality schemes for agricultural products and foodstuffs (and in the regulations that were predated) anyone could find all the details about the motives that EU considered in order to establish this kind of legislation. The most important of these motives are:

- To ensure the fair competition for farmers and producers of agricultural products and foodstuffs having value-adding characteristics and attributes (where value-adding attributes are a result of the farming or processing methods used in their production, or of the place of their production or marketing)
- To provide reliable information to consumers pertaining to such products
- Respect for intellectual property rights
- The integrity of the internal market
Apart from the above mentioned motives, the European Parliament and the Council of the European Union had also in mind that:

- The quality and diversity of the Union’s agricultural, fisheries and aquaculture production is one of its important strengths, giving a competitive advantage to the Union’s producers and making a major contribution to its living cultural and gastronomic heritage.
- Citizens and consumers in the Union increasingly demand quality as well as traditional products.
- Producers can only continue to produce a diverse range of quality products if they are rewarded fairly for their effort.
- Operating quality schemes for producers which reward them for their efforts to produce a diverse range of quality products can benefit the rural economy. This is particularly the case in less favoured areas, in mountain areas and in the most remote regions, where the farming sector accounts for a significant part of the economy and production costs are high.
- An agricultural product or foodstuff bearing such a geographical description should meet certain conditions set out in a specification, such as specific requirements aimed at protecting the natural resources or landscape of the production area or improving the welfare of farm animals.

For the present thesis of special importance is the statement that ‘producers can only continue to produce a diverse range of quality products if they are rewarded fairly for their effort’. We assessed that a ‘fair reward’ is connected to the willingness to pay and buy of consumers on the one hand, and the effect on cost levels for businesses on the other. In the remainder of the thesis, the influencing variables on net value-added are put central. One of the requirements for businesses that affect the cost levels negatively is the obligation of application and registration. Next to the costs, the time elapsing between submission of an application and registration is considerable.
5.2 Legal requirements for approval of a Geographical Indication (sub-question 2)

As far as the requirements for a foodstuff to be registered in the system of Geographical Indications are concerned, there are 2 types of requirements. The first type is about possible conflicts among names (certain names for which the foodstuff is not eligible to obtain due to conflicts and overlaps with names of other categories of products) and the second requirement regards the product specifications (such as description of the product, definition of the geographical area, data proving that the product originates from that specific area, etc.)

When a foodstuff fulfills the first two requirements then the interested party could submit an application for registration. Applications are made to the Member State on whose territory the geographical area is located. Afterwards, the Member State examines the application and in case of positive decision, forwards a document to the Commission together with a declaration stating that all the necessary conditions have been met. The following step is the examination by the Commission. The Commission could either accept either reject the application. The procedures at the Commission’s level described nicely with a scheme in sub-chapter 2.3, but it is worthy to mention again, that The procedures for a possible positive assessment and registration for a product last from 9 to 17 months since the date that a Member State send the positive decision to the Commission.
5.3 How the market for Geographical Indications is structured, what is in general the value-added experienced by food businesses in the EU and what specifically is the relative position of Greek food businesses in this respect? (sub-question 3)

European Commission conducted a survey as regards the products with Geographical Indications. The data collection included 2768 GIs in the 27 Member States of the European Union during 2010 and it referred to 4 schemes: aromatised wines, agricultural products and foodstuffs, wines and spirits.

In 2010, the overall sales value of agricultural products and foodstuffs with GI indications was €15.8 billion. Cheeses (39%), meat products (20%) and beers (15%) possessed the majority of the EU sales value.

Greece was placed in the 7th position among the 27 EU MS in the sales of GI products on 2010. The Greek GI products mainly consist of cheese (around three quarters), wine (less than 20%), spirits (less than 10%) and olive oil (less than 5%). Regarding the total sales value, Feta cheese is the most important Greek GI product.

In general, GI products were sold 2.23 times higher (on average) than the same quantity of non-GI products. That means that the average value premium rate in the EU 27 for GI products was 2.23 and regarding to the sales markets, PDO/PGI agricultural products and foodstuffs are mostly sold in their national markets (78% of sales).

The ratio % sales value / % number of GIs that we created (in chapter 3.4) for each country, we can reach some conclusions. We could say that somehow this ratio showing us to what extent the GI foodstuffs of each country are exploited economically. The ratio in Germany is 2.62, in UK 1.75, in Italy 1.72 and in France 1 while at the same time the ratio in Greece is 0.5, in Spain 0.4 and in Portugal only 0.038. Italy, Germany and France were the three countries that obtained 78% of the total sales value and Spain, Greece and Portugal gathered only 11.5% of sales value for 38% of the GIs. It is obvious that countries like Germany, UK and Italy achieve to be more profitable than Greece, Spain and Portugal. From all these numbers, we
conclude that countries like Spain and Greece although they have many GI products. Still either sales or prices of the products that are sold are low.

It is obvious that Greece performs worse and creates less to value-added than competing countries. Tentatively, several causes may be mentioned, which in the remainder of this thesis have to be studied more intensively. From the previous analysis it follows that:

• Greek protected products with GIs are consumed more regionally, and less exported than is the case with other GI-countries;

• The low “sales/number of GI’s” indicator signals that total sales per GI is relatively low, which can be explained by the limited scale of production outlets.

Other factors that could contribute to the relative low contribution of GIs to the created value in the economy and that are subject to empirical research in the next sub-chapter are the following:

• Consumers might not be willing to pay extra/buy extra for/of a GI-product because they focus on low price instead of high quality (especially this period of the financial crisis);

• Consumers don’t trust the official controls in this kind of foodstuffs and since food have credence characteristics, finally consumers don’t buy them.

5.4 Factors influencing the value-added of Geographically Indicated products in Greece (sub-questions 4, 5 and 6)

After having investigated the market for GI-products, the relative position of Greek producers and summed up factors explaining the meagre performance of Greece in this respect, the consumers’ impressions as to value-added of GI-products are reviewed, and opinions of public authorities have been investigated to empirically substantiate the problems and isolate the factors which determine the net value-added of GI-products in Greece.

The answers in the questionnaires from consumers, consumer associations and businesses in combination with expert interviews that were
conducted with the authorities and the information that we found in the available literature helped us to understand the perception of value-adding factors by the stakeholders in Greece and subsequently to be able to answer the sub-questions 4, 5 and 6 of the project. The detailed analysis of the stakeholders’ perception in Greece is presented in chapter 4 and here we will point out the most important conclusions. Important hampering factors as to consumers are:

- low remarkability (visibility) of labelling and symbols;
- relatively low perception of higher quality of GI-products;
- relatively low trust in public controls.

Surprisingly, consumer organisations have a different and more positive impression as to the last two mentioned points.

Responses from both consumers and businesses have shown that, although GI symbols are helpful for the information of consumers, they are not very remarkable on average. This has a negative effect on sales levels and the willingness-to-pay by consumers. That implicates that even if consumers are aware of Geographical Indications, still it is not easy for them to detect on the labelling if a product is authorized. Since consumers (mainly) and a certain amount of producers (secondary) agree that the remarkability of GI symbols is low, the best strategy from the authorities’ point of view is to try to change the GI-symbols regime, so that they become more remarkable (visible). At the same time, during the expert interviews at Agrocert, we found that the labelling of products with Geographical Indications is being monitored by three services in Greece. The EFET (Greek Food Authority), the relevant ministry, and the Agrocert. So to change the labelling regime the different public stakeholders should coordinate their behaviour and forward a joint proposal to European public authorities.

Consumers and consumer organisations only to one extent they connect products with GIs with better quality. At the same time, GI’s are a criterion for buying a foodstuff only to a part of consumers and consumer associations and this is confirmed also by the fact that only a certain amount of them are willing-to-pay for a GI foodstuff. However, consumer associations,
which represent ‘normal’ consumers at the public level, overestimate the willingness-to-pay by consumers for quality attributes and have an exaggerated impression of the perception of these attributes by the average consumer. Moreover, for as far as the awareness on GI products is concerned, consumer associations are more aware of it compared to ‘normal’ consumers. This could be attributed to the fact that the nature of consumer associations is to be involved with several kinds of products, so, the probability to know GI products is higher.

A further set of factors which influences value added is the local Greek sales and the availability of raw materials. While competing countries sell internationally, Greek businesses are predominantly dependent on local sales. This, in combination with small-scale production, has a negative effect of production scale and therefore leads to higher costs.

More specifically, according to the replies that we received from the businesses, 80% of the respondents stated that local agriculture has a big impact on their production (specifically 45% said very much & 35% much). These sounds logical on the grounds that we speak about products like the PDO were the raw materials should be produced in the specific/defined area. Furthermore, the fact that Greek GI foodstuffs could be placed easier on the domestic market is in concordance with the data of chapter 3 (PDO/PGI agricultural products and foodstuffs are mostly sold in their national markets, at 78% of the sales).

Lastly, in this part we should mention that the significance of traceability (which was discussed in chapter 2) was confirmed by the businesses. To be more precise, 74% find traceability very important in the stages of production of foodstuffs with Geographical Indications and 85% of the respondents said that traceability systems help (finding and fixing potential problems) into a significant degree in the proper production of the GI foodstuff. Since traceability is obligatory for all the food business (not only for GI businesses) and due to the fact that is a tool for businesses to ensure not only the safety and but also the origin of the primary ingredients (and subsequently their quality), then it could be considered as an integral part of GI food businesses.
5.5 To what extent are the expectations and intentions (addressed in q. 4, 5 and 6) complementary or conflicting? (sub-question 7)

The expectations from all the stakeholders should be complementary. GI products should contribute to net value-added of businesses, which is the difference between extra sales (price x volume) and extra costs. The price that is collected by businesses is dependent on the consumers’ willingness to pay and buy. In turn, this is dependent on perceived quality of the product compared to conventional products. And again in turn, quality is dependent on the reliability of application procedures and controls. Finally, only if businesses are inclined to put GI products on the market, public goals like rural development, fair income and high-quality traditional production will be reached.

Consumers expect that GI products will remain of high quality, with respect to tradition and environment. As we saw in the empirical analysis, quality has an effect on consumers’ perception. More specifically, consumers believe that a GI-indication can give extra quality to the foodstuff.

Although a proportion of consumers consider GI foodstuffs as quality products, on average they are not very well able to distinguish them. According to the results of the questionnaires, only 4% of the consumers believe that Geographical Indication symbols are very remarkable on the label. That means that the remarkability of GI symbols is low and this has a negative effect on the value added of GI foodstuffs. However, businesses consider the remarkability of GI symbols satisfactory, maybe due to the fact that they are directly involved with this kind of foodstuffs.

As GIs contribute to income of agricultural producers, this fulfills the expectations of public authorities and benefits the rural economy by rewarding producers for their efforts to provide a diverse range of quality products (particularly in less favored areas, in mountain areas and in the most remote regions). This case study in Greece shows that even in this period of the financial crisis, GI foodstuffs could boost the development of agricultural production.
Businesses for sure want to make a better income and profit, but in order to achieve this they have to comply with the producing/processing requirements of GI products. On average, consumers are not very much aware the quality of official controls. At this point, public authorities can play a more active role. Not only should they improve the methods and the transparency of the controls that take place. They also have to communicate better (through campaigns or advertisement) the benefits and the advantages of GI foodstuffs.

The result will be that on the one hand consumers will feel that GI foodstuffs are superior compared to conventional products and deserve a higher price, and on the other hand businesses that comply with public requirements know that will enjoy a premium. In that case the EU (and its authorities) will feel that their goals had been achieved.

5.6 Policy changes and recommendations that could be advised on a Greek and EU level, to bring the interests of consumers, producers and public authorities more in line with each other and improve the current involvement of businesses that are producing and marketing products with Geographical Indications (sub-question 8)

As it was indicated before, the ratio % sales value / % number of GIs in Greece is small. A solution to this problem is the increasing of that ratio. This could be achievable if we have better organisation from the farm level, if we establish more cooperatives among producers, if we make better advertising campaigns and if finally make agrotourism a vital part of the tourism. All these actions that could be taken, have as a prerequisite that the quality of the products will remain in high standards.

The best thing from the authorities’ point of view is to try to change the regime of GI symbols, so they will be more remarkable (visible). At the same time, according to question 13 (of questionnaire 2), FBOs think that GI symbols are helpful for the information of consumers. Maybe GI symbols
could be more effective in consumers’ information if FBOs or the authorities make campaigns in order to promote these foodstuffs and their symbols.

Simultaneously, producers and FBO should consider the authorities as an auxiliary entity and not as an enemy, because the long term advantages of compliance with the GI requirements only positive results might be have on businesses.

Policy recommendations resulting from this study are the following:

As already indicated in the previous subsection, the labelling and transparency of product quality and the intensity of controls should better be communicated to the consumers. If the consumers gain trust in GIs they are willing to buy and pay more, and this contributes to the income of the businesses.

Next policy makers should improve the information on availability of raw material ingredients in GI products, for example by means of thorough origin information of staple ingredients on the package of GI products. In this way, consumers’ concerns about traceability and supply of ingredients and any other potential confusion about GI products will be eradicated.

Public authorities should also focus their efforts on two themes. On the one hand they should communicate better the advantages of GI foodstuffs to consumers. As a result the increasing of awareness will lead to more sales and higher prices for these products. Moreover, public authorities should reduce the application costs and the costs of controls so that businesses will enjoy a higher net-value added.

5.7 Discussion

Especially in the recent years where suffers from the financial crisis, Greece has turned its attention in two sectors: the land cultivation and the food production. Geographically Indicated foodstuffs are inextricably linked with the above mentioned sectors. So for me, the minor aspects of this research were to understand the weak points of the GI system in Greece and to one extent to try to find solution for that. The further goal (and at the same time my pleasure) would have been to see that some of my findings will contribute to the improvement of the current GI situation.
One thing that it could have been done better it’s the representativeness of consumers that replied to the questionnaires. Although we tried to find a representative sample (we shared the questionnaires to people of all ages and in several regions of Greece) still the software tool that we used (it was internet based) did not allowed us to verify their data. We simply trust the honesty of the respondents. Moreover, we thought that we will obtain more reliable information for consumers if we share the same questionnaire to consumer associations. That’s what we did, but the problem was that consumer associations gave us different answers compared to consumers. So, ultimately a comparison between consumer and consumer associations took place.

Finally, as far as a future research on the topic is concerned, it would have been nice for someone to investigate the contrasting opinions between EU and USA related to the Geographically Indicated products, since both sides have strong arguments.

**Epilogue:** In the recent years the crisis had hit the European Union. This crisis is not only financial as most of the people believe, but also social crisis. For European countries, products with Geographical Indications are not only a way to overcome economic problems but also a way to keep the EU culture and customs. If the EU as an institution continues to exist, then products with Geographical Indications will be an integral part of it.
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LEGAL SOURCES

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• COUNCIL REGULATION (EC) No 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation)

• COUNCIL REGULATION (EC) No 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations

• COUNCIL REGULATION (EEC) No 1601/91 of 10 June 1991 laying down general rules on the definition, description and presentation of aromatized wines, aromatized wine-based drinks and aromatized wine-product cocktails

• COUNCIL REGULATION (EEC) No 2081/92 of 14 July 1992 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs

• COUNCIL REGULATION (EEC) No 2082/92 of 14 July 1992 on certificates of specific character for agricultural products and foodstuffs
• Guidance on the implementation of articles 11, 12, 14, 17, 18, 19 and 20 of regulation 178/2002 on general food law, conclusions of the standing committee on the food chain and animal health, 26 January 2010


• REGULATION (EU) No 1151/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 November 2012 on quality schemes for agricultural products and foodstuffs


• Suggestion letter related to Regulation 1151/2012 from Poultry Cooperative Union of Greece to Ministry of Rural Development and Food, June 2013

WEBSITES


• http://www.iprhelpdesk.eutaxonomy/term/148 (European Commission - European IPR helpdesk, Geographical Indications) (accessible date: May 2014).


ANNEXES

Annex

2.1.1

ANNEX I of Regulation 1151/2012
AGRICULTURAL PRODUCTS AND FOODSTUFFS REFERRED TO IN ARTICLE 2(1)

I. Designations of Origin and Geographical indications
— beer,
— chocolate and derived products,
— bread, pastry, cakes, confectionery, biscuits and other baker’s wares,
— beverages made from plant extracts,
— pasta,
— salt,
— natural gums and resins,
— mustard paste,
— hay,
— essential oils,
— cork,
— cochineal,
— flowers and ornamental plants,
— cotton,
— wool,
— wicker,
— scutched flax,
— leather,
— fur,
— feather.

II. Traditional specialities guaranteed
— prepared meals,
— beer,
— chocolate and derived products,
— bread, pastry, cakes, confectionery, biscuits and other baker’s wares,
— beverages made from plant extracts,
— pasta,
— salt.
List of mandatory particulars on the labelling, according to article 9 of the Regulation 1169/2011:

(a) the name of the food;
(b) the list of ingredients;
(c) any ingredient or processing aid or derived from a substance or product causing allergies or intolerances used in the manufacture or preparation of a food and still present in the finished product, even if in an altered form;
(d) the quantity of certain ingredients or categories of ingredients;
(e) the net quantity of the food;
(f) the date of minimum durability or the ‘use by’ date;
(g) any special storage conditions and/or conditions of use;
(h) the name or business name and address of the food business operator referred to in Article 8(1);
(i) the country of origin or place of provenance
(j) instructions for use where it would be difficult to make appropriate use of the food in the absence of such instructions;
(k) with respect to beverages containing more than 1,2 % by volume of alcohol, the actual alcoholic strength by volume;
(l) a nutrition declaration.
Traceability Systems in more details

The implementation of traceability requires the development of a traceability system. Practically, a traceability system is nothing more than a mechanism for recording and maintaining all the information regarding the route taken by a particular unit or batch of a product or a component from the initial supplier to the final consumer.¹²⁹

A traceability system in order to be implemented (by an organization) depends on:¹³⁰

- technical parameters related to the products (i.e. nature of the raw materials, size of the lots, collection and transport procedures, processing and packaging methods)
- the cost benefits of applying such a system

**Image:** Characteristics of a traceability system¹³¹

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¹²⁹ Kuriakidis S., Traceability and Food Safety, July 2005, General Chemical State Laboratory, Athens
¹³⁰ ISO 22005, Traceability in the feed and food chain — General principles and basic requirements for system design and implementation, 2007
¹³¹ From presentation of Food Law course by prof. Massouras T. at the Agricultural University of Athens, 2011-2012
In developing a food and feed chain traceability system, it is essential to identify the precise objectives that have to be achieved. Some of the possible objectives are the following:\textsuperscript{132}

a) To support food safety and/or quality objectives;

b) To meet customer specification(s);

c) To determine the history or origin of the product;

d) To facilitate the withdrawal and/or recall of products;

e) To identify the responsible organizations in the feed and food chain;

f) To facilitate the verification of specific information about the product;

g) To communicate information to relevant stakeholders and consumers;

h) To fulfill any local, regional, national or international regulations or policies, as applicable;

i) To improve the effectiveness, productivity and profitability of the organization.

A traceability system on its own it is not sufficient to achieve food safety, but there are many benefits of using traceability systems\textsuperscript{133}:

- Timely and reliable retrieval of information required to identify bottlenecks in the processes of business, to achieve a better organization, to optimize the use of raw materials and finally to reduce the cost.

- Ability to better control the quality of raw materials.

- Improvement of relationships with direct clients of the company.

- Increased protection of business from fraudulent activities on its products and ability to support its positions before the supervisory authorities.

- Comply with existing and upcoming legislation.

- Better functioning of the supply chain and e-commerce.

- Ability of production and promotion of niche products

\textsuperscript{132} ISO 22005, Traceability in the feed and food chain —General principles and basic requirements for system design and implementation, 2007

\textsuperscript{133} Theodorou Evangelos, Food traceability systems, Athens, 2010
Stakeholders in traceability

In general, all the stakeholders with the traceability could be divided in two categories. Direct entities and indirect entities\textsuperscript{135}.

Direct Entities

- Suppliers (raw materials, feed, seed, fertilizer, etc.)
- Farms (fields, animal breeders, fish, etc.)
- Carriers (transport companies, Storage, Logistics, etc.)
- Processing and packaging industries.
- Importers and wholesalers (finished products and raw materials).
- Retail stores (Super Markets, companies catering, etc.).

\textsuperscript{134} Theodorou Evangelos, Food traceability systems, Athens, 2010

\textsuperscript{135} Theodorou Evangelos, Food traceability systems, Athens, 2010
- Consumers (individually or through organized groups, eg INKA).
- National authorities (EFET, EOF, Ministry of Agriculture, Ministry of Development, etc.)

**Image:** Direct entities in traceability

**Indirect Entities**
- Legal practitioners involved in the interpretation of regulations, etc.
- The press that raises issues related to consumers’ safety.
- Consultancy and implementation of traceability systems agencies.

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136 From presentation of Food Law course by prof. Massouras T. at the Agricultural University of Athens, 2011-2012
With the following questionnaires we tried to obtain information related to foodstuffs with Geographical Indications from Greek consumers and from Greek food business operators. For this reason the creation of two different questionnaires took place.

The first questionnaire was shared in both consumers’ associations and random consumers in order to have a better view of consumers’ perception on GI products. The questionnaire consisted of 13 multiple-choice questions and it was designed to require less than 4 minutes to be completed. This questionnaire did not require private data and the design of this questionnaire happened having in mind issues that concern consumers over time and also specific questions which helped us to get useful information on Geographical Indicated foodstuffs.

The second questionnaire was sent to Food Business Operators. The questionnaire consisted of 19 combined questions and it was designed to require less than 5 minutes to be completed. In this questionnaire the questions were referred to technical, economic and social issues related to G.I foodstuffs.

**Questionnaire 1:**

1. Until what extent does the quality of food affect your decision to buy them?
2. Until what extent does the price of food affect your decision to buy them?
3. Until what extent do you know what Geographical Indication is?
4. Until what extent do you recognise the certification marks on products with Geographical Indications?
5. Until what extent the Geographical Indication symbols (labels) are remarkable on their label?
6. How much do you trust the Geographical Indication symbols (labels) on products with Geographical Indications?
7. Until what extent do you believe that the official controls guarantee the products with geographical indication?
8. Until what extent the Geographical Indication is a criterion for buying a foodstuff?
9. Until what extent do you connect products with Geographical Indications with the quality?
10. Until what extent are you willing to pay for a foodstuff with Geographical Indication?
11. How traditional do you think a foodstuff with Geographical Indications is?
12. How much do you think that products with Geographical Indication help in maintaining of tradition?
13. How authentic do you thing foodstuffs with Geographical Indication are?

Questionnaire 2:

1. How difficult the producing process of your product is?
2. How much time consuming the producing process of your product is?
3. Until what extent the agriculture of your area does affect your products?
4. How easily could you find the raw materials in your area?
5. How easily could you place your foodstuffs on the Greek market?
6. How easily could you place your foodstuffs outside Greek market?
7. Until what extent do the foodstuffs with Geographical Indications help in the development of your business?
8. Why do you think that consumers prefer your products?
9. Do you want to develop new foodstuffs with Geographical Indications in the future?
10. Until what extent do foodstuffs with Geographical Indications help producers to increase their income?
11. How satisfying do you think that the label of foodstuffs with Geographical Indications is?
12. Until what extent the Geographical Indication symbols (labels) are remarkable on their label?
13. Until what extent do you think that the Geographical Indication symbols (labels) help the information of consumers?
14. Until what extent do the foodstuffs with Geographical Indications help in the maintenance of the tradition?
15. How easily is to get the certification of a Geographically Indicated foodstuff from the competent authorities?
16. How satisfying do you think that the official controls are for the guarantee of the G.I. foodstuffs?
17. How important do you think that traceability is in the stages of production of foodstuffs with Geographical Indications?
18. How much does a traceability system help (finding and fixing potential problems) in the proper production of your foodstuff?
19. How many producers are including in your business? (if you are an individual producer or individual processor fill the gap with the number 1)
DATA COLLECTION – QUESTIONNAIRES

Google Drive

The data required for this thesis have been collected by questionnaires created with Google Drive. Google Drive is a free, Web-based word processor, spreadsheet, presentation, form, and data storage service offered by Google. In order to use this processor you must have an account and an internet browser. Surveys created with Google Drive are recorded to a spreadsheet automatically, making it easy to view responses and manage your data. Moreover the questionnaires can be shared to anonymous users and the answers are registered automatically. To sum up the benefits gained by using Google Drive are the followings:

1. Free
2. Web-based
3. Collaboration – the questionnaire can be shared, opened, and edited by multiple users at the same time
4. Responses can be exported

**Designing the questionnaires**

In order to design the questionnaires particular steps were being followed. Using an internet access and a google ID the steps are the followings:
1. Sign in with Google ID

2. Create a new form
3. Choose title and theme

4. Choose the question type (multiple choice)
5. Example of a Complete Questionnaire (screenshot of edit mode)

6. Invitation for responses. Enter email addresses of the respondents.
7. Detailed feedback in a spreadsheet.

Sharing the questionnaires

The first questionnaire was shared to consumers’ associations (the contact details were obtained from the competent ministry), was send to several consumers via email and also it was uploaded on blogs and social media in order to be visible by the consumers. As far as the second questionnaire is concerned, it was shared to Food Business Operators of Geographical Indicated foodstuffs after an investigation that took place.

Exporting the data

In order to process the data the spreadsheets were exported to .xlsx file extension. A file with the .xlsx file extension is an Excel Microsoft Office Open xml Format Spreadsheet file. Microsoft Office Excel (version 2007 and above) is the primary software program used to open and edit .xlsx files. So this program has been used in this thesis.

Figure 1: Download options of the spreadsheet (selected file extension .xlsx)

DATA PROCESSING

The numerical data that were collected with Google Drive were imported to Excel 2007 in order to be analyzed and presented in charts using pivot tables. A pivot table is a special type of summary table that’s totally unique to Excel 2007. Pivot tables are useful for summarizing values in a table without creating formulas to perform the calculations. It’s this
capability of changing the arrangement of the summarized data on the fly simply by rotating row and column headings that gives the pivot table its name.

Figure 2: Example of a Pivot table

The pivot table was useful for the creation of the tables and the charts afterwards.

Figure 3: Example of a table and a chart
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Fax: 00302108231438
Email: agrocert@otenet.gr or info@agrocert.gr
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