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SECTORAL STUDY

BAKERY, CONFECTIONARY AND PASTA

Project Leader: Chatziliias Nikolaos

Researchers: Panagiotis Kotsios, Nikolaos Kiriakidis, Konstantina Romana,
Theodoros Papadakis, Michalis Savvidis , Sotiris Michaelidis , Antonios Amanios

PLANNING AND IMPLEMENTATION: **AMERICAN FARM SCHOOL**

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Agriculture · Environment · Life Sciences

*New Agriculture for a New Generation:
Recharging Greek Youth to Revitalize the Agriculture and Food
Sector of the Greek Economy*

STUDY # 4: BAKERY, CONFECTIONARY AND PASTA

Notice :The ice cream sector has been included into the above
sector

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1. Executive summary (in Greek & English)

Sector

1.1. BAKERY – CONFECTIONARY (Notice :The ice cream sector has been included into the sector)

Demand in the artisanal bakery and confectionary sector is significantly affected by factors such as consumption patterns, eating habits, tradition and traditional standards and disposable income in correlation with price and quality of the particular products. While the market share of small independent bakeries is significant, it comes under pressure from supermarkets and is slowly eroding. There is some potential of exporting traditional bakery products, mainly due to expatriate populations and the growing international demand for Middle Eastern food.

At present there are an estimated 9.000 bakeries operating, in Greece, with a likelihood of being reduced to 6.000 in the coming years. The key to designing an intervention with real impact in the sector is to realize that the surviving bakeries of the future will not necessarily belong to existing owners; new entrants with the right combination of skills and strategy might have a better chance of survival than existing companies that cling to outdated practices.

Among the existing bakeries, those with a higher chance of survival are those managed by 2nd and 3rd generation business owners who are usually people educated in Business orientated studies but are usually lacking in technical skills. This condition underlines the need for employing technical experts, and developing educational and training courses on RND and NPD with well equipped labs run by experienced new lectures and technicians.

Those services could be developed by establishing incubators where the knowledge and skills for new technologies, consistent and improved quality, reduced cost production and substitution of imports with Greek raw materials will be applied. This way, more innovative and extrovert entrepreneurs will be generated.

A trend worth mentioning among the most successful small and medium-sized companies is their horizontal diversification, integrating café services, confectionary, bakery and ice cream offering, all in one place.

The bakery and confectionary sector is characterized by a large number of traditional products, which most companies produce, so it can be called traditional; this extends both to the long product lifecycles and to production technology and processes. This sectoral lack of dynamism is a threat to small companies in the sense that “traditional” is not necessarily of better quality than what is offered by large supermarkets and certainly not differentiated.

A prerequisite for building quality in the artisanal bakery sector and using it as the basis for differentiation from the supermarkets is the codification of traditional Greek bread recipes, including standardized production guidelines.

1.1.1. Pasta

The economic crisis has not affected the market of pasta. On the contrary, consumption of pasta increased due mainly to reasonably low prices. The consumption of fresh and handmade pasta follows an upward trend due to their perceived higher quality; this creates a whole new opportunity for small-scale entrepreneurship and its connection with rural tourism (Agro-tourism)

1.2. ΑΡΤΟΠΟΙΙΑ - ΖΑΧΑΡΟΠΛΑΣΤΙΚΗ (σημείωση: Ο τομέας του παγωτού έχει συμπεριληφθεί στον τομέα)

Η ζήτηση της βιοτεχνικής αρτοποιίας και ζαχαροπλαστικής επηρεάζεται σημαντικά από παράγοντες όπως τις καταναλωτικές συνήθειες, τις διατροφικές συνήθειες, την παράδοση και τα παραδοσιακά πρότυπα και το διαθέσιμο εισόδημα σε σχέση με την τιμή και την ποιότητα των συγκεκριμένων προϊόντων. Ενώ το μερίδιο αγοράς των μικρών ανεξάρτητων αρτοποιεία είναι σημαντικό, τίθεται υπό πίεση από το σούπερ μάρκετ και σιγά-σιγά

διαβρώνεται. Υπάρχουν κάποιες δυνατότητες εξαγωγής των παραδοσιακών προϊόντων αρτοποιίας, κυρίως λόγω των ομογενών πληθυσμών και την αυξανόμενη διεθνή ζήτηση για τρόφιμα Μέσης Ανατολής.

Προς το παρόν υπάρχουν περίπου 9.000 αρτοποιεία που δραστηριοποιούνται στην Ελλάδα, με μια πιθανότητα να μειωθεί σε 6.000 κατά τα προσεχή έτη. Το κλειδί για το σχεδιασμό μιας παρέμβασης με πραγματικό αντίκτυπο στον τομέα είναι να συνειδητοποιήσουμε ότι τα αρτοποιεία του μέλλοντος δεν θα ανήκουν αναγκαστικά σε υφιστάμενους επιχειρηματίες. Οι εισοδος των νεοεισερχόμενων, με τον σωστό συνδυασμό δεξιοτήτων και της στρατηγικής θα μπορούσαν να έχουν μια καλύτερη πιθανότητα επιβίωσης από τις υπάρχοντες εταιρείες που προσκολλώνται σε ξεπερασμένες πρακτικές.

Μεταξύ των υφιστάμενων αρτοποιείων που διαχειρίζεται σήμερα 2ης και 3ης γενιάς ιδιοκτήτες που είναι συνήθως οι άνθρωποι με εκπαίδευση και προσανατολισμό στο μάρκετινγκ και στις σπουδές επιχειρήσεων, συνήθως τους λείπουν οι τεχνικές δεξιότητες. Αυτή η κατάσταση υπογραμμίζει την ανάγκη για την πρόσληψη ειδικών τεχνολόγων, καθώς και την ανάπτυξη μαθημάτων εκπαίδευσης και κατάρτισης σε RND και NPD με καλά εξοπλισμένα εργαστήρια που διευθύνονται από έμπειρους καθηγητές ανώτατης εκπαίδευσης και τεχνικούς.

Οι υπηρεσίες αυτές θα μπορούσαν να αναπτυχθούν με τη δημιουργία εκκολλητηρίων, όπου θα πρέπει να εφαρμόζονται οι γνώσεις και δεξιότητες για νέες τεχνολογίες, με ταυτόχρονη βελτίωση της ποιότητας, τη μείωση του κόστους παραγωγής και την υποκατάσταση των εισαγωγών με ελληνικές πρώτες ύλες. Με αυτή την εφαρμογή θα δημιουργηθούν πιο καινοτόμες και εξωστρεφείς επιχειρηματίες. Μια τάση που αξίζει να αναφερθεί από τις πιο επιτυχημένες μικρές και μεσαίες επιχειρήσεις είναι οριζόντια προσφορά τους, ενοποιώντας τις υπηρεσίες καφέ, ζαχαροπλαστικής, αρτοποιίας και παγωτού, όλα σε ένα μέρος.

Ο κλάδος αρτοποιίας και ζαχαροπλαστικής χαρακτηρίζεται από ένα μεγάλο αριθμό παραδοσιακών προϊόντων, τα οποία οι περισσότερες εταιρείες παράγουν, έτσι ώστε να μπορεί να χαρακτηριστεί ο κλάδος παραδοσιακός. Αυτό επεκτείνεται τόσο στην εμπορική διάρκεια των προϊόντων αλλά και στην τεχνολογία παραγωγής των. Αυτή η τομεακή έλλειψη δυναμισμού αποτελεί απειλή για τις μικρές επιχειρήσεις με την έννοια ότι «παραδοσιακό» δεν είναι κατ'ανάγκη καλύτερης ποιότητας από ό, τι προσφέρεται από μεγάλα σούπερ μάρκετ και σίγουρα δεν διαφοροποιούνται.

Απαραίτητη προϋπόθεση για την οικοδόμηση της ποιότητας στον τομέα της βιοτεχνικής αρτοποιίας και ζαχαροπλαστικής είναι η χρήση ως βάση για τη διαφοροποίηση από τις υπεραγορές είναι η κωδικοποίηση των παραδοσιακών ελληνικών συνταγών ψωμιού, συμπεριλαμβανομένων και της τυποποίησης τους.

1.2.1 Ζυμαρικά

Η οικονομική κρίση δεν έχει επηρεάσει την αγορά των ζυμαρικών. Αντιθέτως, η κατανάλωση ζυμαρικών αυξήθηκε κυρίως λόγω χαμηλών τιμών. Η κατανάλωση φρέσκων και χειροποίητων ζυμαρικών ακολουθεί μια ανοδική τάση λόγω της υψηλότερης ποιότητά τους. Αυτό δημιουργεί μια εντελώς νέα ευκαιρία για μικρής κλίμακας επιχειρηματικότητα και τη σύνδεσή της με τον Αγροτικό Τουρισμό (Αγροτουρισμός).

1.3. Methodology and data sources used

A variety of secondary and primary sources was utilized to cover the objectives of the study, including desk research, interviews essential to address the objectives of the study:

Desk Research and Secondary data

- Extensive Literature review on sectoral sources and case studies
- Research on legislation and regulations of the sectors
- Research on health and safety legal issues
- Research on regional strategies for smart specialization and objectives
- Research based on NACE and CN Codes Statistics from various sources and analysis to prioritize sectors
- Databases and market sector analysis
- Primary research (interviews) concerning of existing companies and stake holders in Greece

Primary Qualitative Research

A qualitative approach with small size young entrepreneurs of the primary sector and potential entrepreneurs planning their entrance in the agro-processing sector; a semi-structured approach to discussion, with some questions guidelines although the discussion flow was also dependent on the answers of the participants. The aim was to gain insights in the following areas:

- Sub-sectors of interest
- Experience in the sector
- Entrepreneurial Motives
- Planned size of the firm
- Barriers to entry
- Extroversion
- Need for equipment
- Need for support
- Place for establishing incubator's production facilities.

2. Greek Business Environment: A brief review

According to the state organisation “Enterprise Greece”, the Greek economy achieved high growth rates until 2008 and then exhibited signs of recession in 2009 as a result of the global financial crisis. From 2010 onwards the recession intensified considerably due to country’s fiscal imbalances. The restrictive income policy and drastic limitation on public expenses over the past five years have had a negative impact on GDP growth, leading to its decrease by 5.4% in 2010, 8.9% in 2011, 6.6% in 2012 and 3.9% in 2013 (constant prices of year 2010). During 2014, the Greek economy returned to positive growth rates of 0.8%.

The public deficit reduced from 15.3% in 2009 to 11.1% in 2010, 10.2% in 2011, 8.7% in 2012, whereas in 2013 was increased by 12.3%. In 2014, the public deficit decreased even further reaching 3.5% of GDP, while in 2013 and in 2014 a primary surplus was achieved.

Unemployment rate in Greece, up to 2008, was relatively low at 7.6%. In 2009, unemployment rose as a result of the international crisis that also affected Greece and reached 9.6%. In 2010 unemployment showed a further increase, at 12.7%, as a result of the restrictive fiscal policy due to the debt crisis. In 2011, unemployment rose further to 17.9%, in 2012 exceeded 24% and in 2013 reached 27.5%, as a consequence of the general economic crisis and the measures applied towards fiscal consolidation. In 2014, for the first time since the beginning of the crisis, a slight decrease in unemployment is observed, however it remains at the very high levels of 26.5%. Youth unemployment, which exceeds 50%, is one of the major problems arising from the domestic economic crisis.

In 2014, the gross fixed capital formation in Greece reached 20.7 billion Euro at current prices, showing an increase of 1.3% compared with the levels of 2013 (20.5 billion Euro). This slight increase is noted for the first time in recent years, following a series of significant decreases due to the drastic reduction of public expenses and the restrictive fiscal policy resulting from the economic crisis in Greece. Despite the domestic crisis of public debt and Greece’s inclusion in the IMF¹- EU² - ECB³ support mechanism, total (gross) inflows of foreign investment capital, which essentially reflect the real performance of the country in attracting investment, decreased by 24,4% in 2014 in comparison with 2013 , but are still higher by 30.7% compared to 2012.

The export of Greek goods during 2014 dropped by 1.5% compared to 2013, reaching 27.2 billion Euros. Imports to Greece in 2014 amounted to 47.7 billion Euro whereas in 2013 they reached 46.9 billion Euros, increasing by 1.7%. The increase in imports in 2014 and the slight decrease of exports have resulted in the slight increase of the trade deficit of Greece, in 2014.

	2010	2011	2012	2013	2014
GDP(constant prices 2010)	-5.4%	-8.9%	-6.6%	-3.9%	0.8%
Inflation:Annual Average	4.7%	3.3%	1.5%	-0.9%	-1.3%
Unemployment Rate	12.7%	17.9%	24.4%	27.5%	26.5%
Public investments (%GDP)	3.2%	2.5%	2.5%	2.7%	3.8%
Exports(current prices in billion €)	21.1	24.3	27.6	27.6	27.2
Imports(currents prices in billion €)	50.5	48.4	49.3	46.9	47.7

ITEM 1: Basic facts of Greek economy (Source: Eurostat, Hellenic Statistical Authority)

2.1 «FOOD AND BEVERAGES INDUSTRY - Facts & Figures»

The Food and Beverage industry maintains - even in times of recession -, its fundamental role in the Greek economy and manufacturing industry in general, and has all presuppositions in order to retain its role as a key growth driver of the country. The issues that have been raised in regard to the role of the domestic Food and Beverage industry as a springboard for a growth trajectory revolve around the directions of extroversion and exports, the Greek quality of the product, the product ID (brand name, business and domestic) and the organized promotion of Greek foods. The effective coordination and closer cooperation of the industry representatives can contribute to improving the efficiency and effectiveness of Greek products promotional efforts and ensuring selection of the right strategy and stability in the implementation of its long term planning.

The creation of added value and the industry's enhancement of extroversion are matters depending largely on the promotion and projection of the Greek product, in and through properly designed distribution networks of products based on quality and diversification and also, on the promotion the model of Greek and Mediterranean cuisine and diet pattern, domestically and abroad. The connection to the tertiary sector of services in restaurants, hotels and general tourism, the synergy that is the first and the third pillar of the Greek economy is an additional instrument for the promotion of Greek products, adding value and export dynamics in the industry.

Improving the competitiveness of Greek food products is largely based on strengthening human resources, their incorporated skills, knowledge, experience, as well as the object and the degree of specialization. The dynamics of human capital and specialization of employment comprises a broad range of disciplines and business expertise in manufacturing and beyond. New technologies, innovative activity, research and development of new products, decisively lead developments in all production and distribution stages in the food industry, while their rapid changes make rapid adaptation, alertness and flexibility in human resources more than necessary so that it will be able to respond immediately, promptly and effectively to these changes and new requirements in the context of international competition.

2.2. BASIC STRUCTURAL FEATURES OF THE FOOD AND BEVERAGE INDUSTRY

The role of the domestic Food and Beverages industry is fundamental for the Greek manufacturing industry, and more broadly for the Greek economy. The Greek Food and Beverages industry is consistently one of the most important areas of the secondary sector of the domestic economy and one of the driving forces of Greek manufacturing while developments around it affect significantly the total Greek production. This industry is a dynamic, competitive and extroverted one, with significant investment and business activity in Greece, the Balkans and throughout Europe. Its potential for further growth is large and can play an important role in boosting growth in the Greek economy.

The Table below (Item 1) shows the substantial contribution of the Food and Beverages industry to main structural sizes, namely the number of enterprises, turnover, production value, gross value added and number of employees. The data are taken from Eurostat (Structural Business Statistics) and refer to the most recent data available in Industrial research (corresponding CCI - ELSTAT.) in 2009.

In particular, the domestic food industry covers almost 1/5 (18.9%) of all enterprises of Greek manufacturing, which ranks first among manufacturing sectors, followed by metal products (15%) and clothing (13%). At the same time, it is the biggest employer in domestic processing, since it employs 1/5 (20.3%) of all employees (12% in the metal products and 7.4% in clothing). The presence of the sector is also fundamental in purely economic terms, since it is first among other branches of manufacturing production in value terms (20.4%) and gross value added (19.7%) and second largest in terms of turnover (20.2%, the first is coal and refined products with 22%).

The same table shows the comparative analysis with the European Union and their respective classifications of the first 5 processing industries both in Greece and the EU-27. From the data analysis, we can clearly realize its vital role in the food processing sector and its leading contribution to the European economy. The Food industry is one of the largest manufacturing sectors in the EU, while steadily becoming one of the first sectors in relation to other key sectors of the European economy, such as automotive, chemicals, industrial machinery and equipment and metal products. In terms of turnover, production value, gross value added and number of employees, Food ranked first in the European

processing industry and second in terms of number of companies, covering 12.3% of manufacturing, after the metal products (17.9%).

Specifically, the total turnover of European food industry accounts for 13.5% of European manufacturing, followed by Manufacture of motor vehicles (10.8%), while the gross value added of the sector covers about 11.3%, with Manufacture of machinery and equipment follows (10.7%). The food industry remains the largest employer in the manufacturing sector, and employs over four million workers, ie 13.5% of all workers in European industry (followed by metal products with 11.7%).

Compared with the EU-27 in average, the food sector in Greece has a greater contribution to the manufacturing sector, in terms of number of enterprises, turnover, value of production, gross value added and number of employees despite the fact that it is the first sector in the European Union as well in all the above categories, except the number of enterprises. The largest share of the Greek food processing industry reflects both domestic influential dynamics, which derive from its connection to tourism, hotels and restaurants, but also the smaller size of development of other sectors of the domestic manufacturing sector.

As for the distribution of the Greek sub-sectors of Food and Beverages, based on the examined structural characteristics, ITEM 2 shows the following:

-In regard to the gross value added of Food and Beverages, Bakery and floury holds the largest proportion of the relevant distribution (1/4), followed by drinks (24.3%), dairy products (15.5%) and other foodstuffs (10.3%).

- In regard to output, the largest share of the relevant distribution hold the Bakery and floury again, holds the largest share of the relevant distribution (23%), followed by Beverage and Dairy equally (17.3%) and other food products (10.3%).
- In regard to the number of businesses in the sector, Bread and floury holds the largest share (60%), followed by oils and fats (12%), other food products (6.3%), Drinks (5.5%) and dairy products (5.2%).
- In regard to the turnover of the Food and Beverages, Dairy products are holding the largest share of distribution (20%), followed by Bread and floury (18%), beverages (16.3%) and other food products (11.4%).
- As for the number of employees in the whole of the Food and Beverage sector, Bakery and floury (35.6%) comes first in the country, with Dairy ranking second (14.5%), Distillery, third (11.6%) followed by other food products (10.5%).

** The latest available structural data of the survey "Structural Business Statistics" concern year 2009. The classification in the chart was based on gross value added.*

Source: Eurostat, Structural Business Statistics, Processing IOBE

As shown by the relevant distributions, in terms of number of companies, small enterprises, i.e. those employing less than 9 people present the highest percentages, both in Food (95%) and in beverages (90%).

In terms of turnover on the other hand, the highest percentages, both in Food (39%), and more in Beverages, (70%), are presented by very large companies, i.e. those in which the number of employees exceeds 250 people. In Food, a significant share in turnover is collected by very small enterprises, too (21.4%), while in Beverages this figure is only 9%. This is explained by the high concentration and the high number of small enterprises in the Food sub sector, which reaches the amount of almost 15,000 while the number of very small enterprises in the Beverages sub sector is only 835. As for the production value and gross value added in the Food sub sector, again the distribution allocates greater weight, as it is expected, to very large companies, with rates close to 36%, followed by small enterprises (25% and 28% respectively) . In the Beverages sub sector, the very large companies account for 70% and 75% respectively in terms of production value and gross value added.

Finally, the number of employees in the Food sub sector, the largest percentage is allocated to small enterprises (37%), followed by very large firms (27%) and large ones (50-249 people) (20%). In Beverages, nearly half of workers in the sector (48%) are employed by very large companies, while 23% in large ones.

** The latest available structural data of survey "Structural Business Statistics" relate to 2009. The data may differ from those of LFS and CCI, ELSTAT.*

Source: Eurostat, Structural Business Statistics, IOBE

Finally the annual percentage change in the Producer Price Index for all (22) sectors of Manufacturing in 2013. Except for the Food sector which recorded a decrease of -5% in producer prices domestically, in 13 sectors we also note a decrease in the relevant indicator, with the greater being that on furniture construction (-18%) and the smaller on leather Manufacturing (-1.1%). In 8 sectors of Manufacturing, the Producer Price Index is moving positively in 2013, with a smaller rise in Plastic (1.4%) and a greater increase in the production of basic pharmaceutical products and by products (13.3%), computers, electronic and optical products (30.9%).

Source : Eurostat, Short term Business Statistics, Επεξεργασία IOBE

2.3 THE INDUSTRY'S WORKFORCE

The Food industry is the biggest employer of Greek manufacturing sector, while its share of employees records a continuous increase from 2008 to 2013. In 2008, the percentage of the workforce in Food and Beverages in the total workforce in the manufacturing sector, amounted to 22%, while in 2013 reached 34%. The increase is due mainly to the reducing total number of employees in the domestic processing sector from nearly 541.000 in 2008(4) to almost 338.000 workers in 2013. The cumulative fall in employment in the domestic manufacturing sector from 2008 to 2013 reaches -37.5%. Only in years 2011 and 2012, the relative drop reached respectively -10.5% and -14.5%, while in 2013 reached - 7.2%. The same year, employment in the Food and Beverage also declined but at a slower rate (-7.9% and -10.2% in 2011 and 2012), while overall for the period 2008-2013, the cumulative change in the number of employees in Food & Beverages is only -2.9%, while only in the Food sub sector, reduction for the same period is marginal (-1.1%).

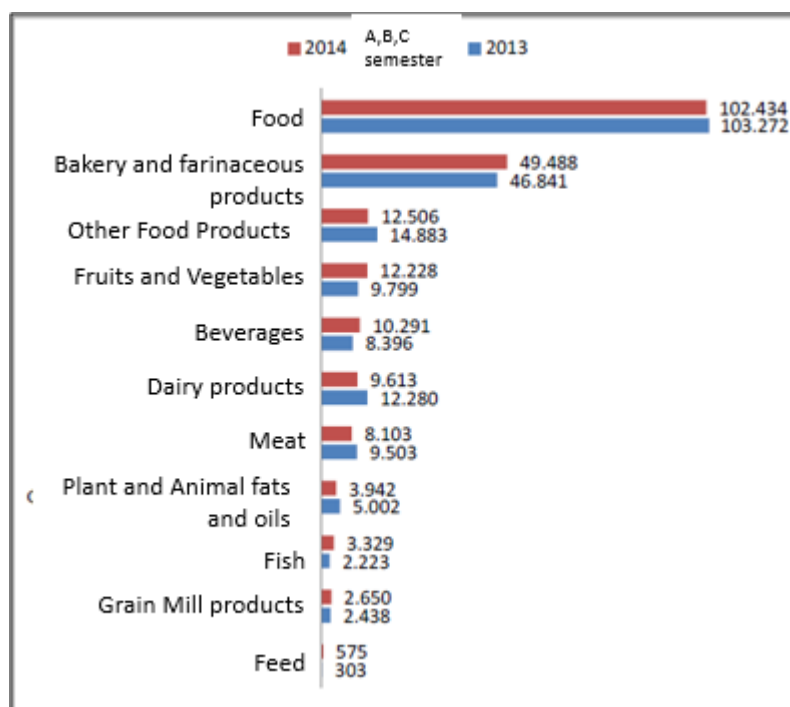
ITEM 2:RATE FORCE IN FOOD AND DRINKS IN CONNECTION WITH THE PROCESSING

In 2013, employment in the Food sector exhibited a significant increase of around 10.3%



compared to while the number of workers in this sector exceeded 106.000 (from 96.600 in 2012). In the Food & Beverages sector as a whole, the number of employees in 2013 exceeded 115.000. But despite the rise in the number of employees in the Food sub sector, Beverages recorded a decrease of -13% in the same year. The overall rise in Food and Beverage therefore emanates purely from the Food sector.

ITEM 3: ANNUAL CHANGES IN FORCE FOOD AND SUB*



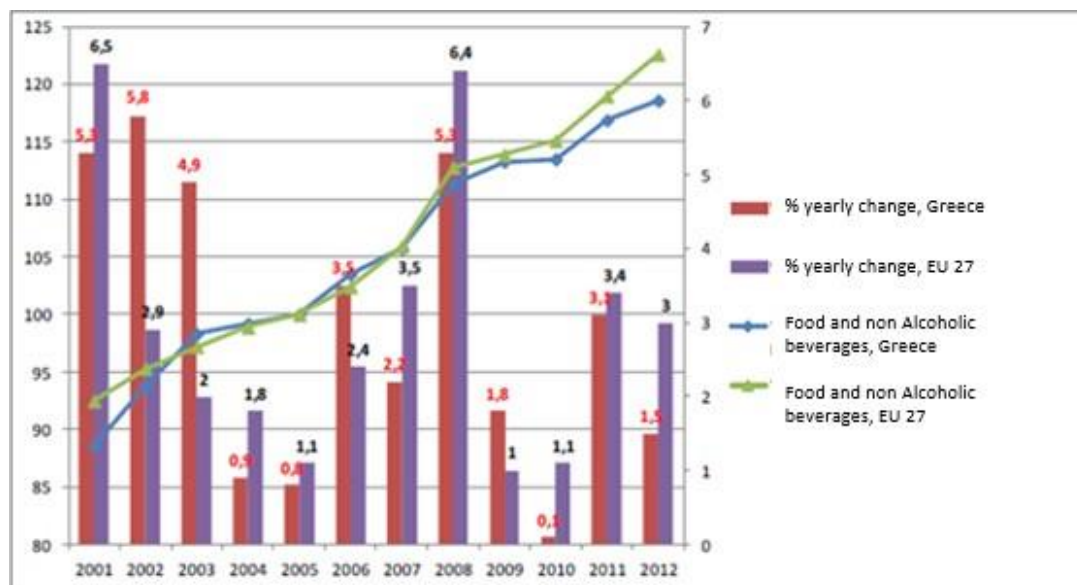
* AVERAGE TERMS INst-3rd QUARTERS, 2008-2013 (data for the 4th quarter of 2013 was not yet available). Source: LFS - ELSTAT. IOBE

2.4. CONSUMER PRICE INDEX

In relation to the harmonized consumer price index in Food and non-alcoholic beverages and its annual percentage change in the EU and Greece we can conclude that the European average indicator is steadily higher than it was in years 2008 to 2013, with this deviation growing bigger each year. Specifically, the annual percentage change in the European index in 2008 was 6.4%, when the domestic was 5.3%, while in 2013, the domestic relevant index remained almost unchanged (0.2%), with the corresponding European average index to record an annual growth rate of 2.6% (POINT 18).

ITEM 4: HARMONIZED CONSUMER PRICE INDEX AND CHANGES IN FOOD AND NON-ALCOHOLIC BEVERAGES, IN EU AND GREECE

Source: Eurostat, HICP., Edit IOBE



The European consumer price index and its annual percentage changes are significantly higher in Food and non-alcoholic drinks than the domestic price index. The changes, however, in terms of the total harmonized consumer price index are higher in the EU and the eurozone, since in 2012 they increased respectively by 1.5% and 1.4%, while in Greece the relevant index registered a slight decrease (-0.9%), highlighting the deflationary trend in the shopping basket, as a result of the prolonged recession and the subsequent reduced demand.

2.5. FOREIGN TRADE IN FOOD AND DRINKS

In terms of foreign trade, in 2012(5) the Food and Beverages industry Beverages recorded a significant reduction in the trade deficit by 21% in one year, with a corresponding reduction in the total trade deficit reaching 28% (6). The corresponding reduction in the trade deficit in 2011 in the same industry was much smaller (5,2%) However, in 2013 the decline in the trade deficit resulted from the sharp drop in imports by 7%. So, while in 2011 the rise in exports was twice as high (8.8%) than that of 2012, the simultaneous import growth to a lesser extent (2%) did not allow a large reduction in the trade deficit.

In absolute terms, Food and Beverages exports in 2012 amounted to € 2.794 million. (from € 2.679 mil. in 2011), while the corresponding imports, to € 4.513 million. (from € 4.857 million. in 2011). Thus, the trade deficit stood at its lowest level since 2007, at € 1.719 million. (from € 2.179 million. In 2011) (Item 22).

The ratio of exports –imports in food and beverages, ie the share of domestic exports relative to the corresponding imports increased by 10 percentage points since 2010, reaching 62% in 2012. The corresponding proportion in the total of trade balance (7) reaches 53% in 2012, having also increased from 2010 (37%).

Additionally, in the total of food and beverages exports, the ratio of intra to extra-community trade is, over time, equal to about 75% to 25%. In the total of imports, the corresponding ratio is higher over time, in favor of intra-community trade, i.e. about 85% to 15%, respectively.

ITEM 5: EXTERNAL TRADE FLOWS FROM GREECE TO ALL FOOD (FIGURES IN MILLION. €)

EXPORTS	2010		2011		2012
EU27_EXTRA		617,85	643,39		725,70
EU27_INTRA	1	.844,01	.035,45	2	.067,99
TOTAL	2	.461,85	.678,84	2	.793,69
IMPORTS		2010	2011		2012
EU27_EXTRA		648,61	683,08		614,06
EU27_INTRA	4	.112,22	.174,53	3	.899,41
TOTAL	4	.760,83	.857,61	4	.513,47
TRADE BALANCE		2010	2011		2012
EU27_EXTRA		-30,77	-39,69		111,63
EU27_INTRA		-2.268,21	2.139,08		-1.831,42
TOTAL		-2.298,98	2.178,77		-1.719,79

Source: Eurostat, ComExt, the combined nomenclature of goods. Edit IOBE

- EU-INTRA: intra community trade in foods and drinks of Greece
 - and EU -EXTRA, trade outside the EU
-

The share of imports and exports in food, beverages and tobacco in intra community trade i.e. to and from EU countries is larger, as it is expected, compared to the corresponding non-EU countries. However, as is evident from the chart below (Item 24), in countries outside the EU, food, beverages and tobacco exported from Greece, in terms of a percentage of total exports, is much higher than the corresponding figure for imports from non-EU countries. This shows that food, beverages and tobacco exports occupy a significant share of total exports of the country, both inside and outside the EU, while imports are mainly from countries within the EU.

More specifically, in relation to Greece's major trading partners (Item 25) and with regard to imports by country, the Netherlands (16%), Germany (16%), France (13%) and Bulgaria (11%) are among the top five, while the rest of the top ten countries are complemented exclusively by the E.U. From countries outside the E.U, its largest trading partner in imports of food products in 2012, Argentina is in the 11th place with a share of 1.6% followed by Malaysia (1.2%, 14th place).

As for exports, Greece's largest trading partners in food and beverage products in 2012 are Germany, (16% of goods exported), Italy (14%), the United Kingdom (7%), Cyprus (7%) and Bulgaria (6%). In the top ten export destinations regarding this sector there is also a country outside the EU, namely the US, in the 6th place, accounting for 5.5% of exports, while outside the top ten export destinations is Australia in 11th place (2.0% of goods exported), but also Russia and Albania (1.8% and 1.7% respectively in 14th and 15th place).

3. The Sectors

3.0 Sector : Bakery , confectionary (notice : the ice cream has been included in the above sector)

3.1. Bakery

3.1.1 Introduction

According to Law 3526/2007, as bakery is defined any techno-economic unit whose installed engine power does not exceed 22KW, or the corresponding thermal power of 50KW. The above techno-economic unit is intended for the production of bakery products and other food compositions which are based on flour (except for the pasta) and the baking of food and other preparations. In that sense, the production cycle of basic bakery products, from the processing of raw materials to their final baking is completed in the bakery, where the sale of the produced in it products is allowed.

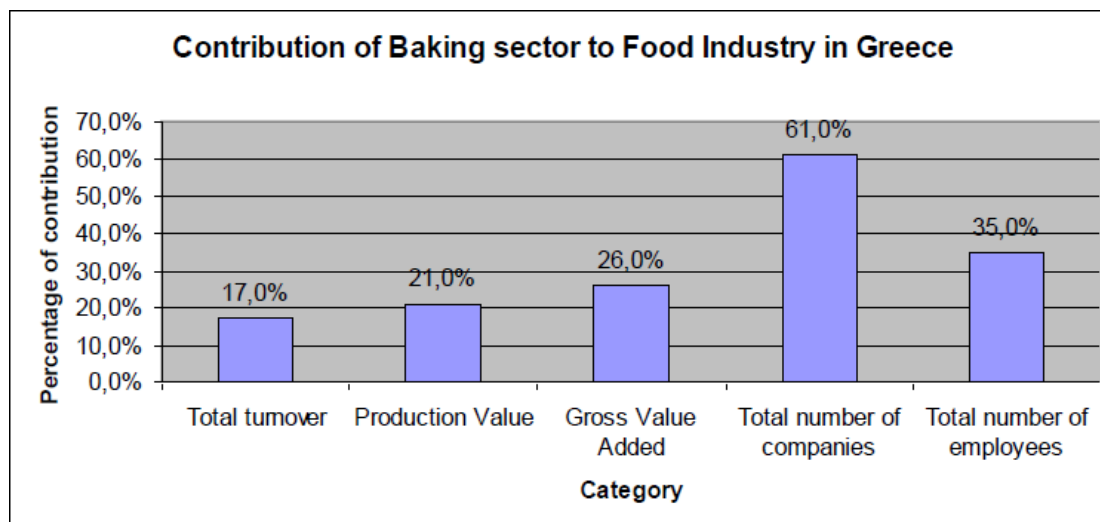
3.1.2 The bakery Industry in Greece

In accordance with the Food industry analysis conducted in 2014 by the Foundation for Economic and Industrial Research, the Food industry remains vital for both the Greek and European Economy constituting 21.2% of the total manufacturing sector and 25.2% of the employment in production.

The Greek food industry occupies the greatest percentage of total manufacturing sector in Greece in terms of Gross Value Added (24.4%), number of companies (21.2%), number of employees (25.2%). In terms of sales turnover and production value the food industry comes second reaching 19.7% and 19.8% respectively.

More specifically, the baking industry contributes 17% of Food Industry total turnover and 21% of Production Value. The contribution in terms of Gross Value Added equals to 26%. The most impressive fact, however, is undoubtedly the percentage of total number of companies involved in Food Industry attributed to the baking sector which touches 61%.

The percentage of employees that are occupied in the baking sector is also high and equal to 35% of the total number of employees of Food Industry in Greece.



ITEM 6: Contribution of Greek baking sector to Food Industry

The Greek Flour Mill industry fully covers the needs of the Greek market, as its installed capacity exceeds the demand.

The overall demand for products of flour is essentially inelastic in regard to income and price changes, since they are the raw material for the production of basic foodstuffs. Much of the demand comes from the bakery or other similar food industries (biscuits, pasta etc).

Domestic wheat flour production decreased slightly in the last two years (after a four-year upward trend) and reached 810.000 tons in 2012. Semolina, in the same year, was estimated at 147.000 tons.

Under the same law, bakery is the autonomous and independent shop in the area of which bakery products as well as other Items that may be sold in bakeries are sold.

By the term bakery products we mean bread, pastries and baked goods, defined as below: Bread (with no other indication): The bakery product which is prepared by baking in special ovens under defined mass balance conditions, consisting of wheat flour, water, yeast and a small amount of salt. If for the preparation of bread other kind of flour or a mixture of flour with other grain products except wheat are used then the prepared product

bears the name the respective cereal products. The bread is divided into white, black, mixed or organic bread.

Farinaceous product: The bakery product prepared from flour of one cereal or flour blends of various cereals, as long as its manufacturing way does not coincide with the way the kinds of bread described in paragraph d' article 1 of the relevant Law are manufactured, and that is available for consumption under the brand name "bread product" (artoparaskevasma). The "flat" bread product of Clean Monday ("laghana") falls under the same category.

"Bakery ware": The bakery product which is prepared in a manner analogous to the way the bread is prepared with single or double oven use, it differs, however, from bread with respect to its macroscopic texture and organoleptic characteristics.

The bread is categorized into white, black, mixed or organic bread.

"Simple bakery wares": The bakery products which can replace bread, such as toasted bread, rolls and buns, bagels, rusks, bread made from emmer wheat, pita bread.

"Various bakery wares": All kinds of bakery wares, prepared in a manner analogous to the method of manufacturing bread, but essentially different from it in regard to their macroscopic and organoleptic characteristics due to adding, besides the raw materials allowed by the Food and Drinks Code (ministerial decision no. 1100/1987 GG B 788) other ingredients such as milk, yoghurt, butter, cheese, eggs, fats, sweeteners, tomato by-products, olives, delicatessen products (cured meats), flavourings.

"Various confectionery bakery wares": Bakery products such as rusks, rolls, toasted bread and other confectionery biscuits containing mandatory fats and one of the natural sweeteners that attribute a sweet or sweetish taste.

3.1.3 Industry participants and competition

The domestic market is characterized by high degree of market concentration with a great number of small local bakeries that appear at an increasing rate during the last years (almost 15,000 bakeries according to Hellenic Federation of Bakers) and a few large manufacturers. The relative limited number of industrial bakeries that involved in bread and pastries production is attributed to strong preferences of Greek consumers with regard

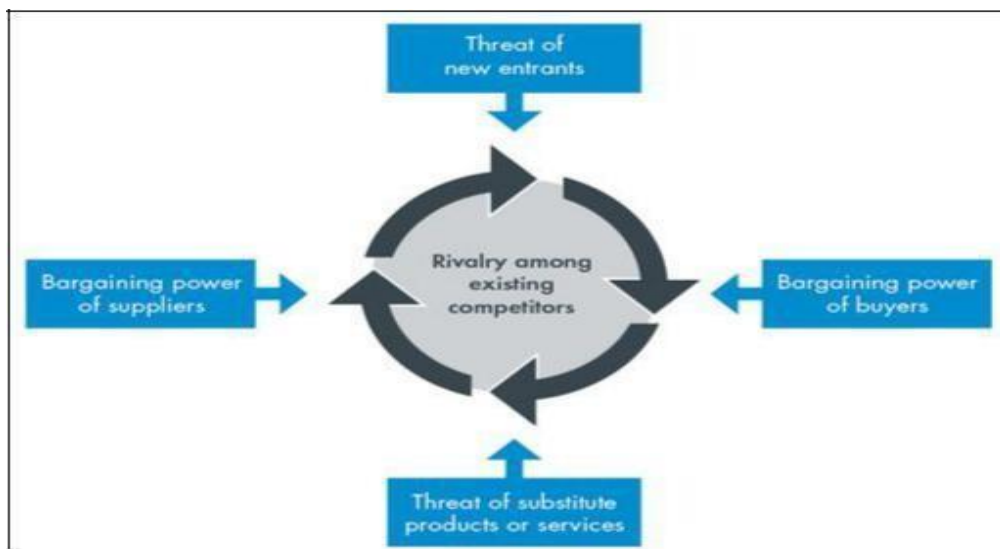
to bread and pastry consumption. Greek consumers prefer consuming products from small local bakeries to those produced by industrial bakeries and sold in large supermarkets.

Industrial bakeries have developed distribution channels and networks that cover the whole country and market, as well as state of the art equipment and know-how that enable them to produce a great variety of bakery products in large quantities and at a lower cost of production and thus are able to offer products at competitive prices.

On the other hand, small local bakeries are characterized by lack of available and enough funds for investment in equipment and upgrade of production facilities in order to develop new products and their promotion through advertising. In addition, small and local bakeries face difficulties in developing an extensive distribution network a fact that leads them to sell their products mainly or even exclusively in local markets in which they operate.

3.1.4 Porter's five forces

Threat of new entrants



Threat of new entrants to the baking industry is estimated as moderately high. The entry of new companies in the industry is considered quite easy given that there is no large capacity prerequisite. The most important obstacle to new competitors is deemed high fixed costs that bakeries face. A contemporary bakery requires state of the art technical and

technological equipment, which is a costly investment, to ensure a high degree of productivity.

Threat of substitutes

Nowadays, apart from the production of fresh bread, a contemporary bakery engages also in the production of a variety of pastries such as biscuits, pies, croissants etc. Close substitutes of these products are considered the standard products that are not fresh; contain flavor improvers and a greater product life compared to a fresh product. The production cost for such products is quite lower and are mainly sold by large supermarkets.

Bargaining power of suppliers

Basic raw materials that are used in baking industry are flour, baking mixtures, yeast, salt, oil, sugar and several improvers. The bargaining power of bakeries against their suppliers depends on the degree of their vertical integration and the number of suppliers. Given that most of small bakeries in Greece are externally supplied their basic raw material, there is observed a dependence on external suppliers making them to quite strong. However, the high competition that is lastly observed among suppliers, confines their power.

Bargaining power of buyers

Buyers can be divided into two broad categories: individual consumers and companies that are involved in food industry such as restaurants, delicatessen, small supermarkets etc. The bargaining power of both categories against large baking companies is not considered quite strong due to valid distribution channels that have developed. On the other hand, the bargaining power of buyers is boosted against small and medium size bakeries due to the excess supply and plethora of bakeries that are operated in Greece. Consumers have the privilege to choose between products that maximizes their utility subject to their budget and the relation between cost and quality.

Rivalry among existing products

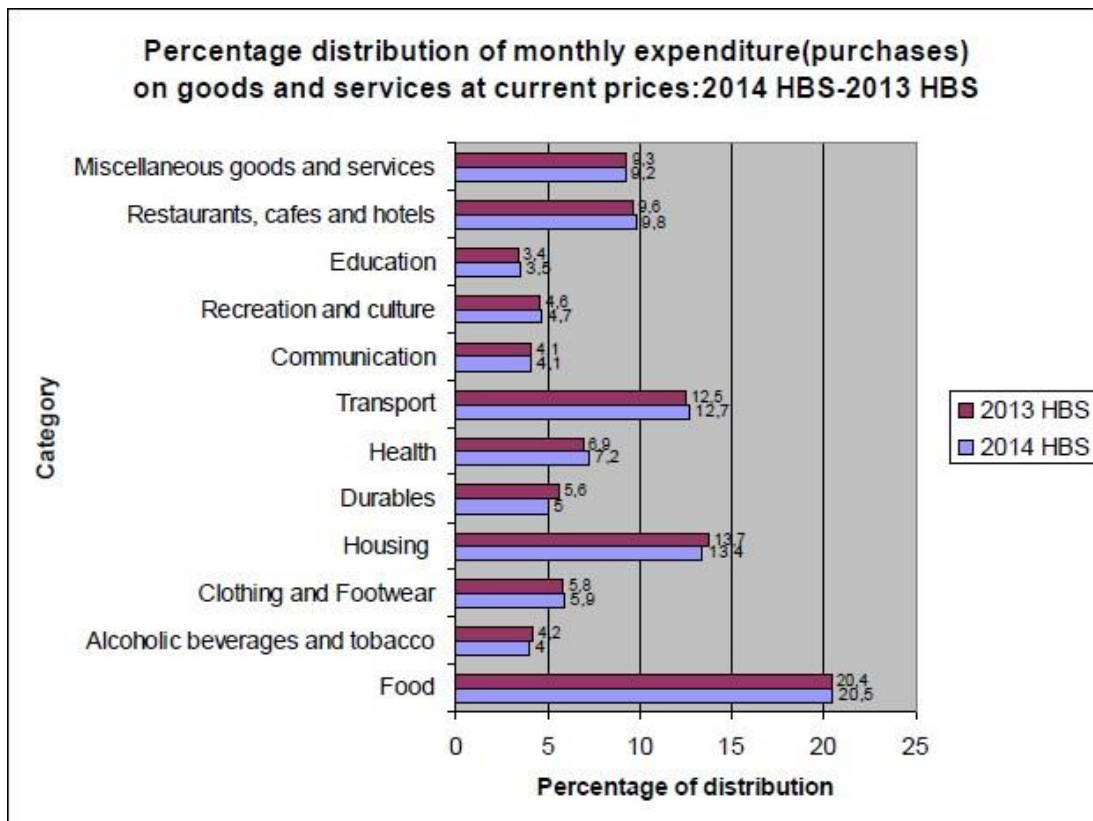
The Greek baking industry is a largely fragmented industry, a fact that is confirmed by the great number of mainly small and medium size companies existing in this sector. Under those circumstances, in the absence of a prominent industry leader, its participants accept the price dictated by market forces. Consequently, this fact brings about the minimization of profits, whereas the market competition among small bakeries with similar market shares leads to a high degree of industry rivalry. Many bakeries struggle to survive through product portfolio expansion and product diversification in order to attract more customers.

In addition, the competition recently tends to be boosted due to the emergence of large supermarkets that engage also in the pastry products. By adopting marketing policies based on low prices, large supermarkets offer lower quality pastry products aiming to gain a market share.

3.1.5. Consumption

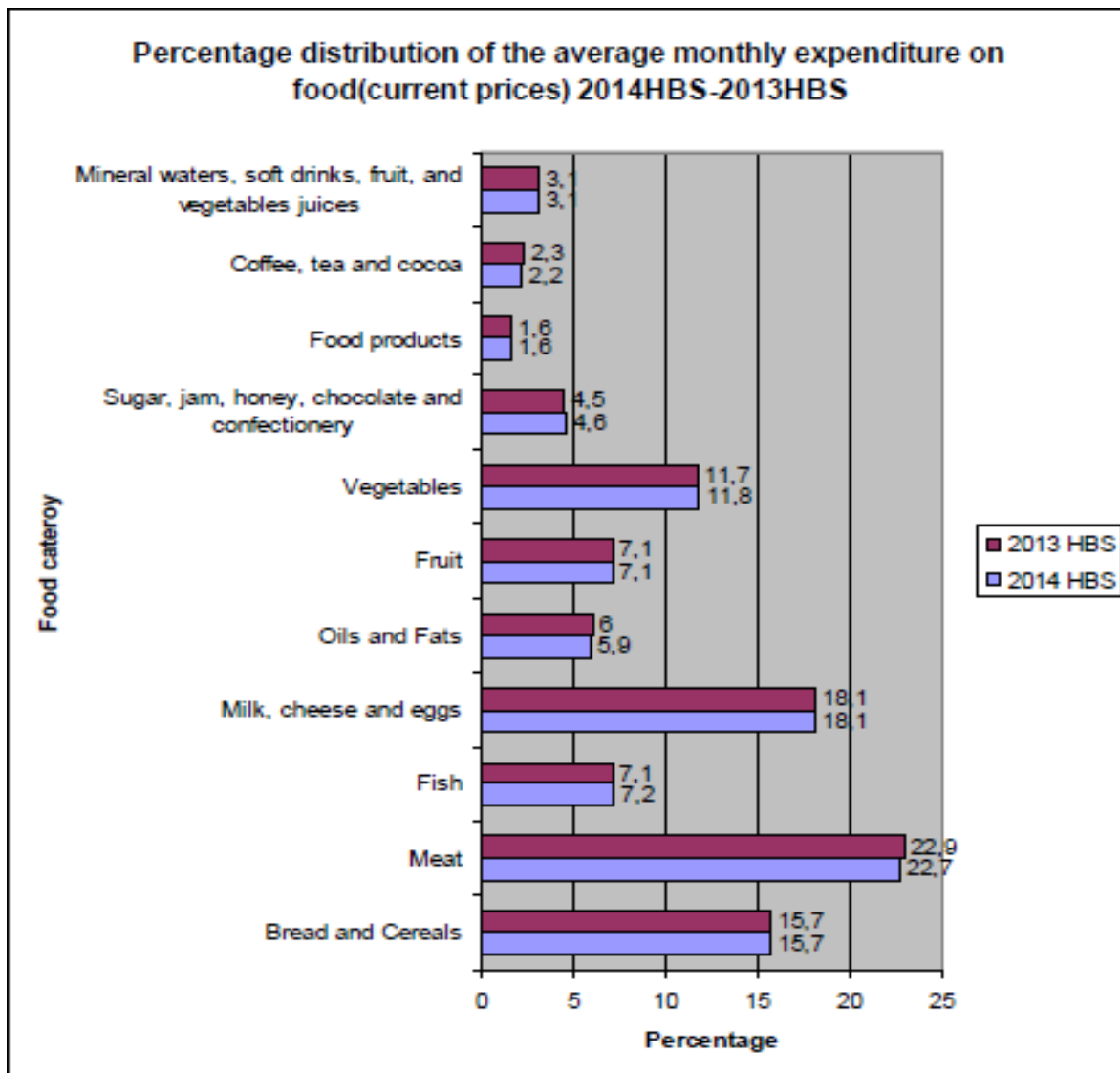
Consumption standards are usually adjusted in line with the changes in life-style and evolution of the technology. In general terms, during the last decades, consumers' tendencies and preferences appear to change and follow Western standards.

According to the Household Budget Survey conducted in 2014 by the Hellenic Statistical Authority, the percentage distribution of the average monthly household expenditure on the twelve (12) main categories of goods and services at current prices for the years 2014 and 2013, food accounts for the biggest share of the average household expenditure (20.5%) and then follow housing (13.4%) and transport (12.7%), whereas education services represent the smallest share of expenditure (3.5%). More analytically, the graph below depicts the percentage average distribution of household expenditure:



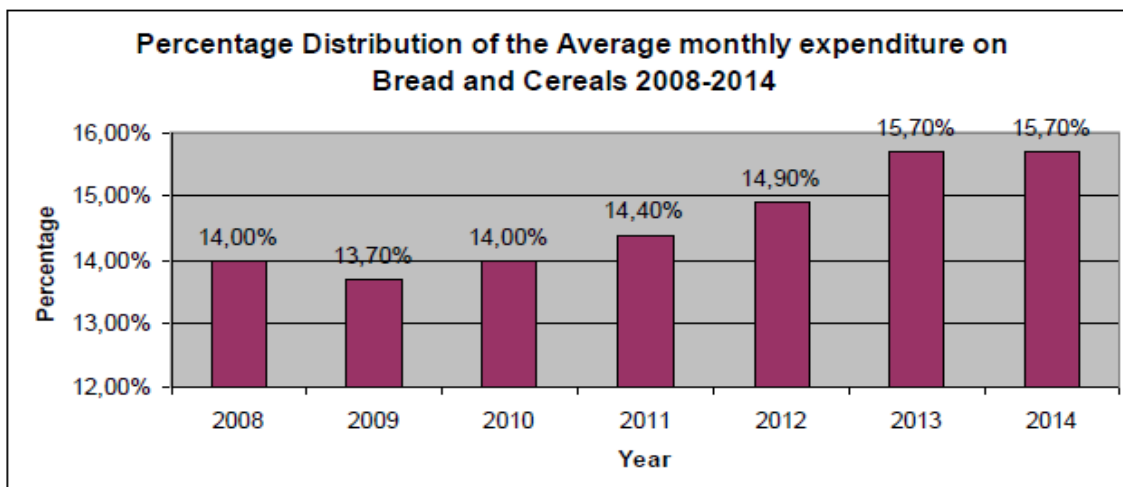
ITEM 7: Percentage distribution of monthly expenditure on goods and services between 2013 and 2014.

More specifically, the average monthly expenditure on food of the Greek consumer in comparison with the 2013 survey exhibited an important increase for the consumption of vegetables, sugar, jam, honey and chocolate products and fish while a quite high decrease is observed for the consumption of meat as well as oils and fats. A slight change is observed in the consumption of bread and cereals, dairy products and eggs. The following graph presents more analytically the percentage distribution of the average monthly household expenditures on food over the last two years.



ITEM 8: Percentage distribution of the average monthly expenditure on food 2014-2013.

The average monthly expenditure of Greek households on bread and cereals over the period 2008-2014 (Graph 4) tends to drift upward. In 2009, the monthly expenditure on bread and cereals touched the lowest level of the period 2008-2014. During the last two years, households in Greece appear to distribute a constant portion of the monthly budget for the consumption of bread and cereals a fact that implies that consumption of bread and pastries remain essential for the daily diet of Greek customers.



ITEM 9: Percentage distribution of average monthly expenditure on Bread and cereals 2008-2014.

The contemporary Greek customer is particularly well-informed and chooses the consumption of products that meet the majority of his/her needs based on its cost and its quality. Over the last five years a general tendency toward the consumption of Greek products is observed. According to a survey on the consumption of Greek products conducted by Mpaltas⁵ and Theodoridis⁶ (2013) 7 out to 10 consumers in Greece prefer the consumption of Greek products. In addition, he/she has the necessary knowledge and experience about the market conditions, the existence of substitutes and alternative available, a fact that is supported by the expansion of Internet using and the availability of other sources of information.

With regard the consumption of bread and other pastries from small local bakeries, a survey⁷ conducted by MARC SA in 2014 showed that the majority of consumers (86.5%) prefer to buy bread and pastry products from the traditional local small bakery mainly due to the high quality of the products and easy access to local bakeries. This tendency appears consistent over the last four years. The price of products of small local bakeries appeared to be an important determinant for 49.5% of survey participants while 40.3% of participants prefer bread and pastry products because a bakery operates close to their house. The survey also revealed that the greatest majority of participants (93.1%) are highly satisfied in terms of the quality of products offered by small local bakeries while 90.4% expressed their satisfaction regarding the variety of products that is offered to consumers by small local bakeries. In addition, despite the fact that the majority of participants are also highly satisfied in terms of the price of the products, there is a

percentage of 45.5% that expressed some concerns about the price levels of products offered by small local bakeries.

3.2. CONSUMERS RESEARCH IN BAKERY SECTOR

This survey was conducted by Marc SA on behalf of the (Federation of Bakers of Greece.??) It was carried out by means of telephone interviews on a representative sample of 802 consumers and 201 bakers in Attica, (in the basin of Attica) in the period from 26th to 30th of September, 2014.

3.2.1 a. Findings of the survey on consumers.

3. 2.1.1 Reduction in bread consumption.

The survey data on consumers confirms that the daily consumption of bread in our country during the period of economic crisis has been following a continuous downward trend. Although bread is a dietary staple, only 36% of households in Attica buys bread daily. In 2011 the figure was 45% and in 2012, 40%. Today 26% of households buy bread every other day, and one in three households claimed to be buying bread once or twice a week while 5% of households rarely buys bread. 86% of households stated that they consume up to one loaf of bread a day, 12% two loaves and only 1.5% more than two loaves. Based on the above data, the estimated average daily bread consumption per household is 590 grams. In 2013 the figure was 610 grams.

Compared to 2-3 years ago, 36% of households stated that today they consume less bread. This trend of declining consumption is more marked amongst women, older consumers, the unemployed and, especially households with insufficient income. Changes in eating habits due to a slimming diet or because of health, the reduction of family size and the economic crisis have been indicated as the reasons for the reductions in bread consumption.

3.2.1.2. The neighbourhood bakery prevails as the preferred retail outlet.

The neighbourhood bakery is still the dominant bread retail outlet. 86.5% of consumers reported buying bread from the bakery in their neighbourhood. 7.9% said they buy their bread from bakery outlets and 5.2% said they buy mostly from supermarket. The

preference for the neighbourhood bakery was recorded as strong, with no significant differences from the previous surveys.

3.2.1.3. Strong and satisfying consumer trust.

The most important reason for choosing the neighbourhood bakery is the consumers' confidence in buying a quality product made with quality ingredients. Other Important selection criteria also include the convenient location and the taste/flavour/freshness of bread and pastries. Cleanliness and general compliance with the hygiene and safety of food regulations, price and variety of breads, as well as opening hours are criteria as well, though not often reported perhaps because they are taken for granted and there are no significant differences among the various retail points. 9 out of 10 consumers (93.6%) believe that bakeries in the neighbourhood offer better quality bread than that available at supermarkets. 4.2% considers that there is no particular variation in quality and 2.2% considers that in supermarkets one can find better bread. The main reason given for buying bread from supermarket is the ease of purchase as it can be combined with other shopping. From the correlation between the retail outlet and the frequency of consumption we are led to the conclusion that consumers who buy bread mainly from supermarkets, consume less quantities and buy it far less frequently than the average (most stated that they buy bread 1 - 2 times per week or even less often).

3.2.1.4. Half of consumers are ignorant of the fact that the bread that is baked in supermarkets is often frozen.

One in two consumers do not know whether the bread baked in supermarkets is fresh or frozen. It seems however that the proportion of those who are aware is increasing. According to the survey data, the disposal of frozen or precooked bread seems to be a serious disincentive to purchasing from retail outlets that engage in such a practice. The vast majority of consumers (83%) said they would not buy bread if they knew it was frozen or precooked.

3.4.1.5. The degree of satisfaction with the neighbourhood bakery is recorded as particularly high overtime.

Over 90% of consumers express their satisfaction with the quality of bread, the variety, service/friendliness of staff, cleanliness and compliance with hygiene rules, and hours of operation of bakeries. Regarding the price of bread 76.5% stated that they are very or fairly satisfied, a percentage that is particularly high for this parameter.

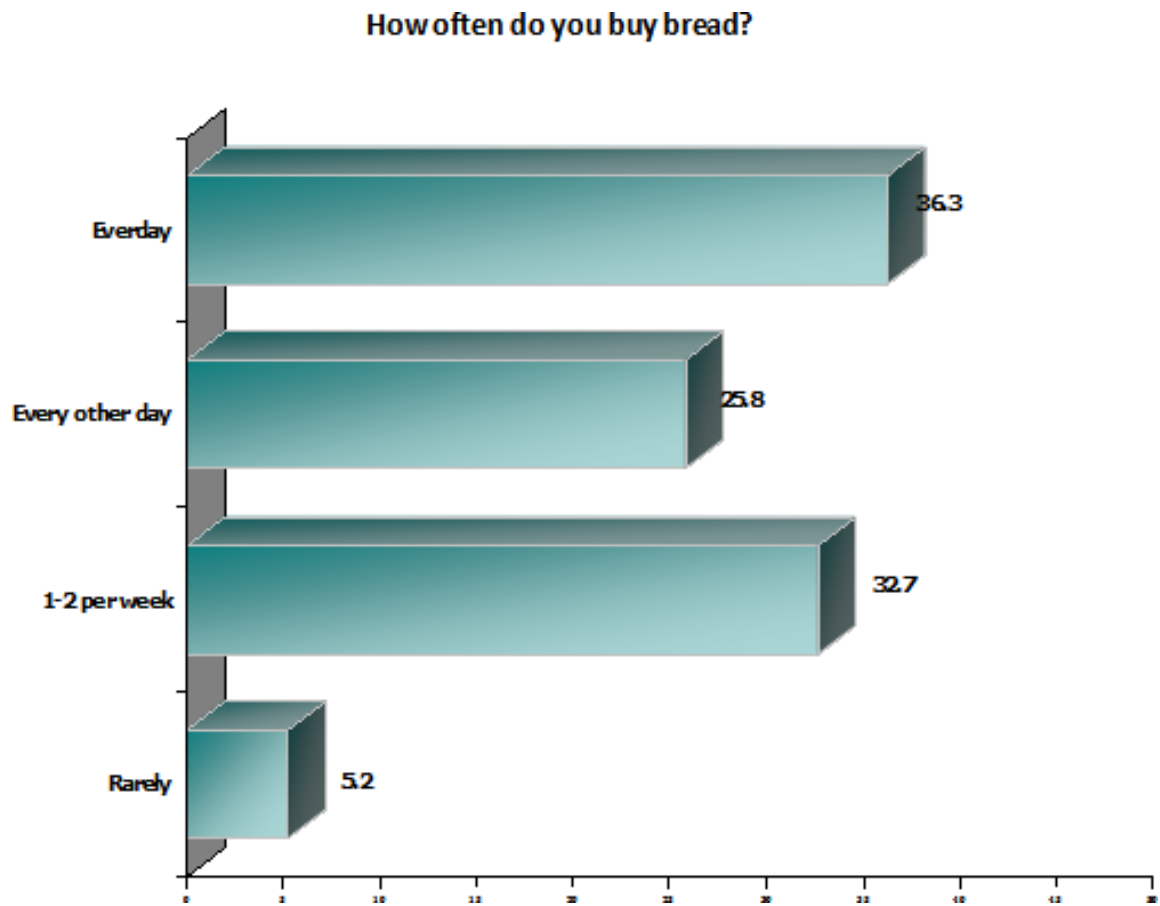
3.2.1.6. The word “Φούρνος” (bakery) means neighbourhood bakery. Survey data confirm that for Greek society and consumers, the word “Φούρνος” (bakery), refers solely and uniquely to the neighbourhood bakery; that is, the location where the bread is fermented and baked. The vast majority of consumers are opposed to the possibility of naming as “bakeries” the locations where frozen bread is baked, like supermarkets.

3.2.2. Findings of the survey on bakers

Eight out of ten (79.6%) bakers reported that compared to a year ago, their turnover has decreased. Only 2% of bakers said that their turnover had increased, while 16.4% reported that it did not show any particular change.

The average reduction in turnover from the beginning of the crisis until now has been recorded at 41%. The relatively higher reduction in turnover was recorded in confectionery products, pastries and milk / juice / soft drinks. Projections for the coming period are not very optimistic. One in two bakers (50.2%) anticipates a further reduction in turnover until the end of 2015, 28.4% predict stabilization at current levels, while 14.4% hope to increase and 7% can not predict. According to bakers, energy costs (oil, electricity, gas) and high taxes are the factors that make it more difficult to run their businesses. At a remarkable rate, the price of raw materials is listed among the factors that hinder their business operations. Labour costs do not seem to impose a significant pressure; the vast majority of bakeries are family businesses with no other staff. Bakers confirm -based on their experience and their relationship with their customers - that consumers are unaware of the differences in the way bread is prepared in supermarkets and bakeries. They confirm, however, that there has been a relative increase in awareness about this issue. 9 out of 10 bakers (93%) said that they have already been informed about the industry sign that the Greek Federation of Bakers is providing to its members with the message “Fermented here, baked here” 65% reported that they have already supplied themselves with the industry sign (the percentage in 2011 was 23.2% and in 2013, 51.7). 76% of those who have not yet got it, want to get it. 9 out of 10 bakers positively consider that this initiative of the Federation is a positive one and believe that it contributes significantly to consumer information.

ITEM 10: How often do you buy bread?

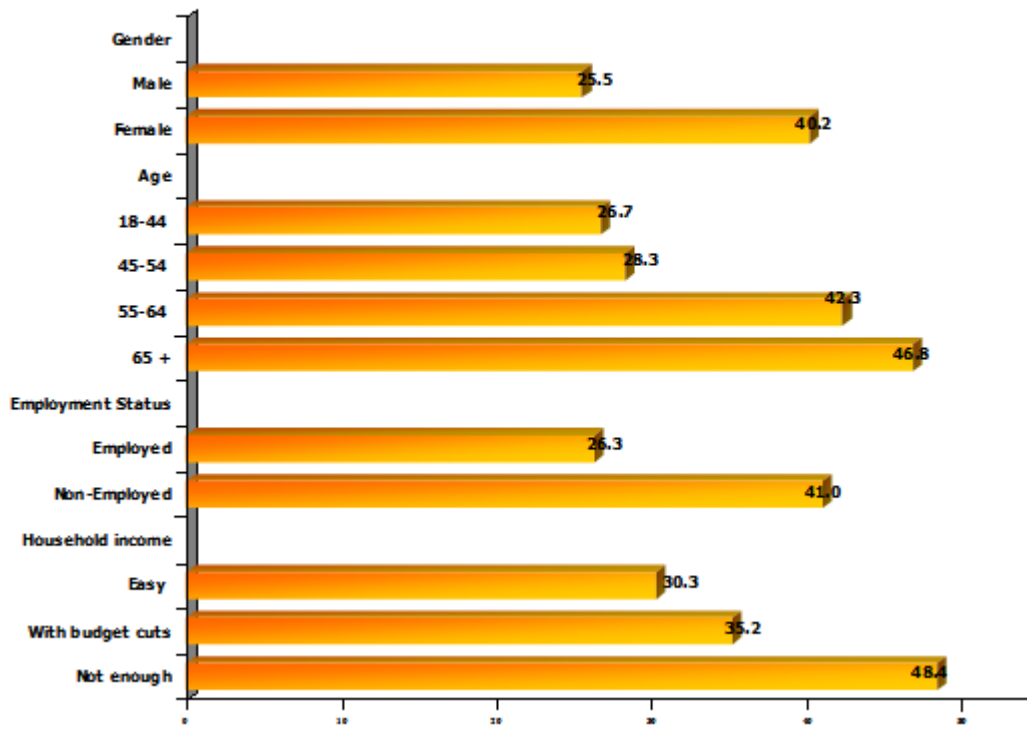


ITEM 11: In comparison to 2-3 years ago, bread consumption in your household was at the same level as now?

ii

Buy less bread than 2-3 years ago -Population Segmentation-

me



ITEM 12: Buy less bread than 2-3 years ago?

ITEM 13: Purchase rate and outlet location

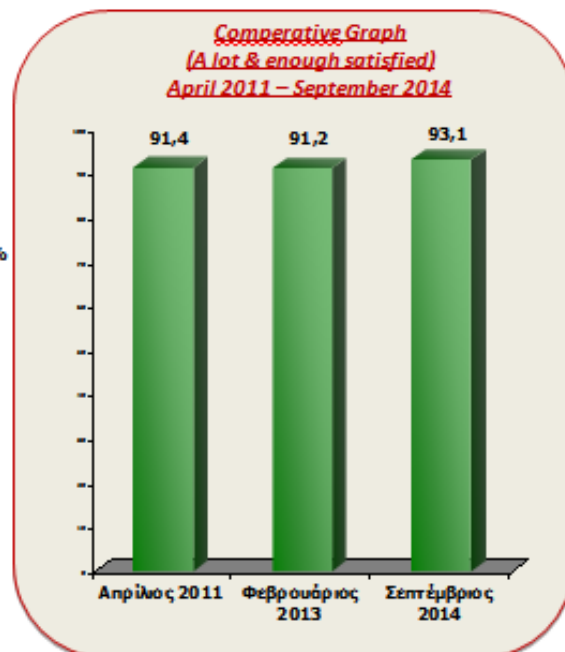
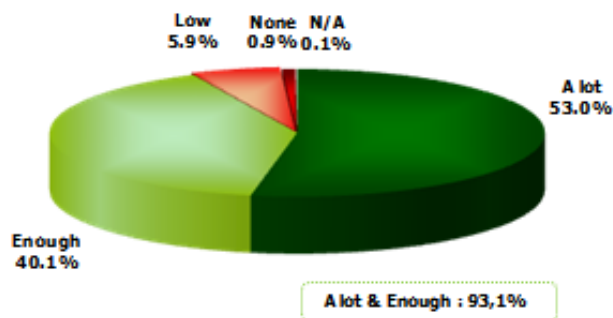
Purchase rate and outlet location

	Outlet Location	
	Neighborhood Bakery	Supermarket
Buy bread every day	37,6	11,9
Buy bread every other day	26,5	16,7
Buy bread 1-2 times per week	31	59,5
Buy bread rarely	4,9	11,9

ITEM 14: How much satisfied are you from your local bakery in regard to: the quality of bread

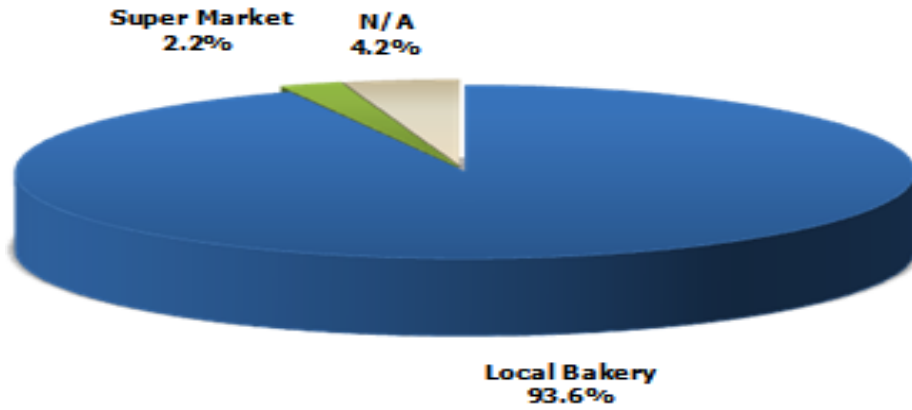
**How much satisfied are you from your local bakery in regard to:
the quality of bread
(for those who buy their bread form the local bakery)**

Low & None: 6,8%



ITEM 15: Where do you find a better quality bread?

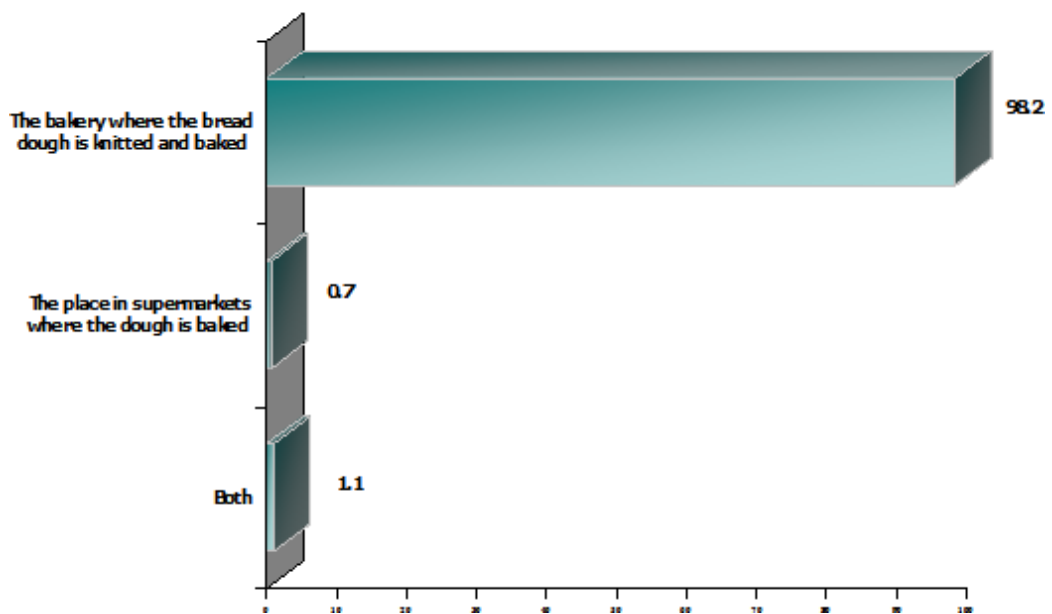
Where do you find a better quality bread?



	Outlet location	
	Neighborhood Bakery	Supermarket
Local Bakery	95	73,8
Super Market	1,6	14,3
N/A	3,5	11,9

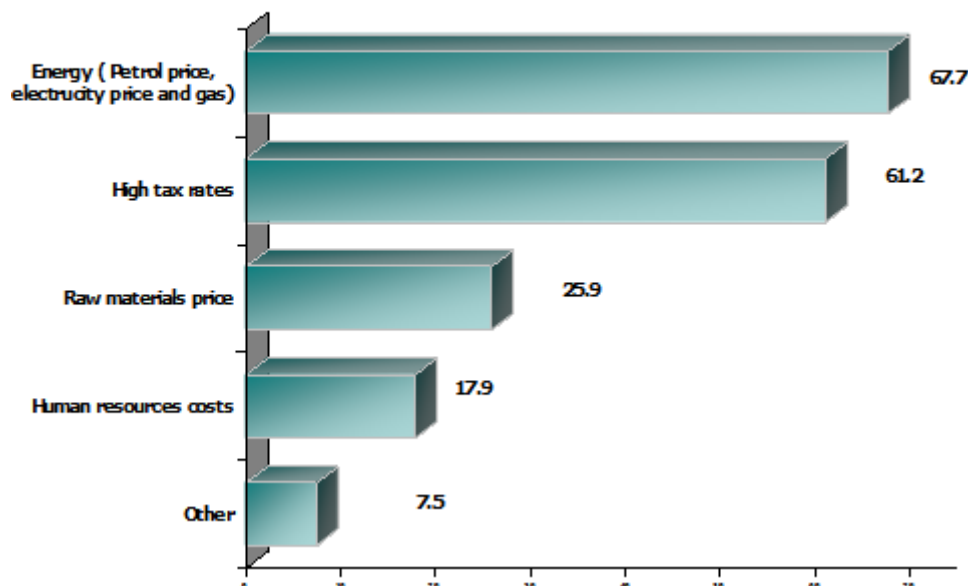
ITEM 16: What does the word "fornos" means to you?

What does the word "fornos" means to you?



ITEM 17: Which of the following are difficulties for your enterprise? (up to 2 choices)

Which of the following are difficulties for your enterprise? (up to 2 choices)



3.3. BAKERY CONSUMER TRENDS AND CONSUMPTION

The average monthly expenditure per household for bread and bakery products (black bread, white bread, other types of breads, toasted bread and bread for hamburgers, sweet and non-sweet bakery products) amounts to € 27,78, covering 9.6% of the corresponding average cost of all food items. The highest average monthly expenditure for bread and bakery items is made by households in rural areas (€ 30,51).

Furthermore, the data from the same research shows that most of this expenditure is allocated to the purchase of white, corn of semolina bread, etc. (€ 16,3), which corresponds to an average monthly purchased amount of 10.2 kg per household. Following, by far, is the average expenditure for sweet bakery products (€ 3,85), which corresponds to an average monthly purchased amount of 722 grams per household.

Regarding the monthly total household income, it was found that the higher expenditures for the purchase of bread and other bakery products (bread black, white bread, other kinds of bread, sliced bread and bread for hamburgers, unsweetened and sweet bakery products)

are made by households with a monthly total income between € 2.201 -2800, a category which spends monthly on average € 34,05 (average monthly purchased amount of 16 kg per household).

3.4. CONCLUSIONS on the consumers' needs

In the field of artisanal bakery and confectionery and in terms of demand, there is a significant effect from consumption patterns and eating habits, consumers' disposable income combined with product price and quality.

With regard to consumer preferences, the purchase rate of bread remains high, while the vast majority of consumers purchase bread from the "neighbourhood bakery", which he trusts in terms of quality

4. Confectionery

4.1. Introduction

4.1.1 Confectionery

Is the art of making confections, which are food items that are rich in sugar and carbohydrates. Exact definitions are difficult. In general, though, confectionery is divided into two broad and somewhat overlapping categories, bakers' confections and sugar confections.

Bakers' confectionery, also called flour confections, includes principally sweet pastries, cakes, and similar baked goods. In the Middle East and Asia, flour-based confections are more dominant.

Sugar confectionery includes sweets, candied nuts, chocolates, chewing gum, sweetmeats, pastillage, and other confections that are made primarily of sugar. In some cases, chocolate confections (confections made of chocolate) are treated as a separate category, as are sugar-free versions of sugar confections. The words *candy* (US and Canada), *sweets* (UK and Ireland), and *lollies* (Australia and New Zealand) are common words for the most common varieties of sugar confectionery.

The confectionery industry also includes specialized training schools and extensive historical records. Traditional confectionery goes back to ancient times, and continued to be eaten through the Middle Ages into the modern era.

4.1.2. Nutrition

Generally, confections are low in micronutrients and protein but high in calories. They may be fat-free foods, although some confections, especially fried doughs, are high-fat foods. Many confections are considered empty calories.

Specially formulated chocolate has been manufactured in the past for military use as a high-density food energy source.

4.1.3. Sweetening agents

Confections are defined by the presence of sweeteners. These are usually sugars, but it is possible to buy sugar-free sweets, such as sugar-free peppermints. The most common sweetener for home cooking is table sugar, which is chemically a disaccharide called *sucrose*. Hydrolysis of sucrose gives a mixture called invert sugar, which is sweeter and is also a common commercial ingredient. Finally confections, especially commercial ones, are sweetened by a variety of syrups obtained by hydrolysis of starch. These sweeteners include all types of corn syrup.

4.1.4. Bakers' confectionery

Petits fours are baker's confections.

Bakers' confectionery includes sweet baked goods, especially those that are served for the dessert course. Bakers' confections are sweet foods that feature flour as a main ingredient and are baked. Major categories include cakes, sweet pastries, doughnuts, scones, and cookies.

4.1.5. Sugar confectionery

Sugar confections include sweet, sugar-based foods, which are usually eaten as snack food. This includes sugar candies, chocolates, candied fruits and nuts, chewing gum, and sometimes ice cream.

The United Nations' International Standard Industrial Classification of All Economic Activities (ISIC) scheme (revision 4) classifies both chocolate and sugar confectionery as ISIC 1073, which includes the manufacture of chocolate and chocolate confectionery; sugar confectionery proper (caramels, cachous, nougats, fondant, white chocolate), chewing gum, preserving fruit, nuts, fruit peels, and making confectionery lozenges and pastilles. In the European Union, the Statistical Classification of Economic Activities in the European Community (NACE) scheme (revision 2) matches the UN classification, under code number 10.82. In the United States, the North American Industry Classification System (NAICS 2012) splits sugar confectionery across three categories: National industry code 311340 for all non-chocolate confectionery manufacturing, 311351 for chocolate and confectionery manufacturing from cacao beans, and national industry 311352 for confectionery manufacturing from purchased chocolate. Ice cream and sorbet are classified with dairy products under ISIC 1050, NACE 10.52, and NAICS 311520.

4.2 The sector of confectionery in Greece

“Patisserie” is defined (Decision – A.I.b/8577/83, GG-528/B/83) as the setting or store in which any kind of pastries, milk, coffee and other beverages, spirits with or without snacks (meze), soft drinks, and bottled drinks are prepared and offered in seated or passing by customers. According to Art-40 of the same Decision, sale of pizza in this kind of stores is forbidden unless they operate as mixed patisseries & pizzeria stores. In these stores the preparation of pies and appetizers for receptions-parties (banquet) is also allowed if intended for home consumption mainly.

- Sweets: Confectionery wares that are prepared by mixing and special processing of various edible ingredients, of plant or animal origin with sweeteners (sugar, honey, etc.) in order to obtain sweet or sweetish flavour (sweets, candied fruits, sweets of the pan, pastries, ice cream, etc.).
- Pies: Confectionery wares of dough leaves and other edible materials (milk, cheese, meat, spinach, etc.).
- Appetizers banquet: Confectionery wares with a basis of unsweetened brioche dough on top of which different types of food or food wares (cheese, ham, Russian salad, egg, etc.) are added, such as “canapés”, «bombs”, etc.

It is emphasized that the present study focuses on confectioneries - pastry workshops which prepare for themselves most of the offered products.

4.3. Legal Framework

Using the methodology outlined in the Competition Assessment Toolkit (2011a and 2011b), the OECD examined the legislation on food processing in Greece. The sector is characterised by several framework laws and regulations, together with specific legislation per usage or product. The framework laws and regulations that were examined cover a wide range of provisions on topics such as food safety, distribution of products, establishment and licensing of production facilities and sanitation. Most food processing

regulations are based on European legislation, because they either directly implement European regulations or transpose European directives.

The OECD also examined specific legislation on food subsectors, such as processing and preserving of meat and production of meat products, processing and preserving of fish, crustaceans and molluscs, processing and preserving of fruit and vegetables, manufacture of vegetable and animal oils and fats, manufacture of dairy products, manufacture of grain mill products, starches and starch products and manufacture of bakery goods and farinaceous products. At the same time, legislation issued by the

Ministry of Health on non-categorised food products, such as special nutrition and homogenised food preparations, was also covered.

Based on the review of the legislation, the OECD identified obstacles to competition in the following branches:

Manufacture of bakery and farinaceous products (Sector 10.7 in NACE Rev.

2). Manufacture of dairy products (Sector 10.5 in NACE Rev. 2).

Processing and preserving of meat and production of meat products (Sector 10.1 in NACE Rev. 2).

Given that the sector being examined involves food, bakeries and patisseries must comply with the Food and Beverage Code (ministerial decision 1100/1967 Official Governmental Gazette (FEK) B 788) which determines the usage of raw materials that are allowed to be used (such as milk, yoghurt, butter, cheese products, eggs, fats, sweeteners, tomato products, olives, baking materials etc).

In Greece, the institution responsible for overseeing the compliance of the hygienic rules concerning food is the Hellenic Food Authority (EFET) which was founded in 1999 (FEK 199/1999) and is under the Ministry of Development.

Concerning confectionary workshops all of the above decrees apply except the law 3526/2007 which refers primarily to bakeries.

4.4. Consumption of Confectionery Products

4.4.0. Factors that affect demand

4.4.1. Consumer preferences and eating habits

The eating habits of the consumer are the main factors that affect demand for baking and confectionery products. Bread is a staple eating item with special nutritional value.

As far as confectionery products are concerned, they too attract high demand, either as food accompaniment or as traditional festive treats and “gift items”. Their demand is high during holiday seasons, birthday celebrations and house visits at which the dessert plays a dominant role.

In addition, demand is influenced by the various current eating trends such as the new tendency towards healthier foods from a percentage of the consumer that has resulted in a growth of demand in such food products such as whole meal bread, bakery goods with low sugar and salt content, “diet” sweets etc.

The sale price with respect to the disposable income of consumers affects to a certain degree the demands of certain products, especially those that present the greatest fluctuation in demand.

4.5. Structure and Description of Sector: Patisseries

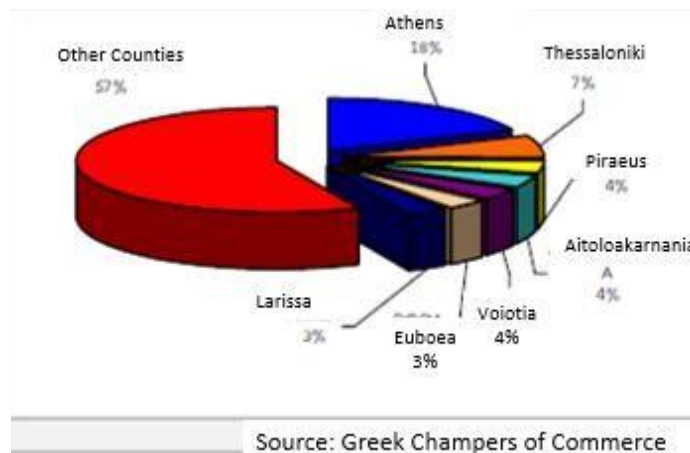
4.5.1. Market Review

The specific sector in Greece is characterized by high competition among small local businesses which implies that the concentration is quite low and most of them sell at competitive prices. On the other hand, concentration among industrial companies is high given the low number of existing companies.

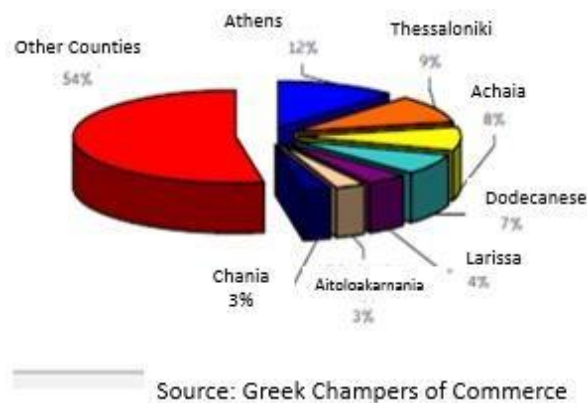
4.5.2. Market value and size

4.5.2.1 Number and Distribution of Businesses

According to a recent study(April 2013) which was completed by all the business chambers of the country, the number of active members in the production sector of baked goods comes to the total of about 12,250 businesses. It is noted that the number of businesses refer to the ones with active registers by prefecture although according to a statement from the Federation of the Bakers of Greece in November of 2013, the number of businesses existing is greater than the above-mentioned registered number¹.



ITEM 18: DISTRIBUTION OF SMALL SCALE BAKERY INDUSTRIES PER PREFECTURE (APRIL 2010)



ITEM 19: DISTRIBUTION OF CONFECTIONARY INDUSTRIES PER PREFECTURE (APRIL 2010)

On the basis of information from the Business Chambers of Greece during April 2013, the greatest number of bakeries are found in Athens (1,335 bakeries) that account for 18% of the total. Thessaloniki follows with 504 that accounts for 7% (graph 14).

As with bakeries, patisseries also are concentrated in Athens with 500 production points that represent 12% of the total number in the country. Thessaloniki follows with 394 businesses that account for 9% of the workshops.

4.6. Industry participants and competition

According to the study of Christofia A. Christina, in 2010 the total confectionery business turnover generally amounted to 186.1 million euro. The total domestic confectionery market is estimated at 880 million euro. In 2010, showing a decrease of 4.4% compared to 2009. It is significant that in the confectionery sector has not seen a particular concentration, since the market is fragmented into a large number of enterprises, the majority of which are very small. According to the Annual Industrial Survey of EL.STAT, the number of companies which was operating in the bakery fresh pastry industry in 2010 it was 324, with 14.917 employees and a total turnover of 1,132,657,331 euros, while in 2011 the companies were reduced to 313- 14.270 employees and a turnover of 1,071,289,758 euros. Greek consumers have changed habits in the consumption of sweets by the economic crisis. Although there was a decline in demand from 2010, the turnover of the sector's branches diminishing. As a result, many enrich their stores with new products (such as bread) in order to attract customers.

4.6.1. Porter's five forces

Balance Sheet Analysis

Since the processing of balance sheets which proceeded the ICAP Group, shows that the total assets from the sample of 38 companies in the bakery rose 4.2% in 2011 compared to 2010, while equity rose 3.3%. Total sales decreased by 2.6%, while a decrease of 30.1% showed the net profit (before tax) in 2011/2010.

Correspondingly, the total assets of the sample of 54 confectionery businesses examined decreased by 3% in 2011 compared to 2010, and was the largest decline on equity (- 6.8%). The total sales of the sampled companies decreased by 7.1% in 2011 over the previous year, while a significant reduction of 50% showed a net (pretax) profit for the same period.

Threat of new entrants

In general terms, the entry of a new company in the sector not considered particularly difficult. Therefore, in this area operate several businesses. A key ingredient of success is the quality of the products it produces, which is related to the expertise and experience of producers.

Risks of substitutes

In the confectionery there is a variety of substitutes. The comparative advantage of fresh pastry goods and in relation to relevant surrogate lies mainly in the quality of fresh items and the personal relationship between the client and the people they are working at the shop and the owner of it. A local patisserie is a place where first and foremost supplies all kinds of sweets at the Greek consumers.

Bargaining power of suppliers

Major suppliers in the industry is the production business, marketing and import of raw materials for the manufacture of fresh pastries offered by artisanal pastry units. The bargaining power of producers towards suppliers affected by the fact that the production units have low degree of vertical integration backwards, and serve as raw material-intensive units. Also the number of available suppliers affects their power. We could say that one of their strength is enhanced due to the artisanal production of fresh sweet points. On the other hand, the fact that there are numerous suppliers (domestic and foreign), of which refuel the various businesses and industrial units related products significantly reduces their bargaining power, especially if the volume of orders of buyers it is high.

Bargaining power of buyers

Buyers of products consisting of end consumers or different firms (e.g. hotels, universities, supermarket etc.). Usually there aren't any negotiations with buyers- consumers since the companies have designated contiguous range of items, a specified value. However, due to oversupply and over- businesses and many different types (menus and prices), consumers have the choice that gives them the best quality - price, depending primarily on their financial capabilities and desires.

4.6.2. Competition between companies in the sector

The large variety, quality, speed of service, the policy of the offers and competitive price, are elements can affect positively or negatively the image of a company. Many companies

broaden the range of their products wanting to attract more customers and strengthen their market position. Competition in the confectionery sector is strong due mainly to the large number of enterprises It is active in it. This market is highly competitive, both overall and by category. In such an environment, many companies are seeking to strengthen their market position and awareness of the brand name.

As stated in an article, confectioners adapt to the new situation and decline in purchasing demand made after 2010. On the contrary, the turnover of branches of reduced industry. As a result, more and more professionals enrich their windows with new products (such as bread), to support their turnover, attract more customers and strengthen their market position. In times of economic downturn, several industry companies also engage in maintaining or reducing prices or offers to retain their customer base and stabilize their position in the market. The companies in the sector face competition not only from enterprises operating in the same focus group, but also shops with different "orientation." Furthermore, the presence of many individual restaurants and bakeries mainly local character, further exacerbating competition. What mainly characterizes this market it is the constant battle given to two areas: attracting customers from anonymous to named enterprises and between themselves branded chains.

4.7. CONFECTIONARY CONSUMERS TRENDS

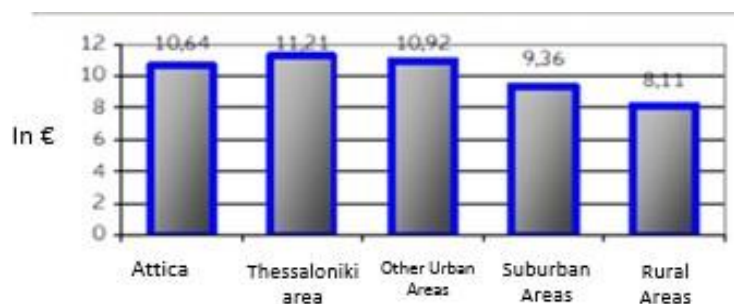
Some of the results produced by a research sponsored by FEDIMA (the Pan European Federation of Businesses involved in the production and distribution of intermediate products involved in the making of bakery and confectionary goods) are presented here.

This research showed that the patisserie provides the main point of sale for the majority of those that buy confectionary goods in Athens (83% of total) and in Thessaloniki (80%), while the bakery-confectionary shop accounts for 13%, the workshop (13%) and the supermarket (1%).

The mean rate of consumption of confectionaries comes to twice a month while a considerable rate (2 out of 10 consumers) buys at least once a week. These consumers are found in the younger age group (15-24) in Athens and having a higher socio-economic status. The average sale amount came to €11, while an important upward trend to spending more has been noted.

The more highly sought confectionary products are pastries (47% of consumers have bought recently), ice-creams (8% have bought recently), traditional syrup covered desserts (29% have bought recently) and cakes (16% have bought recently).

As far as confectionary products are concerned, the mean monthly expenditure per household comes to the amount of €10.08. The greatest expenditure is found within the urban sprawl of Thessaloniki (11.21€), while the lowest is found in rural areas (8.11€).



Source: ELSTAT

ITEM 20: AVERAGE MONTHLY CONSUMER EXPENDITURE FOR CONFECTIONERY PRODUCTS PER TYPE OF AREA

The expenditure for confectionary products has a rising trend with respect to higher income levels of households. Households with monthly income of €3,501 and up have the highest expenditures which average monthly at €14.96.

5. ICE CREAM

5.1. Standard quality definitions

- According to Article 137 of the Codex Alimentarius of Food and Beverages the term ice cream is used for products prepared by mixing either milk of the species and categories listed in Articles 79 & 80 of the Codex, and in combination with each other or fruit juice with natural sweeteners and other materials, after freeze coagulation of the mass which has been previously homogenized.
- The % of total fat at the final product and the % of air infused are the most important factors for taste and quality.

Ice cream may have the following composition:

- greater than 10% milk fat and usually between 10% and as high as 16% fat in some premium ice creams
- 9 to 12% milk solids-not-fat: this component, also known as the serum solids, contains the proteins (caseins and whey proteins) and carbohydrates (lactose) found in milk
- 12 to 16% sweeteners: usually a combination of sucrose and glucose-based corn syrup sweeteners
- 0.2 to 0.5% stabilisers and emulsifiers
- 55% to 64% water, which comes from the milk or other ingredients.

These compositions are percentage by weight. Since ice cream can contain as much as half air by volume, these numbers may be reduced by as much as half if cited by volume. In terms of dietary considerations, the percentages by weight are more relevant. Even the low-fat products have high caloric content.

5.1.1. INTRODUCTION

Worldwide the Ice cream industry is dominated by the Italian, technology, recipes and trends

The sector is characterized by seasonal changes with a peak in demand during the summer months. There is a multitude of domestic and imported ice-creams within the Greek market. The number of business active in the sector is large. However, the market is dominated by few businesses that provide mainly brand products and supply the greatest proportion of consumption. There is fierce competition that is increasing due to the fact that this market is considered saturated. The competition pushes the businesses of the sector towards producing new and improved in quality products in order to cater to the consumer preferences and to strengthen their position in the market. Businesses also work in growing their distribution network to gain a competitive edge and develop strategic partnerships with other businesses of the food sector.

5.2. CONSUMPTION AND CONSUMERS TRENDS

A main characteristic of ice-cream demand is its seasonality. Greek consumers buy ice-cream mostly during the summer season and thus categorizing ice-cream as a seasonal food product. As a result, the consumption of ice-cream per person in Greece is found at lower levels in comparison to other countries which consider ice-cream as a main dessert. The climate and tourism are the two next main factors that affect demand since high temperatures during the summer months and the great influx of tourists increase local ice-cream demand.

Another factor that influences ice-cream demand is advertising which contributes in recognizing brands along with informing the public of new products available in the market. Price along with the disposable income of the consumer influence in the formation of the demand of the products studied.

Generally speaking the relevant industry is based on the trends of the international markets with the raw materials (other than milk) coming from traditional and developed markets as Italy, supplying the industry with ready mixes and recipes.

In Greece the consumption of ice cream per capita are 2.04 lit/ person in comparison with the European which is 9.1 lit/ person

5.3. MARKET

5.3.1. The Greek ice cream Market

Ice-cream in the Greek market is found in the seasonal products sector. Greek food habits have started to show variations with respect to the past where ice-cream was served strictly during the summer months. The continuous development of special brand name ice-cream stores, the parallel expansion of franchising in the area of catering, the increased sale points for ice-cream and the gradual change of consumer habits constitute encouraging signs for future development of the sector. However, they do not upset the strong seasonal character of ice-cream consumption.

A characteristic of the ice-cream sector in Greece is the high level of market concentration in a few businesses despite the large active number of units. Large production units cover the greatest share of the market and create an oligopolistic competition environment due to their long history in the sector, their varied products and the strong brand names that have been widespread acknowledged. With respect to other food industries, the majority of the ice-cream businesses involve small production units and a small dynamic.

The sector also includes businesses that import ice-cream, mainly from other European Union countries. The number of such businesses is small and involves companies that are also active in the wider area of the food sector. Some of these businesses carry brand products that are highly recognized by the consumers and which have considerable market share.

The local consumption of ice-cream is considered saturated mainly influenced by the seasonal climate conditions present during the summer months. The market saturation creates the prerequisites for strong competition amongst businesses compelling both “big” and “small” players to seek survival and development strategies.

The sale of ice-cream is controlled by the few, big businesses that hold strong brand names and developed distribution networks. The largest production units of the sector are Nestle Hellas Ice-cream A.E., Algida and KRI KRI AEBEE.

Beyond the 3-4 large production businesses, the majority of the production businesses are small in size. The sector also includes businesses which are involved with the importation of familiar overseas brand ice-cream and are involved in the wider sector of food products.

Unilever Hellas A.E.B.E. (Algida) holds a distinct place in the import sector and is included in the 3 major businesses involved in the ice-cream market in Greece.

The products investigated are available in the market via small sale points which are estimated to cover about 50%-55% of total ice-cream sales. Within these, the greatest amount of individual ice-creams is also sold. Supermarkets represent about 30% of total sales of ice-cream and are the major distribution channel of family-sized ice-cream packages along with patisseries.

Specialized ice-cream stores such as gelaterias and cafes and catering areas such as restaurants, tavernas, hotels, patisseries and caterers provide mainly non-brand ice-cream.

Businesses of the sector are pursuing the expansion of their distribution networks and their presence in a larger number of sale points. In order to guarantee the best presentation of their products in retail, businesses provide benefits and incentives towards retailers. Large supermarket chains also provide the ice-cream market with their own private-labels whose sales have been on the increase the past years. This further exacerbates the fierce competition in the sector and strengthens the bargaining position of the supermarkets against the other businesses of the sector.

5.3.2. MARKET/VALUE

The largest share of ice-cream consumption in Greece is by domestically-produced goods. The domestic production has produced fluctuations the last few years and in 2014 it figured at the level of 37,000+ tons. The greater portion of production involved individual ice-cream with a percentage of 52% in 2013, the family-sized ice-cream packages with a percentage of 26% and the non-brand ice-cream at a 22%.

The production of ice-cream is concentrated in the two businesses involving Nestlé Hellas Ice-Cream A.E. (former Delta Ice-Cream Industry A.E) and ALGIDA with 39% and 28% of the 2013 market share correspondingly.

The two businesses jointly had 80% of the total production share of individualized ice-cream and 74% of the family-sized package production.

The apparent total domestic consumption of ice-cream as a percentage showed fluctuations during the period of 2000-2010 while it is estimated that in 2014 it resulted in 41,000 tons along with importers, giving a decrease of 1.9% in comparison with the previous year.

The penetration of imports has varied between 25%-28% the last two years. The rise in imports has been driven in part by the turn from production to imports from Hellas Unilever A.E.B.E (ALGIDA) in 2000. The domestic ice-cream market was estimated to have a value of about €235-€240 million in 2013.

Brand ice-creams both individual and family sizes had the greatest share of consumption in 2013 with 76% representing 31.8 thousand tons while the non-brand ice-cream had 24% or 10.1 thousand tons.

Nestlé Hellas Ice-Cream A.E. is estimated to take in a market share of 28% in the market in 2008, whereas ALGIDA held an equivalent percentage of 23.5% and KRI KRI, 18% of domestic consumption.

These businesses jointly had 82.0%-82.5% of the market of individual ice-creams and 76.0%- 76.5% of the family-sized ice-cream packages.

In the ice-cream market, the fierce competition is leading the top performers towards takeovers and strategic partnerships.

In the Greek territory, traditionally, ice cream is produced with sheep milk, and the addition of other traditional ingredients such as salepi, mastic and Mediterranean aromas, mostly coming from the evicted Greek Ionian population of the Turkish coasts

Generally speaking the relevant industry is based on the trends of the international markets with the raw materials (other than milk) coming from traditional and developed markets as Italy, supplying the industry with ready mixes and recipes.

5.3.3. INTERNATIONAL MARKET

The international ice-cram market is characterized by the existence of conditions of oligopolies as more and more countries are controlled by a small number of businesses. In some countries the consumption is affected by climate conditions that dominate during the

summer months while in others ice-cream provides the main form of dessert and is consumed during the entire year.

The main ice-cream distribution networks in the majority of the countries are the supermarkets and the hypermarkets.

The dominant ice-cream production country is the U.S.A who is considered very advanced at an export level and at a consumption level internationally. The U.S.A is the top production country of ice-cream in the world and also of exports. Its total production of ice-cream in 2012 came to 1.55 billion gallons amounting to a 0.7% with respect to the previous year. Canada is also considered an important country of ice-cream production since in 2012 it produced 297.2 million liters of ice-cream. The production of ice-cream in the major countries of Europe amounted to 3,337.8 million liters in 2012 noting a decrease of 1.2% with respect to the previous year. Germany has the greatest consumption of ice-cream in terms of volume (686,8 million liters in 2012 while the greatest per capita consumption is found in the Scandinavian countries (Finland, Sweden and Norway).

5.4. Installation and equipments

5.4.0. Small and middle size companies

5.4.1. Facilities and Equipment

Concerning buildings, these have to be built in compliance with the European Community and National laws, hygienic safety rules and industrial standards. Then, in turn, the architectural blueprints are to be provided to the local Veterinary and Health Department after they have been designed to meet the standards of the goods that are produced.

The Local Veterinary and Health Department also requires an application for the permit to raise a facility in order to gain pre-approval. On the specific blueprints, the facility spaces must be evident, the equipment for the reception of material, for their processing, their storage and transfer, supplementary production equipment, the service networks of production equipment and the non-productive standard equipment.

Simultaneously, a report must be given in which the technical features of the construction materials of the facility, the basic electronic equipment measuring and recording the equipment and the facilities, the technical description of the production process and the

products of the facility and the study of the recording and assessment of the sufficient thermal processing of the mixture of ice-cream (F value). After the completion of the above, the authority that provides the license will pre-approve and the interested party will receive from the authorities the permission to begin construction. The construction of an ice-cream production facility can be facilitated within the boundaries of the agricultural grounds of any milk producer as long as all legal prerequisites are adhered to.

5.4.2. Licensing Authorities

After the completion of the construction of the production unit and the placement of the machinery, the interested party must provide a second application for an issuance of operation and approval of the facility at the license issuing authority which is the Veterinary and Health Department for operations and EFET for the approval of the facilities.

Upon receipt of the operation license and the approval of the facilities, the interested party must pick up a book of official inspection from the Veterinary Department and get it authorized.

5.5. ICE CREAM PRODUCTS / COST

The packaged ice-cream that is sold in the market by the producer must comply with the legal requirements with respect to its labeling and its safety while provisionally, the producer may move to branding the trade mark that their product maintains in the market.

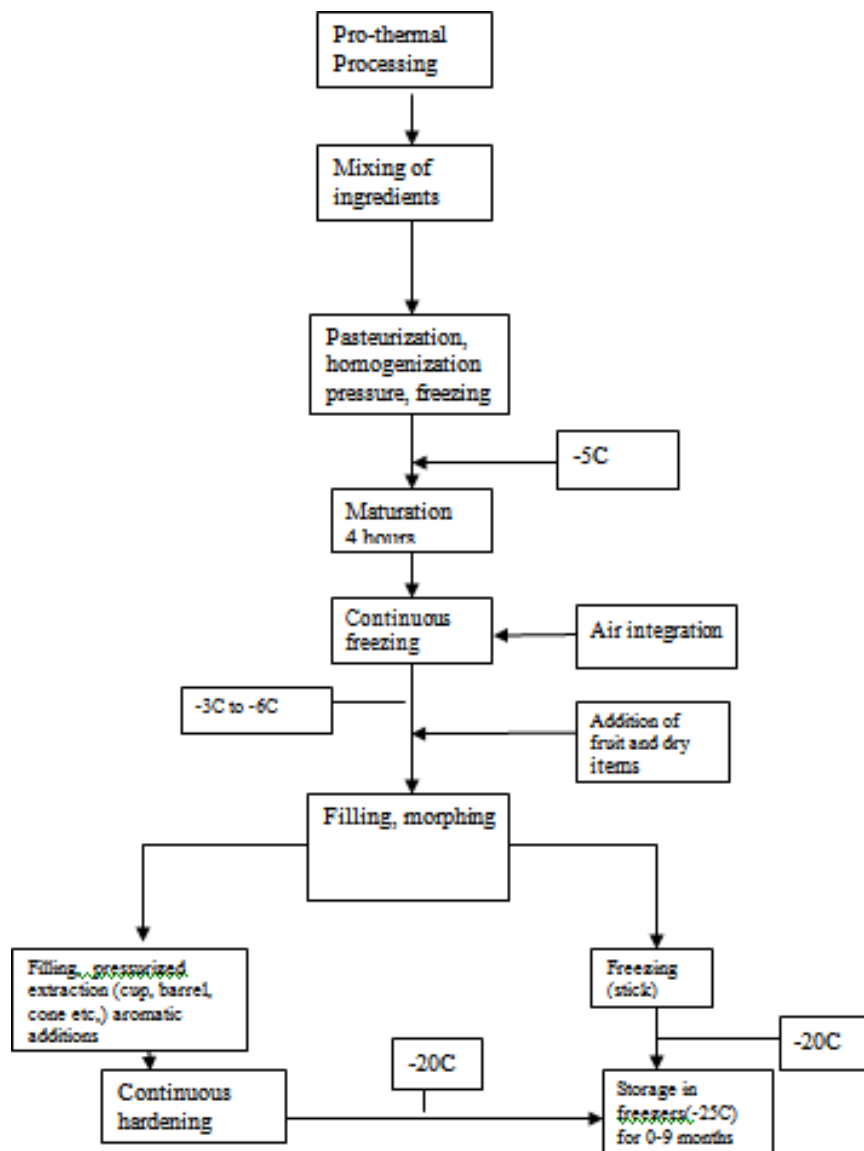
We provide below indicative types of ice-cream that can be produced:

- Vanilla ice-cream
- Milk ice-cream
- Mastic ice-cream
- Fruit sherbets
- Special type ice-cream
- Instant production ice-cream
- Ice-creams on a stick (wooden or plastic)
- Dipiron sugary ice-cream

The cost of the equipment of a small ice-cream production unit with plastic supports with a capacity that is greater or equal to a liter comes to about 100,000€ (one hundred thousand)

and indicative it includes an ice-tank, milk cleaning separator, pumps, boilers with freezing systems for the ice-cream mixtures refrigerator, freezer and shock freezer.

ITEM 21: Ice cream Flow chart



6. PASTA SECTOR

6.1. Introduction of the sector

Definition of the term pasta Pasta is a product of any kind of shape which is made from ground grain products with or without the addition of eggs and/or additives by dough formation, shaping and drying without the use of any fermentation or baking process. Occasionally it is treated before drying with hot water or steam

6.2. The pasta Industry

6.2.1. General Market Characteristics of Pasta Industry

The market structure where every business intends to enter is comprised by the following key elements: Products, Customers, Competitors, Suppliers and Distribution channels.

6.2.1.1. Products

According to Article 15 of the Food and Drink Code as 'pasta' means products that are prepared from semolina which are rich in gluten and water, without yeast, dried in special chambers with slight heating or air, without baking. The production of pasta must be made solely from durum wheat semolina and is forbidden the use of other types of flour.

"Egg pasta" or "pasta with milk" or combination of them, means that pastas are produced by adding eggs, milk or both. Pasta with eggs must be produced with two full fresh eggs at least, for every kilogram of semolina. Similarly, pasta with milk must be produced from full cream milk or full cream milk powder, the amount of milk, is calculated as dry mass and it should not be less than 20 kilograms in 1kilogram of ready pasta.

6.2.1.2 Customers

Pastas are high in consumer preferences from all social strata. Pasta's customers are from every age and living standards. A segmentation of Greek market is: Families with children, young couples, Elders, Students and Food facilities- catering (traditional or not).

6.2.1.3 Competitors

The main competitors of the Greek Market in Pasta Industry are Seven

(7): MISKO A.E

Avez SA

GIOURIMAK SA

MELLISA KIKIZAS AB & EU FOOD KORONA

PASTA SA

Charalabopoulou TH.AFOI SA

DAKOS P.SP. SA

6.2.1.4. Suppliers / Partners

As it knows the (Pasta industry-Traditional Pasta) is highly connected with the semolina's production companies, as Semolina is the basic material for pasta. The semolina is obtained from the milling of durum wheat adding the right amount of water. The companies that produce semolina are relatively few and it is estimated that 90% of their annual production is directed to the pasta industry, a 7% to the sector of pastry and at last the remaining 3% is being promoted to retail market. It is very important for pasta industries to ensure long partnerships with semolina suppliers in order to maintain high quality semolina. More specifically the moisture of the product should be between 13.5% -13.8%. This avoids possible increases in costs production of the final product.

6.2.1.5 Distribution

The distribution of the finished products may differ according to the location, the size of each unit, and distribution policy. Distribution may include the transfer of the finished product directly to stores retailers (Food facilities- catering, shops traditional), the wholesale stores who distribute the product accordingly their will, or private warehouses throughout the country and then distribute to interested retailers.

6.3. Analysis of the Domestic Market

6.3.1 General Characteristics of Pasta Sector

Greek consumes Pasta mainly because of their low price, the short preparation time, the taste is good and generally the variety of combinations in their food habits. Italians place high in their dietary habits pasta and they consume 25kg around per year, additional consumers such as Swiss they are consuming 9.5kg and Greek they are consuming 11,5 kg per year. The pasta industry in Greece is in maturity presenting low variations in annual consumption. Domestic demand is overridden by domestic production, so the imports quantity of pasta is very limited. For this reason many companies have focused their interest in the export business as there is a small margin. The Pasta market is "controlled" by a small number of production companies which are in place for a long time ago. The degree of the domestic consuming rate is concentrating highly in the two largest companies about 65%. Larger quantities of pasta are distributing to retailers, mostly in supermarkets.

The pasta market has not been affected by the economic crisis. On the contrary, consumption increased due mainly to keeping prices low (sectoral study by ICAP). This retention of prices at low levels has led to increased consumption of pasta in times of economic crisis. The sector of pasta is characterized by a high degree of concentration, and controlled by a few industrial companies. An important part of the production is exported while imports are limited in comparison.

6.3.2. Historically Data Industry

It was until the 18th Century that pasta didn't hold a place in the diet of the people. It was considered mainly as a luxury meals and sweet. In the Greek area several industrial units were developed in the mid-19th. Since then the rise of technology in the production process, allowed to increase production and reduce costs both on wheat crops as well as in the manufacturing process, the pasta was consolidated as a cheap and easy food for all walks. Nowadays pasta is one of the most popular foods worldwide. More specifically, the average Italian consumes about 25kg of pasta annually, countries such as Switzerland and Greece consumes annually about 9.5kg and 9kg respectively.

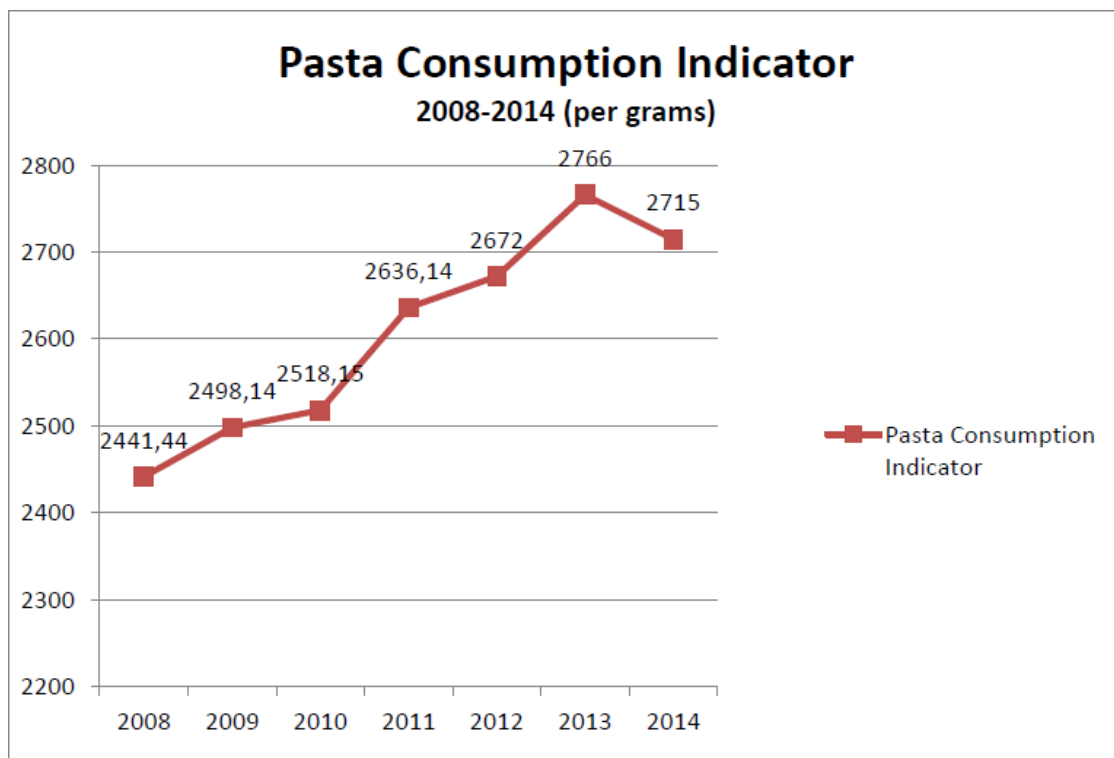
6.3.3.. International Market

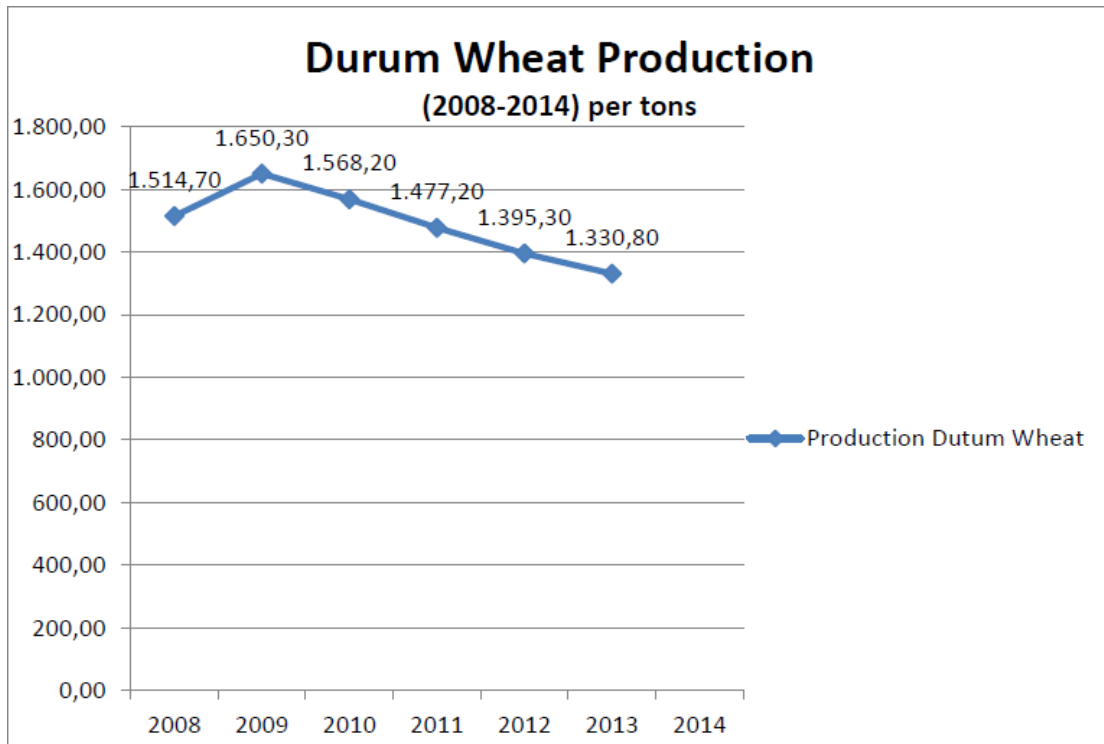
The highest amount of production and consumption of pasta is owned by Italy. Major markets in Europe except Greece are Switzerland and Germany. Domestic production of Germany is in a growth stage and for this reason the coverage of demand is covered by imports. On the other side of the Atlantic, high imports of pasta make the US who source pasta from the European Union, mainly from Italy. Particular emphasis is being placed on private label products as they have been established in several EU countries and the USA.

6.3.4. Size of Domestic Production

Despite the economic crisis that governs the country, the pasta consumption indicator keeps the upward trend (2008-2014, 11% + 273,56gr.) However, the annual production of durum wheat which is used as A material for the production of pasta, is in decline class (2008-2013, - 12% -184 thousand ton). The decrease durum wheat production has not affected the pasta prices, due to the high domestic demand for the production of pasta.

ITEM 22 Pasta Consumption Indicator



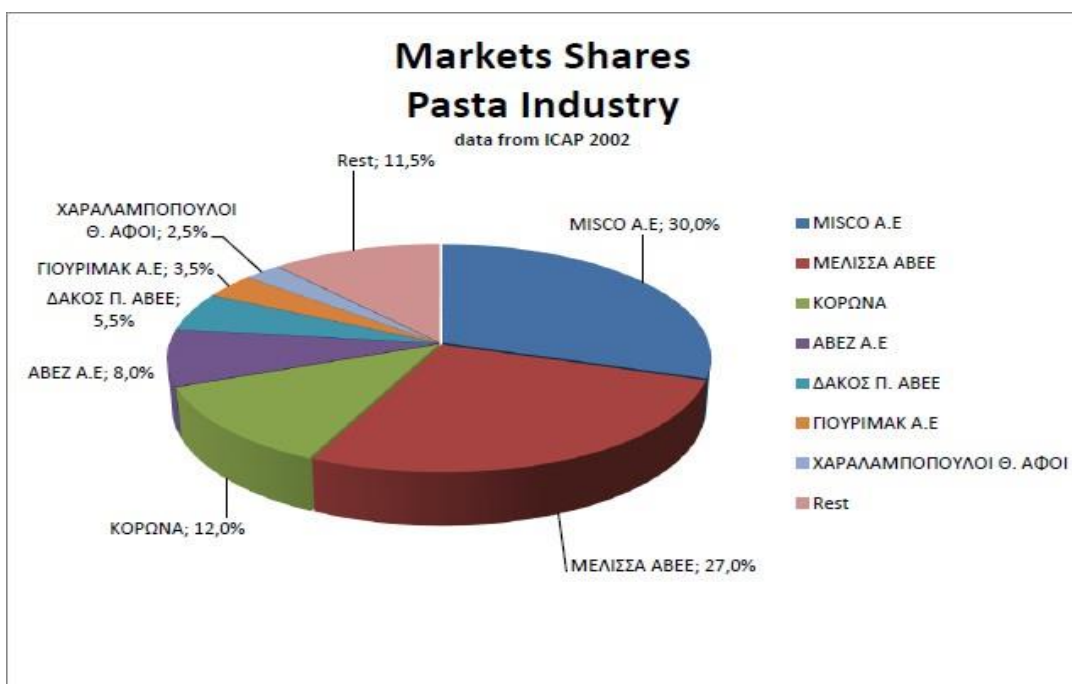


ITEM 23: Durum Wheat Production

6.3.5. Market shares of the major companies

The domestic share of market in pasta industry is held by two (2) companies (Misko SA Melisa SA) which are considered the leaders of the industry. According to studies, these two companies owned more than 50% of the domestic market.

ITEM 24: Market Shares Pasta Industry



Similarly as the market shares the domestic market production units are Misko SA and SA MELISSA are producing more than 50% of total production, with vertical integration production process.

6.3.6. Factors that define Demand

Eating pasta is one of the most popular meals in Greece and also in Southern Europe. There is a large amount of qualitative-quantitative factors that plays an important role in the demand for pasta in our country. The most important are:

6.3.6.1. *Price*

Retail prices are quadrupled compared with the previous decade and this is attributed mainly to the devaluation of the drachma and inflationary pressures that prevailed at that time. In recent years, despite increases in their prices pasta still available at low prices and considered a cheap meal for the general public. The pasta can be combined with a wide range of food offering various flavoring combinations. The low price and the benefits above make pasta part of the nutritional habits of the modern Greeks. Furthermore, there are Pasta products with their own brand (own label) in several retail markets (supermarket) with even lower prices.

6.3.6.2. Modern Lifestyle

The modern lifestyle has imposed a fast paced living both for Greeks and World population. The time of preparation of pasta is relatively small even if it is combined with some kind of sauce. Process of pasta meal is simply as it does not require special skills. As a result of this a meal with pasta is very common to the general public.

6.3.6.3. Nutritional Concepts

According to the Mediterranean diet, which is a globally recognized as healthy eating plan, pasta are at the base of the food pyramid. Pasta is exclusively consisted from vegetable origin, providing energy in the body for long. Also positively affects the demand for pasta in our country, many Italian restaurants have been developed throughout the country.

6.3.6.4. Advertising

Advertising in pasta industry is one of the most important means of influencing consumers to demand, particularly in the direction to the trademarks. The competition between large companies is high so a huge amount of expense is used for advertising services in order to attract more consumers. So far there hasn't been applied a general sectoral advertise that will generally increase the demand for pasta, this happens because there is no common agreement between the companies. Other countries such as Italy, Spain and America there are such advertisements for years aimed to convince consumers of the benefits of consumption of pasta and how to cook pasta properly.

Advertising costs are not shared equally to all media, but varies strongly in instrument and yearly. Each company chooses, depending on their strategy, how, when and where will advertise products (old and new) in order to direct costumers to their trademark.

6.3.6.5. Packaging

Cellophane is used in common packaging pasta. The preferences of the consumers are directed towards package with cellophane film, because is considered more durable, protects the product from moisture and other external factors and is cheaper. There are also more packaging methods such as paper, more presentable than cellophane, however most of the consumers considered it indifferent, especially at ages 25-35 years.

6.3.6.6. Substitutes

Potato and rice can be considered as close substitutes for pasta. However there is no particular a shift for these products because pastas are considered a standard food for Greeks, which is the basis of many combinations for other meals. In many rural areas, there is phenomenon of consumption all kinds of household formulations which are similar with the general Pasta products (noodles, frumenty etc.), however their consumption is quite small and tends to disappear over time. Moreover, pastas are considered substitutes for other types of foods such as meat because of their low prices.

6.4. General Information Competitors

In this section it is important to present some general information about the two (2) major companies in the industry.

6.4.1. Barilla Hellas or Misco A.E

MISKO Company was founded in Piraeus in 1927 and from 1991 is a member of Barilla Group, and trades their products (pasta & sauces Barilla and Passioni biscuits).

In 2000 Misko completed the new ultramodern pasta factory in Eleonas area of Viotia, which is the third largest factory in Europe. In 2001 he joined the Barilla Group and a mill in Volos. The MISKO is the largest pasta industry in Greece with a strong market presence. Thanks to the quality of the pasta, shares the first place in the Greek market. Furthermore, pasta Barilla, are the biggest import of pasta product. In 75 years of the presence MISKO has won 56 gold international quality awards. The leader of pasta MISKO in Greek Market was built thanks to steadily excellent quality product, to the selection of raw material and the dynamic communication in advertising field in Greek Market ('Ακάκιε - τα μακαρόνια να ναί MISKO').

Melissa KIKIZΑΣ ABEE

The company was founded in 1947 under the vision of Alexander Kikizas to create a food industry, which highlight the raw materials of our country, processing into high quality products. The production of pasta and semolina is the main activity. Annually absorbs 100,000 tons of high quality Greek durum wheat. The vertically integrated factory complex (mill and spaghetti) located in Larissa, produces annually more than 50,000 tons of pasta, making the industry one of the largest of its kind in Europe! The presence in European market is strengthened with the establishment of subsidiary Atlanta SA, through which it exports number of series Greek products to the Polish market such as, pasta, olive oil, olives, halva and wines. The basic pasta brands of the company are: Melissa and Stella, the premium pasta line Primo Gusto, "Deveta", and traditional "Vlacha" products.

6.5. Structure analysis of the competitive environment

The attractiveness of the Greek market is highly influenced by the above companies. It is therefore appropriate to analyze the 5 Forces of Porter. Porter five forces analysis is a

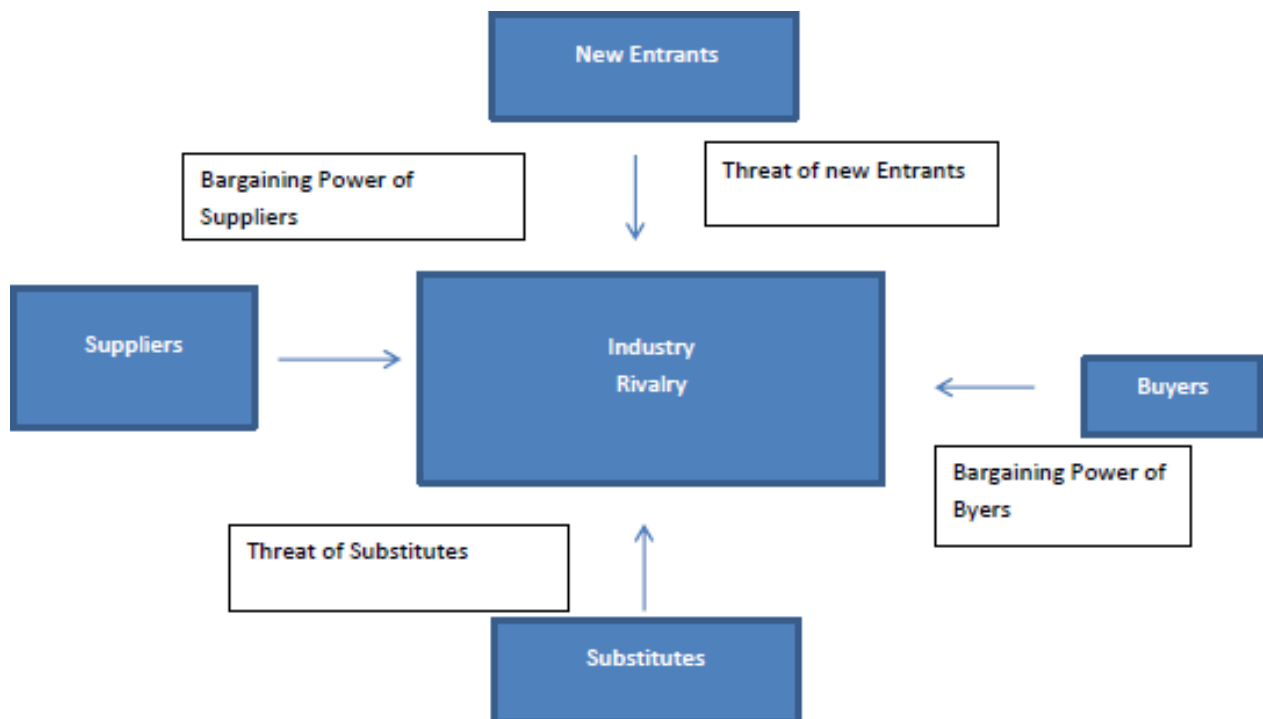
framework to analyze the level of competition within an industry and business strategy development. The degree of intensity is defined through five basic competitive forces (factors).

6.6. Porter's Five Forces Analysis

Threat of new Entrants

Every new entrant in the industry is a threat for existing competitors. "Entry barriers" are called all those financial costs that slow or prevent the entry of new firms in the industry and should be overridden by any new entrant. It is therefore important that businesses must be separated according to their activity level. Companies which are interested in doing business on a nationwide scale their entry are relatively difficult to enter, since high investments required, special know-how and there are already established large companies in the sector which are holding significant market shares and high reputation. On the other hand, companies which are wishing to operate in several local markets are more easily to enter. However high investments are not a deterrent because there is always the possibility of state incentives installation location option that reduce the cost of investment.

Bargaining Power of Byers.



In a general context competing businesses are wishing to maximize the profitability of their capital, while buyers want to buy the highest quality at low prices. In pasta industry can be said that the bargaining power of both end consumers and traders is very big. Traders (large chain supermarket) are few in number and fairly large in size. They collect about 75% of the total distribution and with combination of the large volume markets, they are enhancing their position. End buyers- consumers have also big bargaining power, because they have a great variety in products such as pasta and the prices and quality.

Threat of Substitutes

As mentioned before substitutes of pasta are mainly as rice and potatoes. Both occupy an important share of consumer preferences so the power is important. Assuming that there is equality between the Porter's forces then the availability of these products may limit the profitability of the sector and for this reason the newly incoming firms should pay particular attention to them.

Bargaining Power of Suppliers

It is well known that suppliers are the main business partners. However, the relationship between companies and suppliers can sometimes be fatal because the dependency is high, (eg in a market with few suppliers, if there is an increase in prices or a reduction of quality of raw material this fact increases the cost of final product and reduced the margin of profit. Sometimes this cost is transferred from the businesses to the final consumer by increasing the price of the final product.

Specifically for pasta market, the number of suppliers is relatively large considering the needs of the sector and also their size is relatively small. This fact is making supplier's power, not so important on pasta businesses. In addition to independence of business from the pressures of suppliers large enterprises have vertically integrated their production, they have developed their own production of raw materials.

Industry Rivals

The intensity of competition in pasta industry is an important factor for every company in order to build their strategy. How profitable an industry is depends on the rivalry between the

competitors. If the intensity of competition is small that gives the opportunity for businesses to raise their prices and increase their profitability. Unlike greater the competition limits profitability. In the domestic market there are two leading companies (Misko AE and Melissa SA). The rest companies have small market shares and are limited to local markets mainly. In addition there are some imported, mainly Italian and own label, products which also have limited power. In conclusion it can be seen that the intensity of competition is not very high, while the domestic market of pasta has come to maturity.

6.7. PEST Analysis (Political, Economic, Social, Technological)

It is very important to analyze the external environment of the company. Many studies have been developed for the analysis of the external environment. At this point will be analyzed the most important factors that shapes the macro-environment (political, economic, socio-cultural, technological)

Political Environment

The main feature of the current political environment is the instability. Changes of political decisions are fast, sweeping and painful in their implementation (for the majority of citizens). Additionally the control of funds and the closure of banks, implemented by mid-June 2015, has made it a difficult environment for every business sector. More and more companies, operating in our country, are resorting sum tested strategies, avoiding to take some risk resulting their loss of their development, the conservation effort of any position held in the market and compliance a waiting mode until positive change in the political environment.

Economic Environment

The Eurozone debt crisis has put at risk of the stability system, also shaken vigorously the pasta industry. Fiscal policy currently applied in Greece is very tough and take severe austerity measures. Signing the last agreement our country and Europe are projected to increase corporate tax and VAT cut pensions and salaries of public - private sector . However with the signing of Momentum there will be a recapitalization of banks by the end of 2015 and immediately strengthened at least with 10 bn. Euros. Now there is, no risk of "haircut" on deposits, as required by EU directive on recapitalization banks after 01.01.2016. Furthermore

is planned a development package 35 bn. € «Juncker package», also the implementation of the CFP 2014-2020 will provide benefits in the Primary sector as for the vertical integration of the production, and as an financial aid for the establishment of processing .

Social Environment

In modern societies there is a continually that modulates the values, the principles, the beliefs of citizens, the way they face themselves, the others, the businesses, the organizations, the society and the environment. Greece has one of the highest positions in consumption of pasta per capita. The dissemination of the Mediterranean Diet to the general public, the modern way of life, the expansion of Italian restaurants, have affected increased the demand for pasta. Pastas products are targeting all social classes and are not affected by the several of age differences or demographic variables etc. Moreover, the low price at which marketed make meal which is accessible to all and not considered decades ago as a luxury Item.

Technological Environment

Technological progress has greatly affected the production process from raw materials to the final product. In nowadays are being used high tech machines, for durum wheat crops (agricultural tractors, grain harvesters), drying ovens, automated systems supporting the production process (reducing costs), increasing product quality and machines that are more friendly to the environment. Finally companies investing both in equipment and in building facilities in order to encounter the industry competition.

.Market value and trends

The evolution and structure of the Greek pasta market, as well as its trends, in terms of volume, showed an average annual rate of change of 1.5% in the period of 2009 to 2014. In particular, in 2010 its size increased by 1.2% compared to the previous year. It has been estimated that the long pasta (spaghetti type etc.) occupies a participation rate in the total pasta market of 55%, followed by other types of pasta (35%.) The value of the pasta market fell by 3.2% in 2010 compared to 2009, due to the fact that many businesses engage in promotions, in order to maintain high levels of sales.

Regarding the industry's trends, a gradual increase in consumption of short type of pasta, filled and wholemeal pasta was observed and a small decline in long pasta (spaghetti type). During the last years a dynamic growth pattern in private label pasta has been recorded. The consumption of fresh and handmade pasta follows an upward trend due to their clearly higher quality; this creates a whole new opportunity for small-scale entrepreneurship and its connection with rural tourism (Agrotourism).

The domestic pasta market is considered "mature", so we can not expect significant changes annually.

However, it is estimated that the value of sales will decrease, as companies are expected to continue promotions and discounts in the near future, too.

The consumption of fresh and handmade pasta follows an upward trend due to their clearly higher quality; this creates a whole new opportunity for small-scale entrepreneurship and its connection with rural tourism (Agrotourism).

6.8. Pasta Technology

6.8.1. Pasta extrusion: Conversion of semolina into pasta

Formation of gluten-based dough requires the presence of gluten proteins, gliadin and glutenin, moisture, and energy. Gliadin and glutenin proteins are storage proteins that accumulate in wheat endosperm cells during grain filling. Gliadins are a heterogenous group of single chain proteins that are responsible for dough cohesiveness. Gliadin proteins can be separated using electrophoresis into four groups: α -gliadins, β -gliadins, γ -gliadins, and ω - gliadins. α -Gliadins, β -gliadins, and γ -gliadins contain intrachain disulfide bonds, whereas ω - gliadins lack cysteine residues, a sulfur containing amino acid, and so cannot form disulfide bond.

6.8.2. Pasta Processing: Pasta production

The quality of a pasta product is evaluated by dry appearance and cooked texture. 'Good Pasta' is defined as having uniform amber colour with an absence of black, brown or white spots, a smooth surface free of streaks or cracks, and a texture that when cooked is neither chewy nor mushy but 'al dente'. Three key factors determine success or failure in pasta production: raw materials, processing technology and the presence of skilled employees throughout the manufacturing process...

6.8.3. Extrusion of precooked pasta

Pasta is a common source of carbohydrates in our diet today. Production and consumption of pasta products vary depending on the region of the world and culinary traditions within a society. Italy ranks as the highest consumer of pasta in the world at nearly 26 kilograms per capita, which is nearly double its next closest competitor, Venezuela¹.

Most pasta products on the market, outside of instant noodles, are made from durum wheat semolina, and are processed via low temperature extrusion (less than 50°C)². After extrusion and drying, these traditional pasta products have very low starch gelatinisation levels (less than 50 per cent) and must be cooked before serving. These products can also be treated to produce precooked pasta. This is accomplished after the conventional extrusion process by a cooking stage in which the formed pasta is subjected to a steam or water bath followed by drying.

Another way to make a fully cooked pasta product without additional treatment is with extrusion cooking³. Typically, a twin screw extruder is used to wet the dough and cook and extrude it under high pressures and temperatures ranging from 90 to 110°C. This results in pasta products that can be rehydrated in three to eight minutes and they resemble the texture of those products made via a conventional process.

6.8.4. DRIED PASTA: A global food

Pasta, the Italian food par excellence, is one of the most interesting products obtained from wheat. Dried pasta has a long shelf-life before being cooked, thanks to its low water content and highly compact texture. Its macromolecules have exceptional hydrating capacities which enable it to increase its weight two-fold and acquire a palatable structure when cooked in boiling water while maintaining a high structural compactness. This property allows starch to be slowly digested, thus ensuring the product a low Glycemic Index despite its high carbohydrate content¹. Pasta can then be combined in many different kinds of sauces to suit every taste and to remedy the deficiency of wheat regarding some essential amino-acids.

6.8.5. Innovation directions

Pasta is recognised as a family menu staple because it offers a number of unique benefits that other foods do not, such as a broad taste appeal, the versatility of usage, the convenience of preparation and being an inexpensive alternative to other main entrees.

6.8.6. Utilisation of durum wheat for yellow alkaline noodles

Durum wheat (*Triticum durum* Desf) is a tetraploid wheat that is believed to have arisen from ancient emmer wheat (*Triticum dicoccum*) in the Mediterranean areas of Asia, Africa and Europe (Abdel-Aal et al, 1998) in approximately 300 B.C. Durum wheat has hard kernels and is usually milled into coarse flour, known as semolina, primarily for the manufacture of pasta (Feillet and Dexter, 1996). Durum wheat is also used for couscous, bulgur and specialty bread products, particularly in Mediterranean countries (Quaglia, 1988). There is an advantage in having developed alternative uses for durum wheat to increase its marketability in years of high production. Most previous efforts to increase durum's marketability have centred on its bread making capabilities (Edwards et al., 2007 and references there in).

6.9. How does one open an artisan pasta shop?

Opening a workshop for fresh pasta, dry pasta, organic pasta, or gluten free pasta for those with celiac disease, that is, production and merchandising of artisan egg noodles and stuffed pasta, is a very interesting process. Supermarkets and big-box stores are becoming increasingly formidable competitors of fresh pasta shops. However, workshops that specialize in artisanal production, such as bakeries, ice cream parlors, caterers, and fresh pasta shops, of course, continue to do business, deriving their market strength from the quality of their product.

The fresh pasta industry has been growing continuously in recent years, largely due to increased attention being paid to healthy eating habits, and an increased focus on traditional and homemade dishes. To develop this market, one must pamper clients with high-quality, niche products that whet the palate of the customer, but above all, cater to their particular needs. Think of people with celiac disease, people who, because of their food intolerance, can't enjoy these "NATIONAL" delicacies.

The start-up costs for opening and running an artisan pasta shop aren't particularly high, nor does one have to possess sophisticated technical knowledge. All one needs to do is follow the free course that we provide for our customers to learn the tricks of the trade. In short, there are plenty of good reasons why starting a fresh pasta shop today is a viable option for would-be entrepreneurs.

To open a pasta shop, one can start small, with only 540 ft². The workshop will need to be equipped with all of the necessary tools for making fresh pasta and for the sale of the finished product. The workshop will require: a work table, an extruder, a mill-cutter, an automatic ravioli maker, a gnocchi maker, a molding machine for cappelletti and agnolotti, a cutter designed to be used with the extruder for short pasta, a 4-shelf pasta dryer, a refrigerator, a combined meat mincer-grater, a sink, and a full kitchen with a 4-burner stove and exhaust hood. For the sale: a refrigerated display, an electronic scale, and a cash register. The necessary total investment is estimated at 40,000 to 70,000 € euros, taking into consideration the availability of used and refurbished machines, guaranteed to work like new.

Take part in our free courses to learn how you too can start a workshop for the production of fresh, dried, or gluten-free pasta!

6.9.1 Study How to be a Fresh Pasta Manufacturer

The first thing that any potential fresh pasta manufacturer should do is to learn the process of making fresh pasta. Fresh pasta is basically pasta that is made from fresh ingredients and does not have a long shelf life as compared to the commercial or dry pasta. Fresh pasta is better than the commercial pasta as the fresh pasta manufacturer can tailor the fresh pasta to the needs of the consumer such as the pasta's specific shapes, sizes, flavors and colors.

6.9.2. Equipment Needed by a Fresh Pasta Manufacturer

Any fresh pasta manufacturer must be able to possess the necessary equipment in making fresh pasta. Aside from the usual rolling pins, chopping boards, refrigerator, freezer, knives and flour sifter the fresh pasta manufacturing business requires specific fresh pasta equipment such as a pasta scraper, electric mixer with dough hook or food processor, pasta machine or roller and electric exclusion machine among others. Your projected market determines the number of equipment that you would need. Aside from the equipment, a fresh pasta manufacturer would also have to buy only the best and fresh ingredients.

6.9.3. Marketing the fresh pasta

The main competition of any fresh pasta manufacturer is the commercial pasta. It is not advisable for a starting fresh pasta manufacturer that has limited market of customers to go head to head with the commercial pasta in the supermarket. It would be better to employ marketing strategies to draw in more customers. A fresh pasta manufacturer can do the traditional advertisement of posters and flyers. He can also try and give out samples of pasta

dishes with fresh pasta or offer free pasta in community gatherings or meetings. He can try to market the fresh pasta as custom made for each event that can cater to each of the customer's needs. The fresh pasta manufacturer can also try and sell the fresh pasta to health stores near the area. Finally, a fresh pasta manufacturer, like any businessman, needs to set his goals and business projections for the fresh pasta manufacturing business so as to know if the business is doing well or not.

7. DISCUSSION

7.1. Industry View for all the above sectors

BMI View: Greece's economic growth prospects will remain extremely weak in the years ahead. Consumer spending will not recover from a huge destruction of household wealth since the economic crisis, while fiscal austerity conditions attached to the country's third bailout will prevent any economic recovery reaching escape velocity.

Headline Industry Data (local currency)

- 2015 per capita food consumption = 0.1%; forecast compound annual growth rate (CAGR) 2014-2019 = +0.8%.
- 2015 alcoholic drink value sales = -1.3%; forecast CAGR 2014-2019 = +0.1%.
- 2015 soft drink value sales = -0.3%; forecast CAGR 2014-2019 = +0.9%.
- 2015 mass grocery retail sales = +0.4%; forecast CAGR 2014-2019 = +0.8%. Greece Food & Drink Report Q1 2016

7.2. Market Overview

7.2.1. Food & Food Consumption

The Greek economic crisis has had a severe negative effect on consumer spending in the food sector. Retailers and manufacturers have noted that Greek consumers are spending less, sticking to their planned shopping lists, avoiding impulse purchases, increasingly turning towards private label items and using their cars less frequently. In addition, the concept of bulk buying has become outdated as consumers have less disposable income and prefer to spend small amounts more frequently. In our view, this could represent a considerable opportunity for smaller formats such as supermarkets, discount stores and convenience stores.

According to the country's leading retailer Carrefour Marinopoulos, consumers are buying only essential items and taking full advantage of any promotional campaigns. In response to this changing business environment, the retailer has been expanding its range of own-label lines, believed to stand at more than 2,000 products.

This trend is reiterated by the number two operators in the Greek market, Delhaize-owned Alfa-Beta. The retailer has seen around a 20% increase in sales for its private label lines since 2010, attributed not only to the economic crisis but also to an increased appreciation by the Greek consumer that private label products can be equivalent to, or of higher quality than, named national branded goods.

In response to the increased challenge posed by private labels, domestic food manufacturers are also sharpening their strategies. Executives at Creta Farm, a leading Greek meat company, believe that innovation will help the business come through the present economic crisis. The company, which is known for its patent that substitutes the animal fat in meat products with extra virgin olive oil - resulting in healthier delicatessen cuts - is now tailoring this concept for the cheese sector.

Another trend to note is that consumers are increasingly leaning towards food products they know are made in Greece, a development which could bode well for those manufacturers able to market and promote quality locally sourced products. However, pressure on domestic producers will likely result in consolidation of the sector and closure of underperforming processors, giving consumers less choice.

7.2.2. Food Production

Bread, cakes, biscuits, pastry and other baked goods account for more than 20% of total Greek food and drink production, expressed in value terms. Fruit and vegetable processing and preserving (a segment that includes olive oil manufacturing) constitutes the second largest sector (18.3% of the total), while the dairy industry represents more than 17% of total production value. Other key sectors include meat and poultry (10.1% of the total), the production of soft drinks and mineral water (9.7%), the production of alcoholic beverages (8.3%) and the manufacture of confectionery and chocolate (3.4%).

The Greek food and drink industry is highly developed, with some of the largest and most advanced multinational companies operating in the market. Although Greek manufacturers are facing growing competition from lower-wage countries that have recently joined the EU, the industry has also benefited from the rising incomes in these countries. However, the economic drop of the past four-five years has hit domestic consumer demand really hard, in

line with the country's economic woes, has had a negative impact on the performance of those companies more exposed to Greece.

Geographically, Greece is well positioned in relation to the emerging markets of the Balkans and has good commercial relations with other Central and Eastern European markets. The country's northern port of Thessaloniki operates as a major point of departure for exports to neighbouring countries in the region. Furthermore, Greece's various food and drink industries have accelerated efforts in recent years to support investment-driven growth in these neighbouring markets.

7.2.3. Leading Producers

Greece's food and drink industry has been undergoing rapid consolidation in recent years and has seen the emergence of a number of large food companies that not only dominate the local market but which have become increasingly active overseas.

Vivartia is now one of Greece's largest food and drink manufacturers. Despite divesting its ice cream and bakery units, the company continues to produce a variety of goods, including fresh dairy, fresh juice, frozen foods and ready-made meals. The company is also active in the restaurant and catering industry. Through its Delta Dairy business, Vivartia also leads the Greek market for fresh, refrigerated juices with at least a 65% market share.

Chipita (now part of Vivartia) is one of the largest Greek manufacturers of baked products, producing, among other things, croissants, strudels, tsoureki, various dough products and jams. In addition to being a market leader in Greece, Vivartia is also active throughout south east Europe, with operations in eight countries, as well as production lines in Serbia-Montenegro, Bulgaria and Romania. Another Vivartia subsidiary, General Frozen Foods, has approximately 70% of the Greek frozen food market, retailing products under the Froza and Barba Stathis brands.

7.2.4. Trade

Data from the United Nations Conference on Trade and Development reveal that meat and dairy account for around 30% and 15% respectively of Greece's total food and drink imports. Greece is reliant on imported meat because of the limited cattle herds in the country.

However, the country's dairy sector is well developed, and the high level of imports is largely due to the success of international dairy firms at marketing their products to Greek consumers. Fruit and vegetables account for around a third of Greece's food and drink exports, while olive oil accounts for around a 10th. Primary agricultural products therefore make up the bulk of Greece's exports, with the country's Mediterranean climate allowing for the cultivation of highly valued crops that are in demand in Western Europe and elsewhere.

7.2.5. Agriculture

Thanks to its Mediterranean climate, Greece is well known for many of its agricultural products and is a surplus producer of fruit and vegetables. Its largest exports include fresh and processed fruits and vegetables, especially canned peaches and tomato products, olive oil, wheat and tobacco. Most farms are small, family-owned dispersed plots. Given this combination of a favourable climate and strong reputation for the quality of its food, Greece is in a good position to take advantage of the growing trend towards organic farming and food production.

8. ANALYSIS OF SECTORS

8.1 CONSUMPTION IN GREECE

According to the yearly Greek Statistical Authority's Research on Family Budgets 2015, food expenses on 2014 were estimated at 20,5% of a family's budget, at around 299€ per month. This figure was higher on 2013 at 307€ per month, even though the percentage of food expenses was lower at 20,4%. This decrease is due to the general decrease in average family monthly consumption, which fell from 1509€ on 2013 to 1460€ on 2014. It is important to mention that the average monthly consumption on 2010 was 1956€ and food expenses represented an 18% percent.

Regarding bakery, confectionary, ice-cream and pasta consumption in specific, the sums, percentages and quantities are presented in the tables below.

Bakery products are a popular food among Greek consumers, reaching 10% of total food consumption in 2014. The average consumption of pasta remained constant between 2013 and 2014 at 4,57€. Confectionary consumption as percentage of food consumption grew, while ice cream consumption in euros and as percentage fell.

8.2. SECTOR ANALYSIS

Greece hosts a large number of processing enterprises, which are spread around the country. The numbers presented are drawn from the European Statistical Services's (Eurostat) Structural Business Statistic Database (SBS). The corresponding NACE codes are the following:

ITEM 25: Sectors and NACE Codes

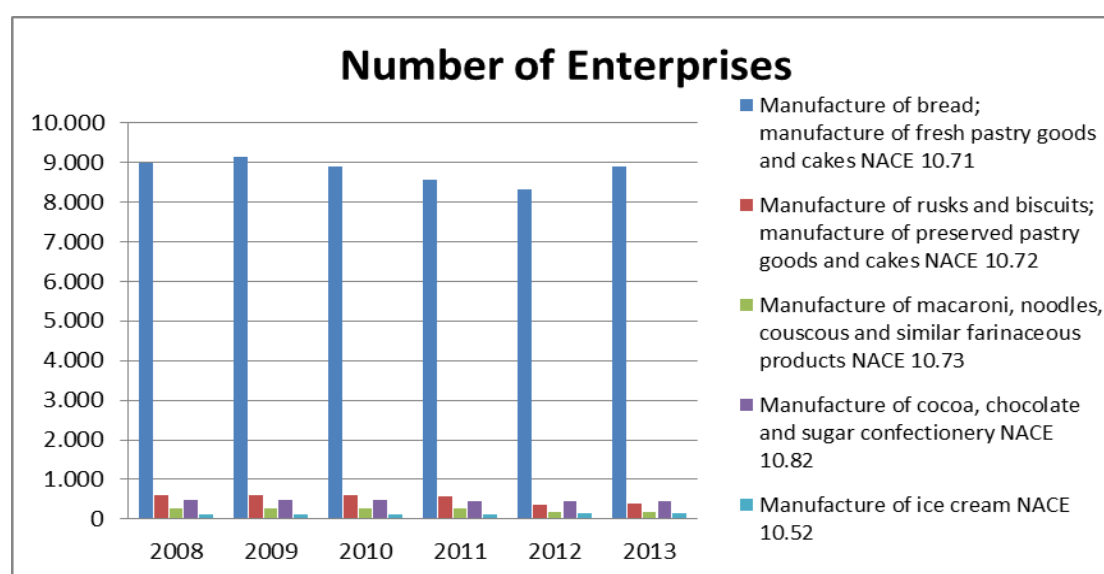
Section D - Manufacturing SubSection DA - Manufacture of food products, be	
Manufacture of bread; manufacture of fre	NACE 10.71
Manufacture of rusks and biscuits; man and cakes	NACE 10.72

Manufacture of macaroni, noodles, d products	NACE 10.73
Manufacture of cocoa, chocolate and sug	NACE 10.82
Manufacture of ice cream	NACE 10.52

8.2.1 NUMBER OF ENTERPRISES

The numbers of companies in the 5 Greek sectors under examination during the period 2008 to 2013 are presented in Table 3.

ITEM 26: Number of Enterprises



Source: Eurostat Structural Business Statistics

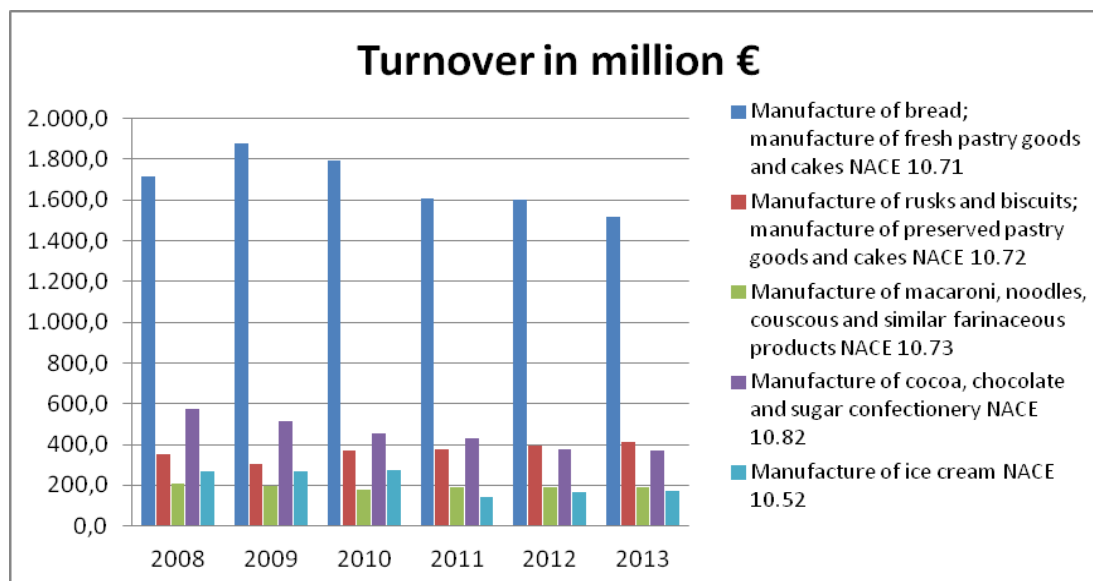
The sector with the largest number of active enterprises is bakery with 8.901 in 2013. The number of enterprises in the bakery sector fell between 2010-2012, but then increased by 7%. In the biscuit sector we observe a large decrease in the number of enterprises in 2012 (-34%). In the pasta sector in 2014 there were 191 active companies, in the sugar confectionery sector 461 and in the ice cream sector 159.

8.2.2 TURNOVER

The data presented in Table 4 and Figure 2 are drawn from Eurostat and refer to the 5 sectors' total yearly sales.

ITEM 27: Greece: Turnover in 5 sectors

Source: Eurostat Structural Business Statistics



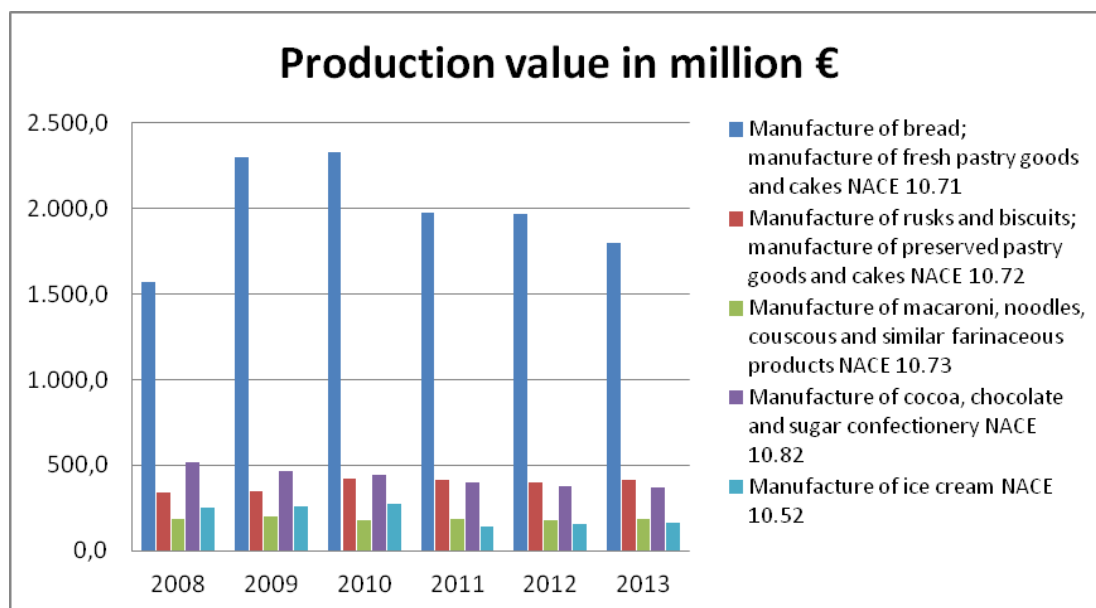
Source: Eurostat Structural Business Statistics

The bakery sector's turnover decreased from 1.7 billion € in 2009 to 1,5 billion € in 2013. The biscuit sector grew in the same period, reaching 412 million € in 2013. The pasta sector also grew between 2010 and 2013, recording a total turnover of 192 million € in 2013. The confectionery sector's sales decreased by -35% between 2008 and 2013. Finally, the ice cream sector's sales fell by -48% in 2011, presenting a total turnover of 169 million € in 2013.

8.2.3 PRODUCTION VALUE

The Greek bakery sector's production value was 2,3 billion € in 2009, but fell to 1,8 billion € in 2013. In the biscuit sector the total production value in 2013 was 416 million € and in the pasta sector 183 m €. Production value in the sugar confectionery sector fell by -20% between 2009 and 2013, while in the ice cream sector there was a large decrease in the production value in 2011, falling by almost -50%.

ITEM 28: Production Value



Source: Eurostat Structural Business Statistics

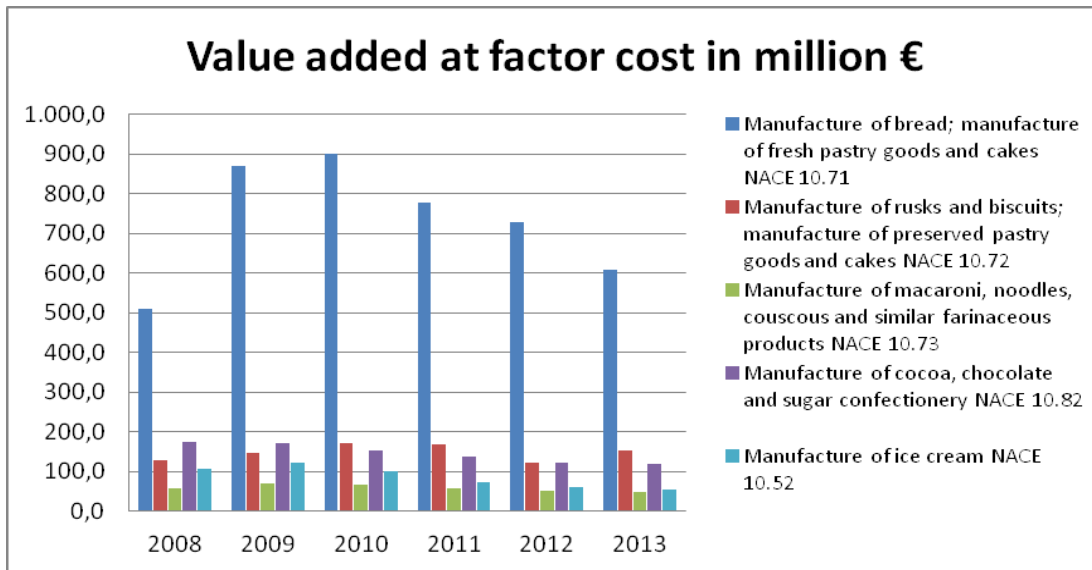
8.2.4 VALUE ADDED

According to Eurostat, value added at factor cost is the gross income from operating activities after adjusting for operating subsidies and indirect taxes. It can be calculated as: turnover (+) capitalized production (+) other operating income (+) increases (+) or decreases (-) of stocks (-) purchases of goods and services (-) other taxes on products which are linked to turnover but not deductible (-) duties and taxes linked to production.

ITEM 29: Greece: Value Added in 5 sectors

Value added at factor cost in million €						
Year	2008	2009	2010	2011	2012	2013
Manufacture of bread; manufacture of fresh pastry goods and cakes NACE 10.71	509,3	868,6	899,2	776,3	726,8	607,4
Percent Change		70,55	3,52	- 13,67	-6,38	- 16,43
Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes NACE 10.72	129,1	147,4	171,2	167,1	123,0	152,5
Percent Change		14,18	16,15	-2,39	- 26,39	23,98
Manufacture of macaroni, noodles, couscous and similar farinaceous products NACE 10.73	57,7	70,5	67,0	56,7	51,5	47,8
Percent Change		22,18	-4,96	- 15,37	-9,17	-7,18
Manufacture of cocoa, chocolate and sugar confectionery NACE 10.82	173,7	170	153,8	137,7	122,4	118
Percent Change		-2,13	-9,53	- 10,47	- 11,11	-3,59
Manufacture of ice cream NACE 10.52	106,9	120,7	99,0	71,0	58,8	53,7
Percent Change		12,91	- 17,98	- 28,28	- 17,18	-8,67

Source: Eurostat Structural Business Statistics



Source: Eurostat Structural Business Statistics ITEM 30: Value Added

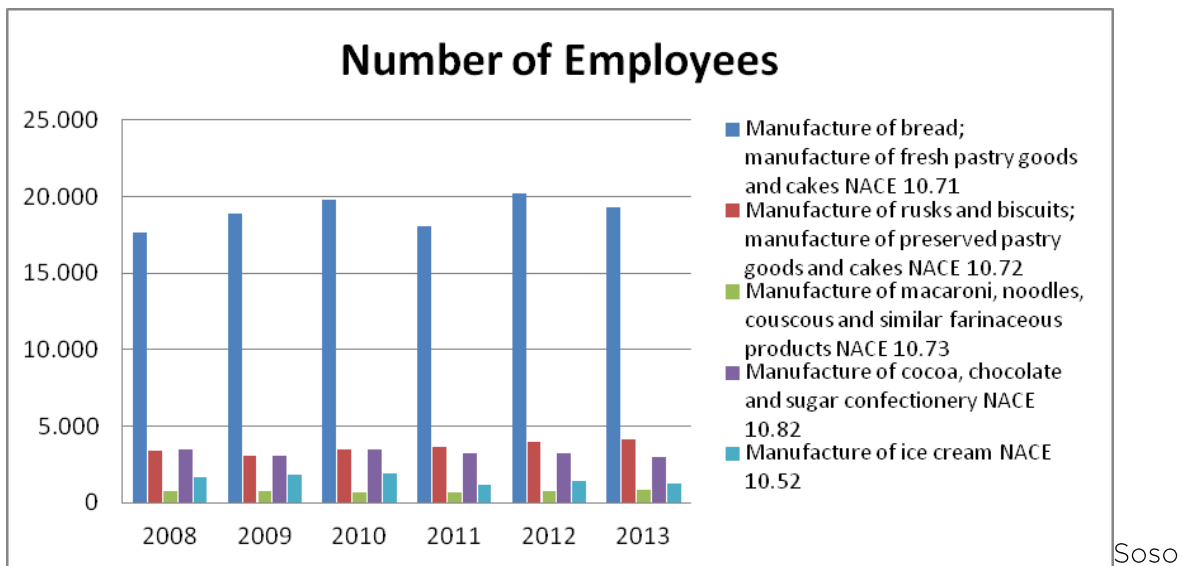
The bakery sector's value added fell by -30% between 2009 and 2013, from 860 to 607 million €. The biscuit sector's value added increased from 2008 to 2013 by 23 million €. The pasta sector's value added in the same period fell by 10 million € and the sugar confectionery sector's also fell 55 million €. In the ice cream sector value added decreased by -50%, recording a value of 53,7 million € in 2013.

8.2.5. NUMBER OF EMPLOYEES

ITEM 31: Greece: Number of Employees in 5 sectors

Number of employees						
Year	2008	2009	2010	2011	2012	2013
Manufacture of bread; manufacture of fresh pastry goods and cakes NACE 10.71	17.637	18.841	19.746	18.083	20.221	19.291
Percent Change		6,83	4,80	-8,42	11,82	-4,60
Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes NACE 10.72	3.379	3.095	3.512	3.660	3.951	4.146
Percent Change		-8,40	13,47	4,21	7,95	4,94
Manufacture of macaroni, noodles, couscous and similar farinaceous products NACE 10.73	762	749	699	685	796	856
Percent Change		-1,71	-6,68	-2,00	16,20	7,54
Manufacture of cocoa, chocolate and sugar confectionery NACE 10.82	3.439	3.047	3.449	3.202	3.208	3.011
Percent Change		-11,40	13,19	-7,16	0,19	-6,14
Manufacture of ice cream NACE 10.52	1.689	1.812	1.923	1.152	1.436	1.255
Percent Change		7,28	6,13	-40,09	24,65	-12,60

Source: Eurostat Structural Business Statistics



Source: Eurostat Structural Business Statistics ITEM 32: Number of Employees

Employment in the bakery sector was 19.291. In the biscuit sector employment grew by almost 34% between 2009 and 2013. In the pasta sector employment also grew by 25% between 2011 and 2013. The number of employees occupied in the confectionery sector in 2013 was 3.011, while in the ice cream sector it was 1.255.

8.2.6 IMPORTS AND EXPORTS

Following there is going to be a presentation and analysis of import and export data related with the bakery, pasta, confectionery and ice cream sectors. The data were drawn from the Hellenic Statistical Authority's (ELSTAT) database. The relevant CN codes are the following:

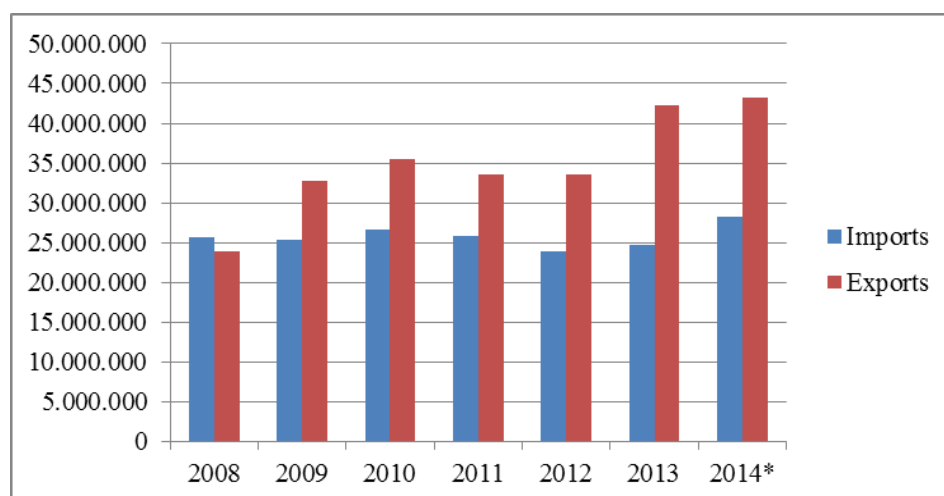
- CN1704: Sugar confectionery, non-cocoa, white chocolate
- CN1806: Chocolate and other foods containing cocoa
- CN1902: Pasta, couscous, etc.
- CN1905: Baked bread, pastry, wafers, rice paper, biscuits, etc
- CN2007: Jams, jellies, marmalades, fruit, nut pastes, purees
- CN2105: Ice cream and other edible ice

Tables 8 to 13 and Figures 6 to 12 present the data.

ITEM 33: Sugar confectionery, non-cocoa, white chocolate Imports, Exports and Trade Balance

CN1704 - Sugar confectionery, non-cocoa, white chocolate					
Year	Imports		Exports		Balance
	€	kgs	€	kgs	€
2008	25.728.800	8.205.990	23.916.130	7.708.226	-1.812.670
2009	25.391.675	8.257.134	32.690.988	9.214.033	7.299.313
2010	26.693.541	9.010.727	35.482.926	11.133.630	8.789.385
2011	25.830.869	8.574.016	33.602.349	9.955.655	7.771.480
2012	23.979.240	7.789.701	33.624.334	8.969.886	9.645.094
2013	24.710.754	8.819.608	42.234.398	10.320.396	17.523.644
2014*	28.211.134	8.737.936	43.153.369	9.802.252	14.942.235

Source: ELSTAT



Source: ELSTAT

ITEM 34: Sugar confectionery, non-cocoa, white chocolate Imports and Exports

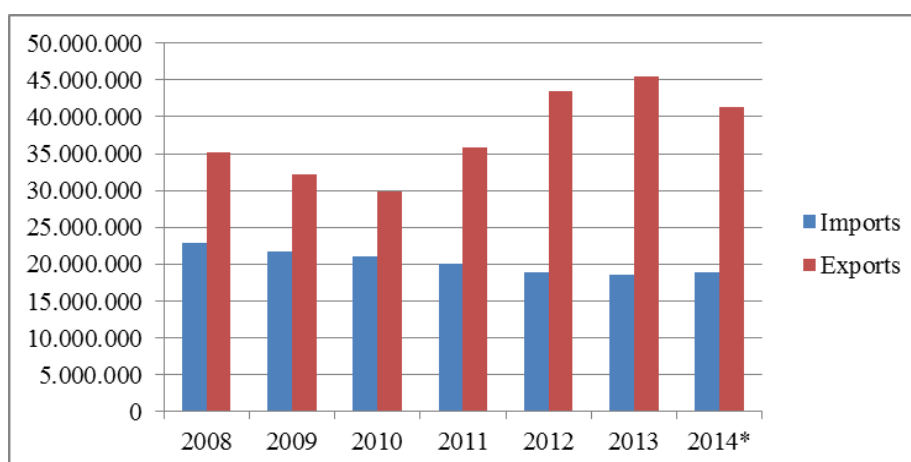
Greece since 2009 has a positive trade balance in the international trade of sugar confectionery products, reaching 14,9 million € in 2014, down from 17,5 million € in 2013. Exports grew by 86% between 2008 and 2014.

Sugar confectionary imports amounted at 119 million € in 2014 (down from 140 billion € in 2008), while exports were 24 million €. Exports increased by 118% between 2008 and 2014.

ITEM 35: Pasta, couscous, etc. Imports, Exports and Trade Balance

CN1902 - Pasta, couscous, etc.					
Year	Imports		Exports		Balance
	€	kgs	€	kgs	€
2008	22.802.418	17.203.133	35.217.219	39.473.654	12.414.801
2009	21.767.487	15.084.588	32.175.907	42.927.266	10.408.420
2010	20.950.359	16.595.983	29.833.061	39.987.506	8.882.702
2011	19.969.497	14.156.208	35.874.460	47.506.255	15.904.963
2012	18.927.058	12.940.986	43.432.500	53.468.143	24.505.442
2013	18.510.089	12.144.962	45.451.164	55.315.162	26.941.075
2014*	18.856.925	12.702.331	41.284.804	51.994.045	22.427.879

Source: ELSTAT (2014 temporary values)



Source: ELSTAT

ITEM 36: Pasta, couscous, etc. Imports and Exports

Greece has a positive trade balance in the international trade of pasta and related products. Exports amounted at 51 million € in 2014. Imports were 18 million € in the same year. The export value grew by more than 30% between 2008 and 2014.

ITEM 37: Baked bread, pastry, wafers, rice paper, biscuits, etc Imports, Exports and Trade Balance

CN1905 - Baked bread, pastry, wafers, rice paper, biscuits, etc					
Year	Imports		Exports		Balance
	€	kgs	€	kgs	€
2008	129.901.116	51.452.885	78.768.723	31.477.005	-51.132.393
2009	119.181.573	50.008.845	64.668.075	26.337.523	-54.513.498
2010	119.952.876	48.980.649	66.372.814	27.384.326	-53.580.062
2011	114.166.523	47.907.544	64.104.140	24.824.036	-50.062.383
2012	114.047.366	50.057.626	54.700.209	20.787.082	-59.347.157
2013	120.268.617	58.951.500	51.687.854	19.108.577	-68.580.763
2014*	118.247.273	57.267.975	58.224.374	21.636.656	-60.022.899

Source: ELSTAT (2014 temporary values)



Source: ELSTAT

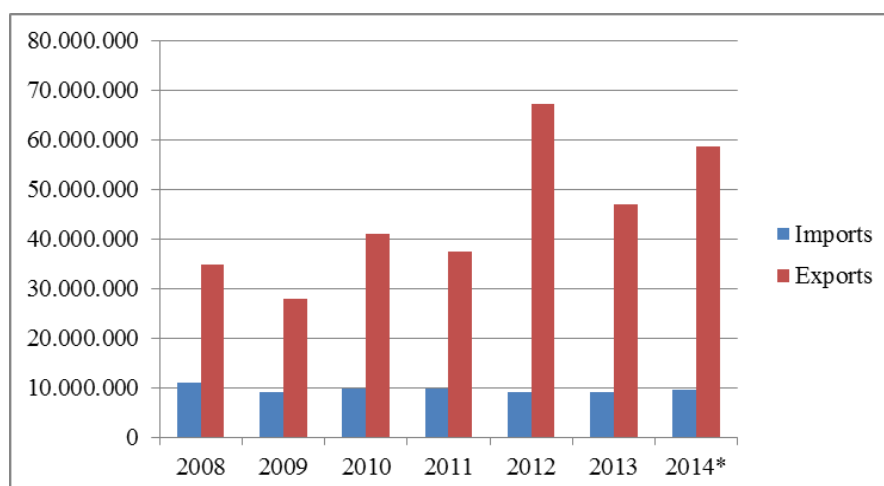
ITEM 348: Baked bread, pastry, wafers, rice paper, biscuits, etc Imports and Exports

Greece's trade balance in bakery products was negative by 60 million € in 2014. Imports in 2014 were 118 million €, while exports were 58 million €, down from 78 million € in 2008.

ITEM 359: Jams, jellies, marmalades, fruit, nut pastes, purees Imports, Exports and Trade Balance

CN2007 - Jams, jellies, marmalades, fruit, nut pastes, purees					
Year	Imports		Exports		Balance
	€	kgs	€	kgs	€
2008	11.138.220	5.481.774	34.999.607	41.059.330	23.861.387
2009	9.287.809	4.193.475	28.034.196	38.642.481	18.746.387
2010	9.999.515	4.747.229	41.131.733	60.364.032	31.132.218
2011	9.865.844	4.125.102	37.675.891	49.280.930	27.810.047
2012	9.162.249	3.236.745	67.330.279	55.781.788	58.168.030
2013	9.139.438	3.728.342	47.080.342	55.371.950	37.940.904
2014*	9.711.767	3.974.212	58.676.797	65.358.395	48.965.030

Source: ELSTAT (2014 temporary values)



Source: ELSTAT

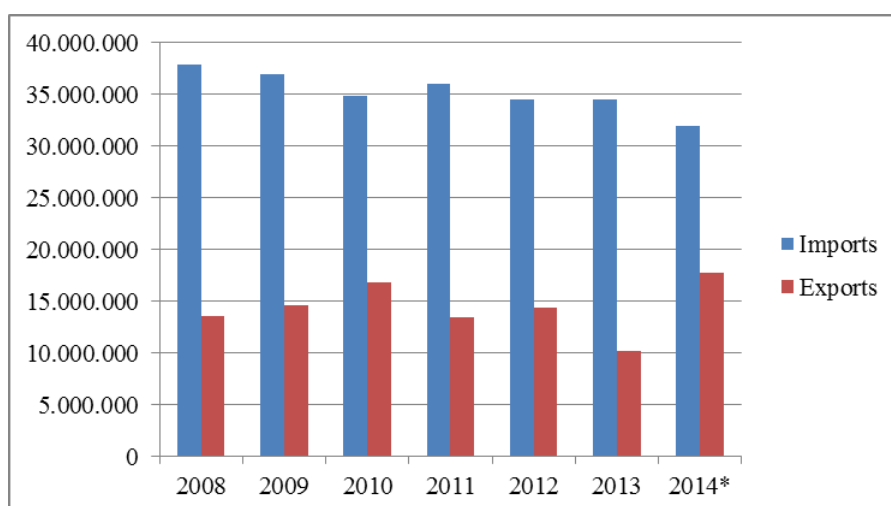
ITEM 40: Jams, jellies, marmalades, fruit, nut pastes, purees Imports and Exports

Greece's international trade of jams, jellies, marmalades and related products had a positive trade balance of 48 million in 2014. Moreover the trade surplus more than doubled between 2008 and 2014. The year with the highest value of exports was 2012 with 67 million €.

ITEM 41: Ice cream and other edible ice Imports, Exports and Trade Balance

CN2105 - Ice cream and other edible ice					
Year	Imports		Exports		Balance
	€	kgs	€	kgs	€
2008	37.948.816	18.824.624	13.592.625	4.564.744	-24.356.191
2009	36.961.228	18.515.206	14.582.704	4.487.315	-22.378.524
2010	34.910.815	19.989.645	16.842.688	4.922.321	-18.068.127
2011	36.073.365	19.016.260	13.396.015	4.313.762	-22.677.350
2012	34.471.528	19.415.374	14.339.023	4.404.117	-20.132.505
2013	34.473.145	19.525.971	10.126.781	3.018.216	-24.346.364
2014*	31.955.907	15.773.570	17.779.790	5.158.844	-14.176.117

Source: ELSTAT (2014 temporary values)



Source: ELSTAT

ITEM 42: Ice cream and other edible ice Imports and Exports

Ice cream imports decreased by -16% between 2008 and 2014, recording a value of 31 million in 2014. In the same 6 year period, exports increased by 30%. However, there was a trade deficit which was valued at -14 million in 2014.

8.3. OTHER INFORMATION

ITEM 43: Pasta Consumption in Selected Countries (kg per capita)

Country	2011	2012	2013
Italy	26	26	25,3
Greece	10,5	10,6	11,5
Switzerland	9,3	9,2	9,2
Sweden	9	9	8,8
United States	8,8	8,8	8,8
France	8,1	7,8	8,1
Germany	8,1	7,9	8
Russia	7,8	7,8	8
Austria	7	7	5,6
Canada	6,5	6,5	6,5
Spain	5	5,3	5,3

Source: International Pasta Organization

9. Analysis of the primary research data collected

From the 18 interviews reports of our visits after analysis, we have ended up with the following results:

1. most of the companies have been certified with HACCP and ISO . Only the family and very small companies have not certified.
2. all of them producing one or more traditional Greek products
3. most of the have export orientations
4. most of them they do not have problems with the raw materials
5. most of the raw material are imported from abroad
6. all of them are facing problems with the access in money, capitals and bank loans
7. all of them once have been benefited from EE subsidies
8. there is a lack of comprehensive legal support and laws regulations
9. all of them are facing difficulties with the logistic services
10. all of them (instead the large companies)arepressing for easier access to the specific research labs , NPD & RND
11. there is no access and relations with the academic institutions
12. there is lack of high educated technicians for their production
13. there is lack of educated researchers for developing their recipes
14. most of them they are operating with almost 50 of their capacity
15. there is lack of industry engineers for designing and expanding their production lines
16. The required cost for starting up and establishing a bakery and confectionary company , is at a level of a min of 100.000 euros and 50.000 for the pasta sector
17. Running business on these sectors is needed to a min. of 3 employment positions

10. SWOT ANALYSIS OF THE ABOVE SECTORS

Strengths

1. most of the companies have been certified with HACCP & ISO
2. The available state of the art technology that can provide bakeries with a high production capacity of high quality
3. Relatively high food spending per capita despite the economic upheaval
4. Great variety and quality of bread, pastry and ice cream products that small bakeries offer.
5. Cultivation of personal relations between customers and bakeries.
6. The increased of availability of small bakeries. Nowadays at least one small bakery is available in every district providing consumer with fresh bread and other pastry products.

Weaknesses

1. there is a lack of highly educated technician .
2. there are no properly equipped NPD labs
3. most of the raw materials are imported .
4. Frequent price fluctuation of raw

material. Opportunities

1. Private label products are expected to become more.
2. Tourism has traditionally provided a seasonal boost to retail and food and drink sales.
3. Pastry products are capable of adjustments and diversifications in order to be aligned with the current life-style. The new life-style promotes a more healthy diet low in fat and calories which means that there is a need for new pastry product development.

Threats

1. Health scares and allergens might effect the customer's demand
2. Elevated unemployment and falling wages will continue to hinder growth of volume and value of food and drink product sales.

With public finances under huge strain, rising taxes and cuts in government spending as part of various fiscal austerity packages are dampening consumer demand.

3. Geographical challenges, including a large rural and island-based population, will continue to hamper the development of larger retail formats that can stock wider varieties of food products.
4. Imports of low quality substitute products that are usually attractive due to their low prices.
5. The new life-style that promotes the consumptions of products low in fat and carbohydrates such as pastry products.

10 .1. EVALUATION OF THE SWOT ANALYSIS DATA

	Total opportunities							Total threats						
	4	4	3	-1	1	3	2	2	1	1	1	4		
Strength - 1	+	+	0	0	+	0	0	0	0	0	0	+	4	Total strength
Strength - 2	+	+	0	0	+	+	+	0	0	+	0	+	7	
Strength - 3	+	+	+	+	+	0	+	+	0	0	+	0	8	
Strength - 4	+	+	+	+	0	+	+	+	+	0	0	+	9	
Strength - 5	+	+	0	0	0	0	+	+	0	0	0	+	5	
Strength - 6	+	+	+	0	0	+	+	+	+	0	0	0	7	
Weakness - 1	-	-	0	-	-	0	-	-	-	0	0	0	-7	Total weakness
Weakness - 2	-	-	0	-	-	0	-	-	0	0	0	0	-6	
Weakness - 3	0	0	0	-	0	0	-	0	0	0	0	0	-2	
Weakness - 4	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Opportunities - 1	Opportunities - 2	Opportunities - 3	Opportunities - 4	Opportunities - 5	Opportunities - 6	Opportunities - 7	Threats - 5	Threats - 4	Threats - 3	Threats - 2	Threats - 1		

11. Conclusions and recommendations/proposals

11.1 Conclusions on the bakery-confectionary (including ice cream) sector.

Taking in consideration the SWOT analysis scores and evaluation we can conclude as:

-The bakery and confectionary sector is devoid of New Products Development laboratories and specialized RND & NPD scientists, who will record, create and develop the Greek culture in the industry, which is quite rich and could stand as part of development of the Mediterranean diet and tourism culture.

-The 2ND AND 3rd generation business owners of the existing companies are people well educated in the orientation of Business and Marketing sciences, but there is lack of orientation in engineering, chemistry, and food science.

-Demand in the artisanal bakery and confectionary sector is significantly affected by factors such as consumption patterns, eating habits, tradition and traditional standards and disposable income in correlation with price and quality of the particular products.

-No e-commerce is applied yet.

-In the Greek territory, there is a large number of traditional products, which most companies produce, so that the industry can be called traditional.

-There is great potential of exporting traditional products throughout the world, due mainly to Hellenism and its inextricable tradition (“tsoureki”-a kind of plaited sweet dough, new year’s cake, baklava, “Turkish” delight, “kichi”- a kind of plaited pie, pies, frozen Greek yogurt, etc.) but despite this, a Greek school of thought which would collect and register these products and create strong brands throughout the world, has not been established yet. In the according sectors, there is a tradition both in the method of producing these products and their taste despite the fact that most of their ingredients are imported from abroad.

-Small and medium-sized companies are managed by their 2nd or 3^d generation of ownership; they have achieved their survival by developing new trends like running café, confectionary, bakery and ice cream business, all in one place for better, more efficient economic sustainability.

-It has been observed that these companies, over the last ten years have been equipped with new machinery which ensures increased productivity, but unfortunately, most of them currently operate only at 50% of their potential. On the other hand, this fact means that they have the opportunity to further develop their productivity within the appropriate market conditions.

-The sector's needs created a whole new interesting branch as a stake holder, that of the production and development of bakery and confectionary equipment specially designed for traditional Greek-inspired products that are quite popular, strong and viable (e.g. fillo, puff pastry, kataifi etc).

- Most of the raw materials of the sectors are imported and it has been a great opportunity and demand for Greek -produced substitutes.

11.2. Conclusions on the Pasta sector

-Although there is a great degree of centralization of the pasta market, a new noticeable trend is that small producers are entering the market, resulting in an increase in local and traditional pasta products and fresh pasta, using local raw materials.

-The traditional Greek pasta "trachanas" returns to fashion in a large number of flavours and suggestions for cooking, strengthening this way the economy of local markets and communities.

The economic crisis has not affected the market of pasta. On the contrary, consumption of pasta increased due mainly to reasonably low prices. The consumption of fresh and handmade pasta follows an upward trend due to their perceived higher quality; this creates

a whole new opportunity for small-scale entrepreneurship and its connection with rural tourism (Agro-tourism).

11.3. Recommendations/proposals

BAKERY, CONFECTIONARY AND PASTA SECTOR PROPOSALS
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A) Opportunities for easy victories:

1. Demand of traditional Greek foods
2. Demand of increasing the private label of the product ranges and benefit for cheaper prices
3. changes of the life style and demand for convenience-snack market
4. Traditionally boost of the retail sales due to the seasonal Tourism and culinary Tourism
5. New life style promotes a more healthy diet in low fat and calories which means new product development
6. Mediterranean food popularity

Strengths to rely on, in order to take advantage of these opportunities

- Small Bakeries can offer great quality and verity of products
- Relative high food spending
- Availability of high technology and productivity capacity
- Increased of availability of small Bakeries
- Cultivation of personal relations between customers and Bakeries
- Most companies have been certicied by ISO and HACCP

B) Opportunities that can be taken advantage of only after redressing the balance of strengths/weaknesses

1. Life style promotes healthier products
2. Health scares and allergens effect consumer's demand
3. Imports of low quality products with low prices
4. Geographical difficulties and large rural and island population
5. Elevated unemployment and wages falling

Weaknesses to alleviate in order to take advantage of such opportunities

1. Limited of high educated technicians
2. There are no properly equipped NPD labs
3. most of the raw materials are imported Limited export experience

Proposals for Part B of the Project:

Relevant to A) Opportunities for easy victories:

1. Train Food Technologist graduates who seek employment in the sector, as well as prospective and existing entrepreneurs on knowledge and skills for more consistent and improved quality. A promising partner in the Bakery training school of Loulis Mills, based in Athens. (short term)
2. Train & advise new & existing entrepreneurs on financial and operational efficiency , improvement of the bottom line of enterprises (short term)
3. Train prospective entrepreneurs of the agrotourism sector. (short term)
4. Development of contacts with similar schools in Europe for the development of new syllabi. (medium term)
5. Based on original Greek raw materials and recipes, development of lexicon of sensorial characteristics and design of applications under industrial scale production. (medium term)
6. Development of RND & NPD laboratories to develop and register the Greek recipe culture of the sectors. This can accelerate the development the Agro-tourism sector
. (long - term)

Relevant to B) Opportunities that can be taken advantage of only after redressing balance of strengths/weaknesses:

1. Deliver sector-customized training courses to young entrepreneurs / prospective technicians in application of new technologies and developing new products as part of a Food Incubator Processing Network (medium - long term)
2. Design of a set of job description for employees, with accompanying training syllabi in order to promote professionalism in the sector and attract new qualified employees. (medium - long term)
3. Deliver demonstration & training courses on new technologies for Food Engineers as part of a Food Incubator Processing Network (medium - long term)

4. Establish specialised NPD and Packaging labs as part of a Food Incubator Processing Network (medium - long term)
5. Establish specialised RND labs as part of a Food Incubator Processing Network for subsidizing import raw materials with Greek origin raw materials (medium - long term)
6. Provide accelerator & funding opportunity services as part of a Food Incubator Processing Network (medium - long term)

12. APPENDICES

Business Plan Bakery

October 2015

Executive Summary

Business Idea and purpose

A bakery business engages in both producing and selling bread and most of times a great variety of other pastry products. The ultimate aim of a small local bakery is to cover the needs of citizens for bread that is considered of primary importance for the human's daily diet.

Product Portfolio

The product portfolio of a small local bakery includes mainly different type of bread, variations of bread and other pastries such as pies with a variety of fillings, cakes, biscuits and cookies and croissants. In accordance with the current prices that dominate the market, pastry products contribute to a great extent to the total annual turnover.

Market Review

The baking sector in Greece is characterized by high competition among small local bakeries which implies that the concentration is quite low and most bakeries sell at competitive prices. On the other hand, concentration among industrial baking companies is high given the low number of existing companies.

Startup cost and sources of Financing

The greatest percentage of total startup cost of a bakery constitutes the equipment cost which includes expenses for purchasing the basic productive equipment and other useful materials and for a small local bakery with 100kg of bread production capacity per day is estimated to more than €70,000.

The cost of an investment in a small local bakery can be covered by a wide variety of sources such as personal savings, bank loans and grants provided by the Government or the European Union. However, the investment can also be financed by a mix of the aforementioned sources.

Chapter 1: Industry Analysis

1.1 Greek Business Environment: A brief review

According to the state organisation Enterprise Greece, the Greek economy achieved high growth rates until 2008 and then exhibited signs of recession in 2009 as a result of the global financial crisis. From 2010 onwards the recession intensified considerably due to country's fiscal imbalances. The restrictive income policy and drastic limitation on public expenses over the past five years have had a negative impact on GDP growth, leading to its decrease by 5.4% in 2010, 8.9% in 2011, 6.6% in 2012 and 3.9% in 2013 (constant prices of year 2010). During 2014, the Greek economy returned to positive growth rates of 0.8%. The public deficit reduced from 15.3% in 2009 to 11.1% in 2010, 10.2% in 2011, 8.7% in 2012, whereas in 2013 was increased by 12.3%. In 2014, the public deficit decreased even further reaching 3.5% of GDP, while in 2013 and in 2014 a primary surplus was achieved.

Unemployment rate in Greece, up to 2008, was relatively low at 7.6%. In 2009, unemployment rose as a result of the international crisis that also affected Greece and reached 9.6%. In 2010 unemployment showed a further increase, at 12.7%, as a result of the restrictive fiscal policy due to the debt crisis. In 2011, unemployment rose further to 17.9%, in 2012 exceeded 24% and in 2013 reached 27.5%, as a consequence of the general economic crisis and the measures applied towards fiscal consolidation. In 2014, for the first time since the beginning of the crisis, a slight decrease in unemployment is observed, however it remains at the very high levels of 26.5%. Youth unemployment, which exceeds 50%, is one of the major problems arising from the domestic economic crisis.

In 2014, the gross fixed capital formation in Greece reached 20.7 billion Euro at current prices, showing an increase of 1.3% compared with the levels of 2013 (20.5 billion Euro). This slight increase is noted for the first time in recent years, following a series of significant decreases due to the drastic reduction of public expenses and the restrictive fiscal policy resulting from the economic crisis in Greece.

Despite the domestic crisis of public debt and Greece's inclusion in the IMF- EU - ECB support mechanism, total (gross) inflows of foreign investment capital, which essentially reflect the real performance of the country in attracting investment, decreased by 24,4% in 2014 in comparison with 2013 , but are still higher by 30.7% compared to 2012.

The export of Greek goods during 2014 dropped by 1.5% compared to 2013, reaching 27.2 billion Euros. Imports to Greece in 2014 amounted to 47.7 billion Euro whereas in 2013 they reached 46.9 billion Euros, increasing by 1.7%. The increase in imports in 2014 and the slight decrease of exports have resulted in the slight increase of the trade deficit of Greece, in 2014.

	2010	2011	2012	2013	2014
GDP(constant prices 2010)	-5.4%	-8.9%	-6.6%	-3.9%	0.8%
Inflation:Annual Average	4.7%	3.3%	1.5%	-0.9%	-1.3%
Unemployment Rate	12.7%	17.9%	24.4%	27.5%	26.5%
Public investments (%GDP)	3.2%	2.5%	2.5%	2.7%	3.8%
Exports(current prices in billion €)	21.1	24.3	27.6	27.6	27.2
Imports(current prices in billion €)	50.5	48.4	49.3	46.9	47.7

Table 1: Basic facts of Greek economy (Source: Eurostat, Hellenic Statistical Authority)

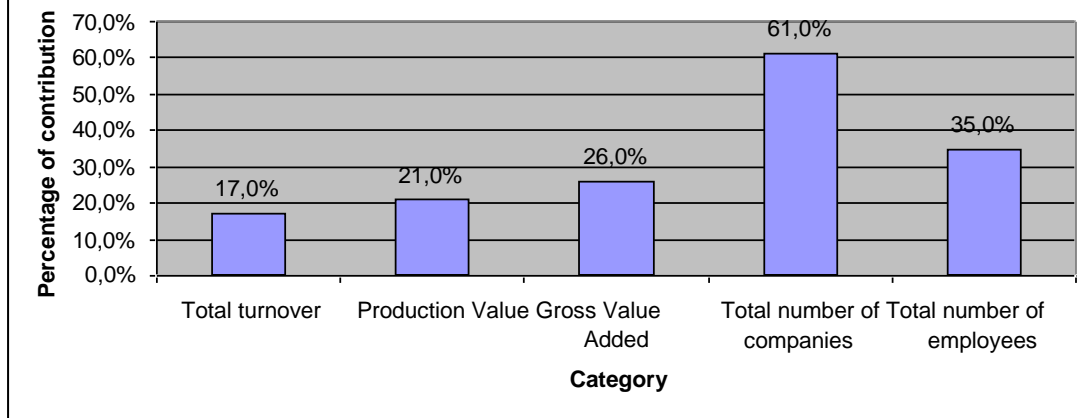
1.2 The Food Industry in Greece

In accordance with the Food industry analysis conducted in 2014 by the Foundation for Economic and Industrial Research, the Food industry remains vital for both the Greek and European Economy constituting 21.2% of the total manufacturing sector and 25.2% of the employment in production.

The Greek food industry occupies the greatest percentage of total manufacturing sector in Greece in terms of Gross Value Added (24.4%), number of companies (21.2%), number of employees (25.2%). In terms of sales turnover and production value the food industry comes second reaching 19.7% and 19.8% respectively.

More specifically, the baking industry contributes 17% of Food Industry total turnover and 21% of Production Value. The contribution in terms of Gross Value Added equals to 26%. The most impressive fact, however, is undoubtedly the percentage of total number of companies involved in Food Industry attributed to the baking sector which touches 61%. The percentage of employees that are occupied in the baking sector is also high and equal to 35% of the total number of employees of Food Industry in Greece.

Contribution of Baking sector to Food Industry in Greece



Graph 1: Contribution of Greek baking sector to Food Industry

1.3 Industry participants and competition

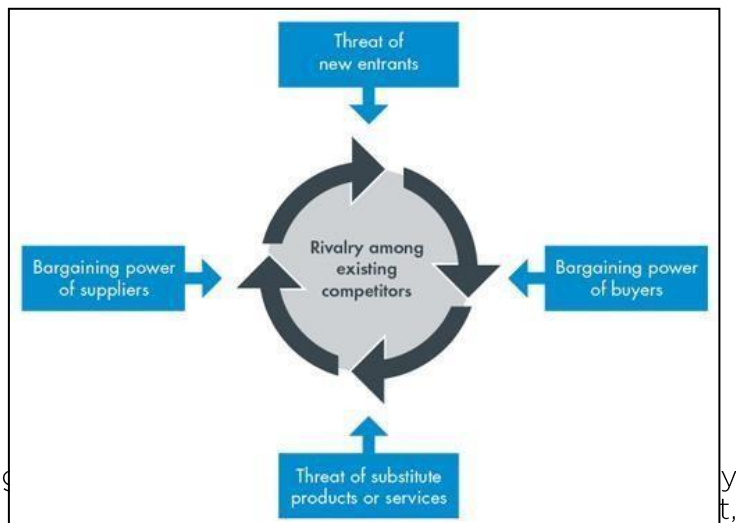
The domestic market is characterized by high degree of market concentration with a great number of small local bakeries that appear at an increasing rate during the last years (almost 15,000 bakeries according to Hellenic Federation of Bakers) and a few large manufacturers. The relative limited number of industrial bakeries that involved in bread and pastries production is attributed to strong preferences of Greek consumers with regard to bread and pastry consumption. Greek consumers prefer consuming products from small local bakeries to those produced by industrial bakeries and sold in large supermarkets.

Industrial bakeries have developed distribution channels and networks that cover the whole country and market, as well as state of the art equipment and know-how that enable them to produce a great variety of bakery products in large quantities and at a lower cost of production and thus are able to offer products at competitive prices.

On the other hand, small local bakeries are characterized by lack of available and enough funds for investment in equipment and upgrade of production facilities in order to develop new products and their promotion through advertising. In addition, small and local bakeries face difficulties in developing an extensive distribution network a fact that leads them to sell their products mainly or even exclusively in local markets in which they operate.

1.4 Porter's five forces

Threat of new entrants to the baking industry is estimated as moderately high. The entry of new companies in the industry is considered quite easy given that there is no large capacity prerequisite. The most important obstacle to new competitors is deemed high as a bakery requires state of the art, which is a costly investment, to ensure a high degree of productivity.



Threat of substitutes

Nowadays, apart from the production of fresh bread, a contemporary bakery engages also in the production of a variety of pastries such as biscuits, pies, croissants etc. Close substitutes of these products are considered the standard products that are not fresh; contain flavor improvers and a greater product life compared to a fresh product. The production cost for such products is quite lower and are mainly sold by large supermarkets.

Bargaining power of suppliers

Basic raw materials that are used in baking industry are flour, baking mixtures, yeast, salt, oil, sugar and several improvers. The bargaining power of bakeries against their supplies depends on the degree of their vertical integration and the number of suppliers. Given that most of small bakeries in Greece are externally supplied their basic raw material, there is observed a dependence on external suppliers making them to quite strong. However, the high competition that is lastly observed among suppliers, confines their power.

Bargaining power of buyers

Buyers can be divided into two broad categories: individual consumers and companies that are involved in food industry such as restaurants, delicatessen, small supermarkets etc. The bargaining power of both categories against large baking companies is not considered quite strong due to valid distribution channels that have developed. On the other hand, the bargaining power of buyers is boosted against small and medium size bakeries due to the excess supply and plethora of bakeries that are operated in Greece. Consumers have the privilege to choose between products that maximizes their utility subject to their budget and the relation between cost and quality.

Rivalry among existing products

The Greek baking industry is a largely fragmented industry, a fact that is confirmed by the great number of mainly small and medium size companies existing in this sector. Under those circumstances, in the absence of a prominent industry leader, its participants accept the price dictated by market forces. Consequently, this fact brings about the minimization of profits, whereas the market competition among small bakeries with similar market shares leads to a high degree of industry rivalry. Many bakeries struggle to survive through product portfolio expansion and product diversification in order to attract more customers.

In addition, the competition recently tends to be boosted due to the emergence of large supermarkets that engage also in the pastry products. By adopting marketing policies based on low prices, large supermarkets offer lower quality pastry products aiming to gain a market share.

1.5 SWOT ANALYSIS



The S.W.O.T analysis is a valuable tool that provides potential investors with a view about the current as well as expected entire environment (both external and internal) that a company or an industry operates in. The S.W.O.T analysis identifies and measures the strengths, the weaknesses, the opportunities and the threats that make an industry to distinguish.

Strengths of the baking industry are considered:

- The high degree of confidence that customers demonstrates towards the fresh products of small local bakeries compared to standardized pastry products (bread, biscuits, cakes etc) that are sold by large supermarkets.
- Great variety and quality of pastry products that small bakeries offer.
- Cultivation of personal relations between customers and bakeries.
- The increased availability of small bakeries. Nowadays, at least one small

bakery is available in every distinct providing consumer with fresh bread and other pastry products.

- The available state of the art technology that can provide bakeries with a high production capacity of high quality.

Weaknesses of the baking industry are considered:

- The market segmentation included companies with different orientation and the high competition.
- The existence of substitute product in low prices and quality.
- Frequent price fluctuation of raw material (flour). The baking industry is raw-material intensive. Most of raw materials useful for pastry production are imported from other countries mainly of European Union which indicates that the prices depend not only on the domestic factors but also on economical factors from the countries that export.

Opportunities of the baking industry are considered:

- The expansion of its sales network that a bakery can achieve through the establishment of franchise stores as well as the entry to new markets.
- Pastry products are subject to adjustments and diversifications in order to be aligned with the current life-style. The new life-style promotes a more healthy diet low in fat and calories which means that there is a need for new pastry product development.
- The emergence of online shopping that under circumstances can be also implemented in the baking industry. Such a practice is already applied in developed countries.

Threats that should be taken into consideration are the following:

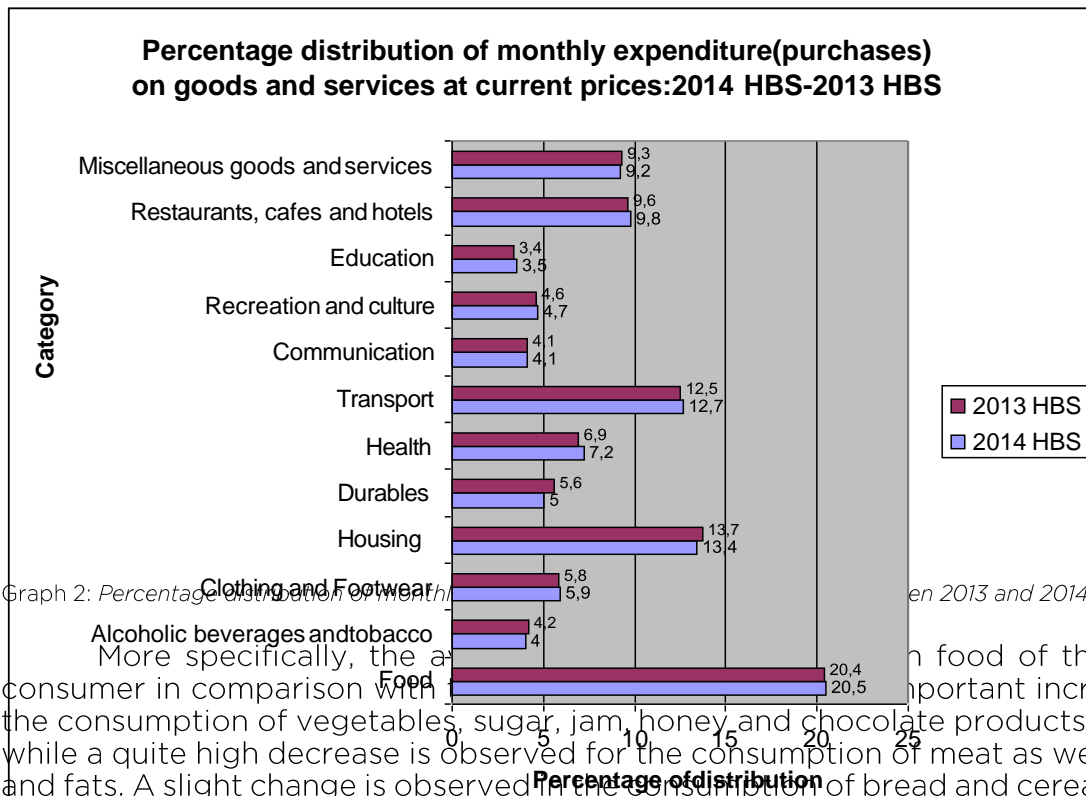
- The current unstable and uncertain economic environment in Greece which has affected and restricted the purchasing power of customers.
- Imports of low quality substitute products that are usually attractive due to their low prices.
- The new life-style that promotes the consumptions of products low in fat and carbohydrates such as pastry products.
- The difficult access to funding for small and medium size companies which a fact that restricts them to invest in a greater production capacity.
- The easy entry to the industry that results in high and fierce competition.

1.6 Consumption Standards

Consumption standards are usually adjusted in line with the changes in life-style and evolution of the technology. In general terms, during the last decades, consumers' tendencies and preferences appear to change and follow Western standards.

According to the Household Budget Survey conducted in 2014 by the Hellenic Statistical Authority, the percentage distribution of the average monthly household expenditure on the twelve (12) main categories of goods and services at

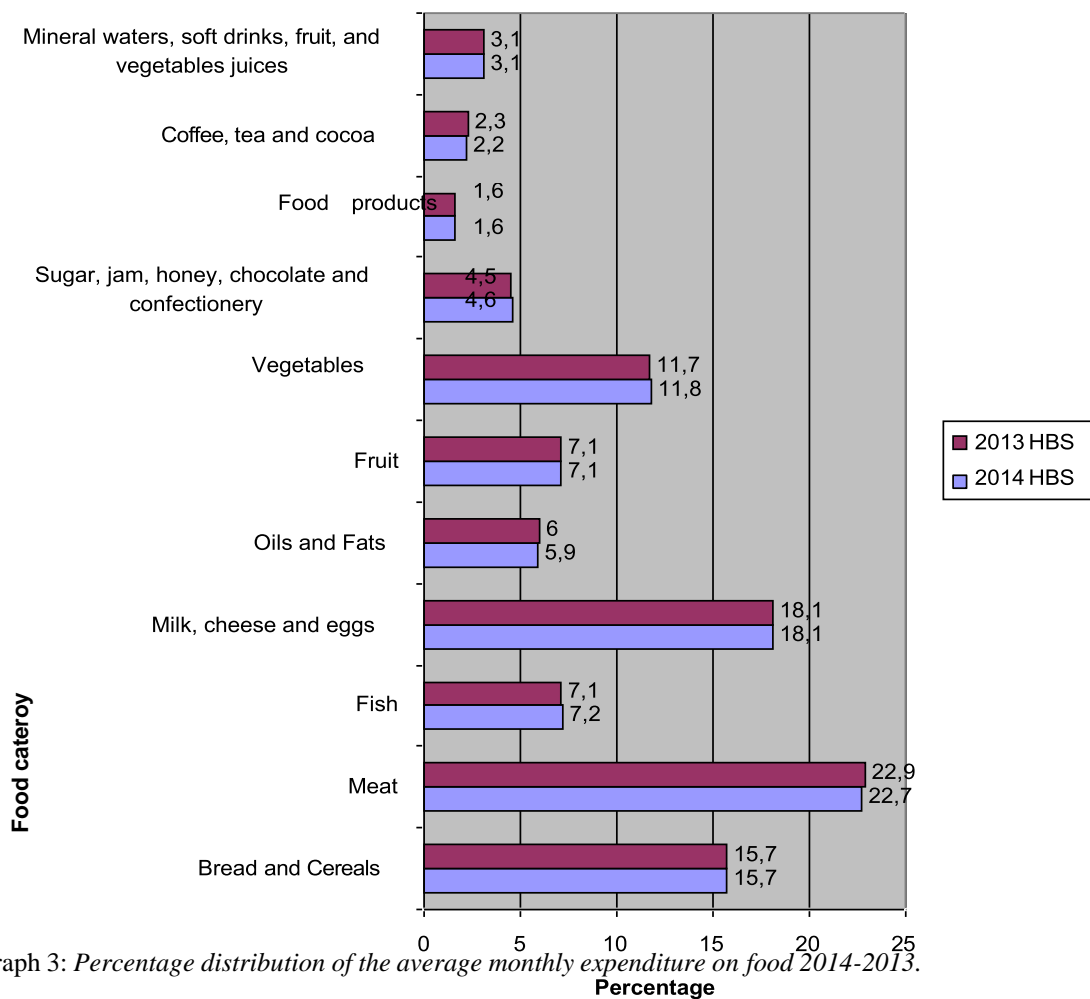
current prices for the years 2014 and 2013, food accounts for the biggest share of the average household expenditure (20.5%) and then follow housing (13.4%) and transport (12.7%), whereas education services represent the smallest share of expenditure (3.5%). More analytically, the graph below depicts the percentage average distribution of household expenditure:



Graph 2: Percentage distribution of monthly expenditure on goods and services at current prices:2014 HBS-2013 HBS

en 2013 and 2014.

More specifically, the average Greek consumer in comparison with the average European consumer has an important increase for the consumption of vegetables, sugar, jam, honey and chocolate products and fish while a quite high decrease is observed for the consumption of meat as well as oils and fats. A slight change is observed for the consumption of bread and cereals, dairy products and eggs. The following graph presents more analytically the percentage distribution of the average monthly household expenditures on food over the last two years.



The average monthly expenditure of Greek households on bread and cereals over the period 2008-2014 (Graph 4) tends to drift upward. In 2009, the monthly expenditure on bread and cereals touched the lowest level of the period 2008-2014. During the last two years, households in Greece appear to distribute a constant portion of the monthly budget for the consumption of bread and cereals a fact that implies that consumption of bread and pastries remain essential for the daily diet of Greek customers.

Percentage Distribution of the Average monthly expenditure on Bread and Cereals 2008-2014



Graph 4: Percentage distributon of average monthly expenditure on Bread and cereals 2008-2014.

The contemporary Greek customer is particularly well-informed and chooses the consumption of products that meet the majority of his/her needs based on its cost and its quality. Over the last five years a general tendency toward the consumption of Greek products is observed. According to a survey on the consumption of Greek products conducted by Mpaltas and Theodoridis (2013) 7 out to 10 consumers in Greece prefer the consumption of Greek products. In addition, he/she has the necessary knowledge and experience about the market conditions, the existence of substitutes and alternative available, a fact that is supported by the expansion of Internet using and the availability of other sources of information.

With regard the consumption of bread and other pastries from small local bakeries, a survey conducted by MARC SA in 2014 showed that the majority of consumers (86.5%) prefer to buy bread and pastry products from the traditional local small bakery mainly due to the high quality of the products and easy access to local bakeries. This tendency appears consistent over the last four years. The price of products of small local bakeries appeared to be an important determinant for 49.5% of survey participants while 40.3% of participants prefer bread and pastry products because a bakery operates close to their house. The survey also revealed that the greatest majority of participants (93.1%) are highly satisfied in terms of the quality of products offered by small local bakeries while 90.4% expressed their satisfaction regarding the variety of products that is offered to consumers by small local bakeries. In addition, despite the fact that the majority of participants are also highly satisfied in terms of the price of the products, there is a percentage of 45.5% that expressed some concerns about the price levels of products offered by small local bakeries.

Chapter 2 : A typical small local bakery

2.1 Location

Bakeries are forced by the Greek law to operate on the ground floor of a building. The location that a small local bakery chooses to be established is as vital for its success as the combination of price-quality. Therefore, several determinants should be taken into consideration:

- 1) Existing competition:** The number of existed bakeries in the area is crucial. The higher the number of bakeries that already operates in the area, the higher the competition and the smaller the market share that can be gained.
- 2) Easy access to the bakery:** An area that is easily accessible with transportation or on foot or close to a high-traffic boulevard is considered ideal.
- 3) Expansion prospects of the distinct:** The possibility of an area to be expanded and become a more attractive place for living is also a factor that should be taken into account. The future prospects of the area allow an entrepreneur to schedule and define his/her future investment plan.
- 4) Local population and their idiosyncrasies:** The consumption standards and characteristics of local residents reveal valuable information about the marketability of products and the potential success of the bakery.

2.2 Legal issues

Compliance with current laws is central when starting a business. According to framework law 3526/2007 with regard the baking industry, for the establishment and operation of a bakery a number of requirements must be met. A business as well as an installation license is required. The estimated time for an entrepreneur to obtain the necessary licenses is at least one month and the cost does not exceed €150.

Given that bakeries fall into the food sector, a bakery business is expected to be subject to regular inspections by the health authorities. Hellenic Food Authority is the public entity responsible for monitoring the compliance with the general food hygiene rules, supervised by the Ministry of Reconstruction of Production, Environment & Energy. The new hygiene rules that were adopted in April 2004 by the European Parliament and the Council define that all companies involved in the food and beverage industry are required to implement, maintain and frequently review a Hazard Analysis and Critical Control Points (HACCP) system that analyzes the safety of the products that are produced and then sold to the public.

The Hellenic Federation of Bakers has initiated the special certification that distinguishes a small local bakery that produces from the

scratch all types of bread. This kind of certification is awarded to all legally bakeries that, apart from the selling process, engage also in the production process of bread and aims at separating small local bakeries from supermarkets, bake off and several other spots where bread and pastry products are usually sold.

2.3 Human resources

Human factor is quite significant for the success of any type of business. During the last years, the production process tends to be automated. However, human resources will always constitute a vital factor.

The requirement in human resources is mainly based on the production capacity of the bakery. A typical small bakery in order to be operated efficiently requires a total of at least two employees for the department of production and one employee for the sales process.

Production: The production process requires a head baker responsible for product development; setting up and monitoring the production process; ensuring the safety cleanliness of the kitchen. At least, an additional assistant is also required for baking, monitoring the entire process and providing the sales department with ready-for-sale products. Quality, creativity and devotion are the main assets for production department employees apart from the relevant knowledge- confirmed by a relevant certificate- and experience that they should have.

Sales: The importance of sales department is unquestionable. The main function of a sales department is to effect sales. The employees that are involved in selling are mainly responsible for the marketing of the product (bread and pastries), the promotion activities and customer service. More specifically, they are packaging, pricing and merchandising bread and other baked goods. They also inform customers about bakery products and services and often prompt customers to taste samples of bakery products as a way to increase sales.

2.4 Basic bakery equipment

2.4.1 Production department

Oven: Bakery ovens have been specially designed to ensure quick and economical performance. They bake using wet, stabilized and homogenous heat. The baking is carried out on fixed bedplates (baking tiles) providing a high quality baking for both small and large sized bread as well as any other pastry.



Proof Box: Proof boxes are used to ensure that bread and other pastries rise at the right temperature. For a small local bakery, a mobile proof box is considered an appropriate choice.

Ingredients that are used in the production of bread and pastries must be kept fresh and be protected by any spoilage. Thus, a professional refrigerator and freezer that meet all requirements of a bakery's operation are deemed valuable and useful.



Volumetric Dough Divider: This machine is used for the division of dough into pieces of equal volume and weight. Usually, it can receive dough manually or from an automatic mixer-lifting device.

Mixer: This machine prepares dough for a wide range of bakery products. Most of times, this type of mixers can be used also in the production of confectionery products. It can save time as well as hard work and eliminates the need for further dough processing.





Miscellaneous: The basic equipment for the department of production of a bakery includes also a great variety of miscellaneous that complement ovens and mixers. This category includes working tables, kitchen utensils (mixing bowls, measuring cups and spoons, hand mixers), baking sheets, racks, cake and pie pans, cookie cutters etc.

Display cases: Display cases (wooden for bread and glass for other pastry) should be used in order to display baked products to be displayed in an attractive and eye-catching way. Display cases are also used in order to prevent customers from touching with naked hands the products.



Cash register: A mechanical and electronic device for registering and calculating transaction. Cash registers are usually attached to a drawer and a printer for storing cash and printing out receipts, respectively.

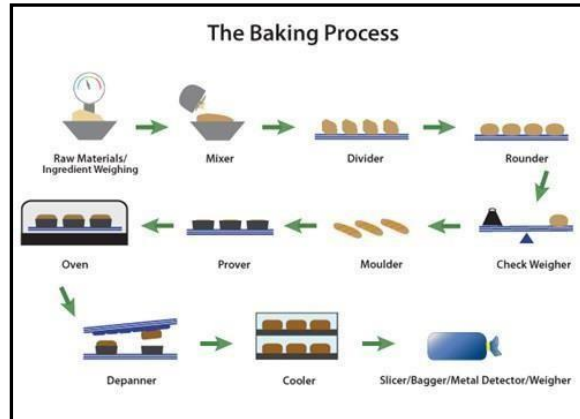


2.5 Process / Production

2.5.1 Bread production process

The production process of bread and the majority of pastries include the following stages:

1. Mixing
2. Rising and fermentation
3. Kneading
4. Molding into loaf shapes
5. Rising
6. Baking
7. Cooling



2.5.2 Ingredients

A bakery should order the ingredients necessary for the production process from retail or wholesale suppliers based on the price and quality they offer as well as their reliability. The order size depends on the capacity production of the bakery and the vendor's schedule. A small local bakery can place orders on a daily, weekly or monthly basis. The terms of the delivery are subject to agreement between two parties. The manager of the bakery should conduct a weekly raw material inventory and check for any spoilages and damages. The main ingredient of bakery products is the flour which determines to a great extent the production cost. The variety and quality of bakery products depend on the type of flour. The flour production in Greece is sufficient for the production of bakery products.

2.5.3 Production

A bakery prepares all baked goods from scratch on a daily basis. The preparation and baking process are usually conducted during midnight. Bread and pastries are made with four basic ingredients such as flour, water, salt and yeast or sourdough starter. In addition to basic ingredients, the productions of bread variations as well as pastry products (pies, croissants, cakes, biscuits) include also some of the following ingredients: sugar, butter, eggs, cheese, olives, plums, spinach etc.

2.5.4 Baking process

The bakery's manager creates the daily production schedule based on the projected sales volume. The baking process is usually conducted early in the morning before the opening of the bakery. Pastry products can be baked throughout the working hours of the bakery.

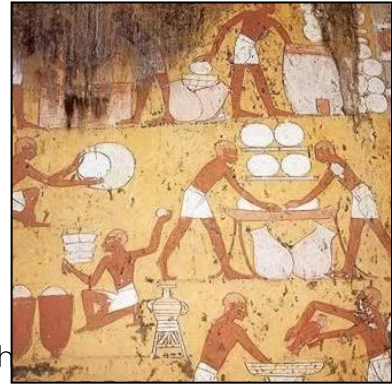
2.5.5 Working hours

Small local bakeries are open selling bread and other pastries to the public Monday to Saturday from 7 a.m. to 3 p.m. except for public holiday and celebrations. The production process starts usually at midnight and lasts until the opening of the bakery.

Chapter 3: Product/Service Analysis

3.1 Historical review

Bread has a vast history, as its presence ages to the beginning of mankind's time on earth. The production of bread started in ancient Egypt. The very first flour had absolutely no resemblance to today's flour. It was made of roasted or drained seeds that were rubbed or ground between two smooth stones. Later, people learned to mix this primitive flour with water and produce the first chyles, the real predecessors of bread. They learned to make more dense chyles, which they baked onto the fire or laid into lit or fired stones.



The first organized bakeries are estimated to have appeared in Rome during the ruling of Emperor Trajan from 97 to 117 AD.

Bakery in Greece

In Greece, thanks to Greek seamen and merchants who brought the Egyptian flour to Greece, where the baking of bread had already begun, the bread started to emerge. Most popular was the white bread, in which ancient Greeks used to put sea salt in the bread for taste and a very intense competition for the best bread existed between the cities. Athens was very proud of Theario, her best baker, the name of whom was in the writings of many authors. Bakeries appeared in the 2nd century AD. Among the many qualities of bread produced in ancient Greece, was "*zymitis*" made of flour, water and yeast, the unleavened bread made of flour and water, the "*simigdalitis*", made of delicate flour from good quality wheat.

According to ancient texts, ancient Greeks offered bread to the gods, which they called "*theiagonous bread*". In the temple of Demetra in Eleusis, during the celebration of "*Thesmofora*", people offered the goddess large bread and for this reason, the celebration was named "*megalartia*".

Bread nowadays

The presence of bread in human's daily diet is considered more than necessary. The bread is a valuable source of the complex carbohydrates, and the fibers it contains are essential for the proper functioning of the human's body. It is rich in vitamin B and iron and particularly low in sugar and fat. The bread is made from flour, water and yeast. In recent years, there is a wide range depending on the type of flour used. The common white bread made by 70% type flour without bran. Rye bread is made from a mixture of wheat and rye flour. The whole-wheat bread is made from grinding whole wheat flour (with peat). The multigrain bread made from whole grains, like wheat, barley, rye, oats, corn and some times mixed with other seeds or nuts (sesame seeds, oat flakes, walnuts).

3.2 Demand for bakery products in Greece

Bread is an essential component of consumers' daily diet exhibiting inelastic demand. In contrast toasts pastries such as pies, cakes etc, do not belong to principal and necessary daily diet, a fact that indicates that their demand displays a greater elasticity. Moreover, demand for bread and other pastries is also affected by the existence of substitute products as well as changes in eating habits and consumption standards.

The price of the product and level of available income affects to some extent the demand for bakery products. The size and the changes in the structure of population in areas where bakeries operate can also contribute to the determination of demand for their bakery products. The development of tourism is another crucial factor that may affect the demand for bakery products at areas that visit many tourists. Finally, a crucial factor that affects the demand for bakery goods produced by small local bakeries is the great variety of bakery products that produced by industrial bakeries and are sold by large supermarkets chains.

3.3 Product Portfolio of a bakery

A bakery usually, apart from the production of bread and pastry products, engages also in the promotion and selling process of the product. Consequently, a standard small bakery has a dual business activity. However, there are also bakeries that are involved only in one of the

aforementioned business activities.

To begin with, the product portfolio of a bakery, apart from the loaf of breads and its different variations, include also the production of a great variety of pastry products such as biscuits, cakes, croissants and different pies. For convenience reasons, the product portfolio of a bakery can be divided into two broad categories:

- Bread and its variations
- Pasty products

3.3.1 Bread and its main variations

White bread: Made from wheat flour from which the bran and the germ layers have been removed (and set aside) from the whole wheat berry as part of the flour grinding or milling process, producing a light-coloured flour. The white bread is deemed the most popular type of bread.



Whole wheat bread: or wholemeal bread is a type of bread made using flour that is partly or entirely milled from whole or almost- whole wheat grains.

Rye bread: A type of bread made with various proportions of flour from rye grain. It can be light or dark in color. It is higher in fiber than white bread and is often darker in color and stronger in flavor. Rye bread has a low glycemic index.



Multigrain bread: A type of bread made with two or more types of grain. Grains used include barley, flax, millet, oats, and wheat. Whole grain multigrain breads contain a dietary fiber content of up to four times greater than white breads and more vitamins and protein compared to white bread.

Baguette: A loaf that distinguish for its length and its crisp crust. It is a common type of bread in France. It is usually made with wheat flour and used mainly for sandwiches.





Ciabatta: An Italian type broad and flat white bread made from wheat flour. It was initially introduced in 1982 by Arnado Cavallari a baker from Andria, a small town close to Venice.

Sesame Bread ring: Sesame bread ring also known as "*koulouri Thessalonikis*" is round shaped bread covered with sesame seeds. It is usually crunchy outside and soft inside. It is a popular product for breakfast.



Cheesebread: A type of bread that contains a mix of different types of cheese, seasonings and herbs. In Greece, cheesebread mainly contain feta cheese or Cheddar or even a mix of different types of cheese.

Olivebread: A type of bread that contains olives, several seasonings and herbs. It is usually meet in Mediterranean countries where olives flourish.



Plumbread: A type of bread and contains plums, cinnamon and nuts.

in this category can be included Rosewater and Walnut biscuits, Christmas biscuits with honey (known also as *Melomakarona*), shortbread cookies with confectioner's sugar and almonds (known also as *Kourabiethes*) Sesame biscuits, butter cookies, orange shortbread biscuits, vanilla crescent biscuits, olive oil cookies, almondcookies.





Croissant: A buttery, flaky Vienna-style pastry named for its crescent shape. Croissants are made of layered yeast-leavened dough. The dough is layered with butter, rolled and folded several times in succession, then rolled into a sheet in a technique known as laminating.

Cake is a sweet dessert. Typical cake ingredients include flour, sugar, eggs and butter or oil. There are also recipes that require additional liquid like milk or water and leavening agents such as yeast or baking powder.



Greek Style Pies: A typical Greek pie is a baked pastry that usually contains a filling of various sweet and savoury ingredients. The most popular and favorite Greek pies that are produced by Greek bakeries are feta cheese pie, spinach pie, ham and cheese pies, sausage pie, apple pie, sweet milk pie.

Bougatsa pie is prepared from phyllo dough wrapped around a filling. The most popular filling of bougatsa is sweet cream. However, apart from sweet cream, bougatsa is usually filled with feta cheese and many other fillings both sweet and savoury.



3.4 Nutritional value

3.4.1 Nutritional value of flour

Flour, both wheat or wholemeal, provides a large proportion of the nutrients necessary for human body to ensure growth and health. Flour is used as the basis for many cereal food products including bread, biscuits, pastries and cakes. The nutrients it contains are continually supplied throughout an average person's day. Breakfast, lunch and evening meals usually consist of products either based on flour, or thickened with flour. Flour is an excellent source of protein, vitamins, fibre and complex carbohydrates. It is also low in fat and cholesterol.

3.4.2 Nutritional value of bread

Bread provides consumers with a significant portion of the nutrients

required for growth, maintenance of health and well-being. Undoubtedly, it is a valuable source of proteins, vitamins, minerals, fibre and complex carbohydrates. It is also low in fat and cholesterol. Bread is quite bulky so it takes longer to digest and is therefore more satisfying and less fattening than the fats, sugars and alcohols commonly consumed in excess. All bread types are nutritious, and the differences between them in nutritional value are not significant in case a balanced diet is adopted.

The following table summarizes the approximate nutrient content per 100g of product for the four main bread types:

Nutrient/Bread type	White	Wholewheat	Wheat/Rye	Multigrain
Protein(g)	7.30	8.1	9.1	7.70
Thiamin(mg)	0.33	0.66	0.84	0.4
Niacin(mg)	1.6	2.1	2.1	1.3
Riboflavin(mg)	0.09	0.16	0.19	0.15
Iron(mg)	1	1.7	1.7	1.6
Calcium(mg)	40	33	40	50
Energy(kcal)	216	198	207	189

Table 2: Nutrition Value per type of Bread

3.5 Pricing strategy

The pricing strategy of any type of business is considered crucial mainly because affect the attractiveness of the product. The price of a product is not only a simple reward for its delivery. It conveys valuable information about its structure and its quality and it is deemed a useful tool for the definition of the marketing mix. Moreover, pricing integrity improves customer satisfaction and builds loyalty.

The management team is usually assigned to define the price of the product or the service taking into account several factors the most significant of which are the existing competition, consumers' preferences and standards and the production cost.

The following table presents a potential pricing policy of a small local bakery:

No	Product	Price(in €)
	Bread (€/loaf)	
1	White Bread	0.80
2	Whole wheat	0.80
3	Bread Rye Bread	0.80
4	Multigrain Bread	0.90
5	Baguette	0.80
6	Ciabatta	0.80

Bread variation(€/roll)		
7	Olivebread	0.90
8	Cheesebread	1.10
9	Sesame Bread ring(Koulouri Thessalonikis)	0.50
10	Pumbread	1.00
Other		
11	Biscuits and cookies(€/kg)	8.50
12	Croissant	1.20
13	Cake(€/kg)	8.50
14	Feta cheese pie(€/slice)	1.30
15	Spinach pie(€/slice)	1.30
16	Bougatsa cream pie (€/slice)	1.30
17	Ham-cheese pie (€/piece)	1.30
18	Sausage pie (€/piece)	1.30

Table 3: A possible pricing policy of a small localbakery.

3.6 The role of technology

The technology that a bakery uses in the production process has been evolved rapidly during the last decades. Both Industrial bakeries and small local bakeries can take advantage of the new technology in order to create improvements in their bottom line. Intelligent use of new technologies can make even the smallest bakery safer and more productive.

Baking Equipment

Improvements in baking equipment account for some of the most visible technological changes in a bakery. Spiral-style mixers enable bakers to make larger batches of bread, with less oxidation of the dough from over-mixing. Moreover, automatic timers let a baker "dump and forget," with mixers that could provide a timed rest period for the dough

without supervision. State of the art ovens use rotating racks, probes and microprocessor controls to provide even baking and precise control of both temperature and humidity levels while products are baking. New and sophisticated baking equipment allow bakers to have a complete control over crust, browning and texture.

Safety and Ergonomics

Many changes in operation and design of bakery equipment have risen from safety or ergonomic considerations. Floor-standing commercial mixers now use a heavy wire guard to protect bakers from the paddle while it's in operation, as well as pouring trays, so ingredients can be added to a running mixer without risk to the baker's hands. Compact machines turn dough into shaped rolls or loaves, making staff more productive and reducing their risk of repetitive stress injuries. Furthermore, dough sheeters offer similar advantages by quickly rolling pie crusts and producing puff pastry.

Materials

New baking materials can improve the baking process making it more efficient. For instance, the rise of silicon pans made it possible to freeze cake dough, and take it directly from the freezer to the oven. Silicon-impregnated baking parchment provides a disposable non-stick coating for cake pans or sheets, so they can be reused safely without being washed.

Ingredients

The recent tendency of moving away from trans-fats has made it necessary for bakers to adjust their product portfolio using new varieties of shortening and margarine in their pastry goods. New flour blends and gelling agents have helped bakers meet the demand for gluten-free breads and pastries, providing textures similar to conventional baking but without wheat.

Chapter 4 : Sales and Distribution Channels

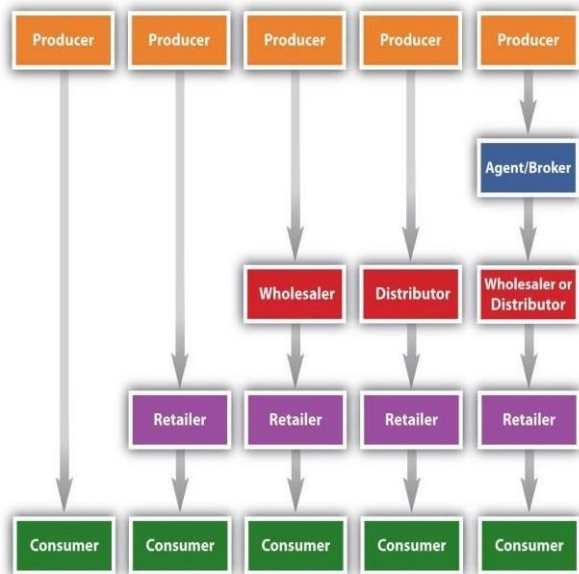
4.1 Promotion strategy for baked products

Owners of small local bakeries should be aware of the importance of promotional and marketing strategies that assist in developing creative approaches for sales and customer service. Given that a small local bakery is usually not able to conduct a large advertising campaign as a big industrial bakery does, it can take advantage of ways that are less

expensive as well as more creative and out-of-the-box marketing initiatives. Traditional and popular ways that can be adopted by a small bakery are presented as follows:

- **Internet and Social Media:** The widespread use of Internet and well known social media such as *Facebook* and *Twitter* can be exploited by small bakeries to not only to retain contact with existing customers but also to attract new ones. A website or a blog is also deemed an easy and affordable strategy for a small bakery to keep in touch with its customers and promote its products on a frequent basis.
- **Press Release:** A press release in the local newspaper or magazine is a smart and affordable way for a small bakery to promote and communicate its variety of products.
- **Free samples:** Free samples of the baked products enable consumers to taste and check out the flavor and quality of the product free of charge. Consumers usually appreciate the fact that they are allowed to test the product before purchase it.

4.2 Distribution



A distribution channel is considered the path through which goods and services are distributed to the customers and can be as short as direct transaction from the company to the consumer or may consist of several interconnected intermediaries along the way like agents or distributors.

There are four basic types of distribution channels as follows:

the good or the service to the consumers of its distribution channel or sell through a retail location. A benefit that arises for the company is that it can completely monitor and control the distribution of the product and can receive directly consumers' feedback.

4.2.2 Indirect

The Company uses an intermediary (wholesaler, agent) to sell the good or service to the consumer. This can raise product costs since each

intermediary will get a percentage of the profits. A channel like this may become necessary and appropriate for large producers who sell through hundreds of small retailers.

4.2.3 Dual distribution

The Company uses a combination of direct and indirect selling. The good or service can be sold directly to the consumers while in some cases it can be sold through intermediaries. Dual distribution may assist in reaching more consumers.

4.2.4 Reverse distribution channels

This distribution channel includes the collection of damaged, outdated and unsold goods and bringing them back to suppliers or manufactures. The most ordinary example of reverse distribution channel is when consumers recycle.

A small local bakery is usually involved in direct distribution, selling the goods that produce directly to the consumers. Many bakeries can also operate an outlet that is exclusively involved in selling bread and pastry products the bakery produce.

Benefits of direct distribution channel for a small local bakery:

- **Less complicated:** Consumers visit the bakery where bread and pastries are produced and buy the goods without any additional effort and cost.
- **Increase direct consumer contact:** Consumers feel more convenient and confident when they buy a product directly from the producer who knows their needs and their preferences. This can make them to feel special and unique, a fact that can build brand loyalty. In addition, consumers are allowed to provide the bakery and the management team directly with feedback.
- **Eliminate Intermediary expenses:** A bakery that sells directly its product to the consumers can keep their cost for selling in low level avoiding commissions and other costs related to the intermediary.
- **Control of brand's image:** A bakery has the ultimately control and monitor over the quality of bread and pastries from the production process until the purchase of consumers. Consequently, it can ensure that customers will be provided with high quality products.

Challenges of direct distribution channel for a small local bakery:

- **Limited consumer base and network:** A bakery that directly sells its good to customers may experience a limited consumer base which can rise due to its location or the existing competition in the area. The more places a company's products are available, the higher the potential sales volume.
- **Increase cost and internal workload:** Direct selling of baked products requires the bakery to have invested a great amount in organizing the sales department. The cost of the investment includes not only the purchase of the necessary equipment like cash register and other devices but also recruiting and training employees for customer service.
- **Increase cost for promotion:** By employing direct selling, the promotion of products is conducted by the bakery itself which results in additional expenses for advertising and other promotion activities.

Chapter 5: Financial Plan

The financial planning is considered one of the most essential components of any business planning. Its main purpose is to identify a company's requirements in funding, possible sources through which it can raise the necessary capital and performance projections for some years forwards. An efficient financial planning and management of the financial resources of a company guarantees not only a successful inception but also its further development. This section include a brief description of the minimum capital necessary for investment in facilities, equipment and other miscellaneous expenses related to the opening of a bakery and sales projections for the following years.

5.1 Start up costs

Startup costs are considered all the expenses associated with the starting of a bakery business. These costs usually include facility-related expenses like construction of facility improvements and renovation, basic equipment that is required for the production of bread and other pastries, startup inventory and necessary human resources.

5.1.1 Facility and Buildings

This category of startup costs include the expenses related to facilities and buildings of the bakery such as rental fees, renovation as well

as design and construction.

Following the selection of the site for the bakery, the available space may require a number of adjustments or reconstruction. On average, the total cost of the design and construction is estimated as follows:

No	Description	Expense (in €)
1	Construction of floor	2,500
2	Electrical Installation	1,000
3	Construction of warehouse	2,000
4	Plumbing equipment (scullery, vestuary etc)	2,000
5	Permits and Licenses	200
Total Expense		7,700

Table 4: *Indicative Design and Construction cost for a small local bakery.*

5.1.2 Equipment

The costs of the necessary equipment for the production of baked products as well as the cost of the implementation of necessary equipment fall into this category of costs. In addition furniture for the sales and management department are also included. The following table summarizes the cost per item necessary for a small local bakery:

No	Description	Quantity	Expense (in €)
1	Oven (Electric)	1	20,000
2	Refrigerator	1	3,500
3	Freezer Counter	1	4,200
4	Proof Box	1	6,000
5	Volumetric Dough Divider	1	7,000
6	Automatic spiral mixer for bread dough	1	6,500
7	Automatic spiral mixer for other pastry	1	3,800
8	Water cooler and dosing machine	1	3,800
9	Working Table(inox)	1	1,600
10	Baking sheets	80	1,920
11	Baking sheets (baguette)	10	380
12	Hand mixers	2	20
13	Mixing bowls	3	90
14	Spoon	2	40
15	Measuring cups	4	60
16	Spatula	5	50
17	Display case (wooden)	1	1,000
18	Display case (glass)	1	1,600
19	Working table (wooden)	1	500
20	Cash register	1	200
Total Equipment Expense			63,260

Table 5: *Cost of necessary equipment of a bakery.*

5.1.3 Operation expenses

In this category are included expenses such as the cost for accounting services, personnel and raw materials expenses. The table below depicts some of the most frequent operation expenses on average:

No	Description	Expense per month (in €)	Total Expense (in €)
1	Accountant	80	480
	Human		
2	Salaries ⁹	1,500	9,000
3	Social security contribution	270	1,620
	Raw materials		
4	Flour	800	4,800
5	Yeas	40	240
6	t Salt	10	60
	Utilities and fuels		
7	Other ingredients	80	480
8	Water	20	120
9	Electricity	700	4,200
Total Operation costs		3,520	21,120

Table 6: Basic operation costs for the first six months.

5.1.4 Unexpected expenses

Given the uncertainty that dominates the business world especially during the last decade, a potential entrepreneur should be aware and prepared for unexpected expenses that might arise and should be covered.

5.2 Sources of Finance

The financial needs of a bakery may vary in accordance with the size and its production capacity. There are several different sources of financing that can be considered when an entrepreneur search for financing the startup costs. Below there are presented some of the most popular funding sources for a small bakery:

Personal Savings

The first place to look for money is your own savings or equity. A potential entrepreneur should keep in mind that most sources of financing will not fund the entire cost of the investment which implies that the potential entrepreneur should contribute a least percentage of the total budget.

Friends and Relatives

Borrowing from your friends and family is a good and affordable way for new companies to be financed. It is not uncommon for friends or relatives to make low interest or no interest loans to family members. It may also be in the form of equity financing, according to which the friend or the relative receive an ownership interest in the company.

Government Grants

There are several national and international programs that subsidize or offer financial assistance in form of tax credits, the startup or expansion of various business activities. These programs are usually co-funded by European Union and aims to boost the entrepreneurship and economic development in Greece.

Banks and Other Commercial Lenders

Banks and other commercial lenders are popular sources of business funding. Most lenders require a solid business plan, positive track record, and plenty of collateral especially in cases of young entrepreneurs. Once the business is underway and profit and loss statements, cash flow statement and balance sheet are available, the company may be able to borrow additional funds.

Recently, National Bank of Greece and Hellenic Federation of Bakers agreed to initiate cooperation in order bakeries, operated in Greece, regain access to banking products. Under the framework of the cooperation , the access to funding and other useful tools provided by banks is strengthened and becomes more easier aiming to cover both liquidity and investment needs.

Leasing

A lease is a method of obtaining the right to use assets for the company without using debt or equity for finance. It is a legal agreement between two parties that specifies the terms and conditions for the rental use of a tangible resource such as buildings, machinery and equipment. Lease payments are subject to agreement between participants. When the lease ends, the asset is returned to the owner.

However, the lessee can request for agreement update, or even to purchase the asset under leasing. A lease may have an advantage because it does not tie up funds from purchasing an asset. It is often compared to purchasing an asset with debt financing where the debt repayment is spread over a period of years.

5.3 Sales Projection

Sales projection is considered of the essence for any type of business given that sales or revenue projections enable the management of the company to create its budget and adjust its strategy.

As it has already determined in Section 3 the product portfolio of a small local bakery can be divided into two broad categories: bread and its variations and other pastry products. The table below exhibit sales projection for each product sold by a small bakery for the first five years of its operation.

Sales projections were based on the following assumptions:

1. The bakery operates (both production and distribution) 6 days a week and 45 weeks a year.
2. The amounts sold per day and per item are on average and correspond to the sales volume of a typical small local bakery in Greece.
3. The annual turnover is expected to increase by 15% in the second year, 10% in the third year and by 5% in the fourth and fifth year respectively.

No	Product	Cost/Product (in €)	Amount sold/Da y	Price/Product (in €)	Revenue (in €)
1	White Bread	0.32	23	0.80	4,968
2	Whole Wheat Bread	0.32	13	0.80	2,808
3	Rye Bread	0.32	13	0.80	2,808
4	Multigrain Bread	0.40	13	0.90	3,159
5	Baguette	0.32	13	0.80	2,808
6	Ciabatta	0.32	9	0.80	1,944
7	Olivebread	0.30	13	0.90	3,159
8	Cheesebread	0.30	18	1.10	5346
9	Plumbread	0.50	9	0.90	2,187
10	Biscuits and cookies(kg)	5.50	5	8.50	11,475
11	Croissant	0.42	9	1.20	2,916
12	Cake(kg)	4.00	5	8.50	11,475
13	Feta cheese Pie (piece)	0.46	9	1.30	3,159
14	Spinach pie (piece)	0.60	9	1.30	3,159
15	Bougatsa cream pie (piece)	0.60	9	1.30	3,159
16	Ham-cheese pie (piece)	0.46	9	1.30	3,159
17	Sesame Bread ring	0.25	11	0.50	1,485
18	Sausage pie (piece)	0.50	9	1.30	3,159
First Year					72,333

Table 7: Sales and revenue projection for the first year of operation.

Sales Projection					
(amounts in €)	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Turnover	72,333	83,182.95	91,501.25	96,076.31	100,880.12

Table 8: Turnover projections for the following years

5.4 Break Even Analysis

Break even analysis is used to determine the point at which revenue received equals the costs associated with receiving the revenue. Reaching the break-even point is the business's first step towards profitability and is computed using the following formula:

$$\text{Break-even point} = \text{Fixed cost per product} / (\text{Price per product} - \text{Variable cost per product})$$

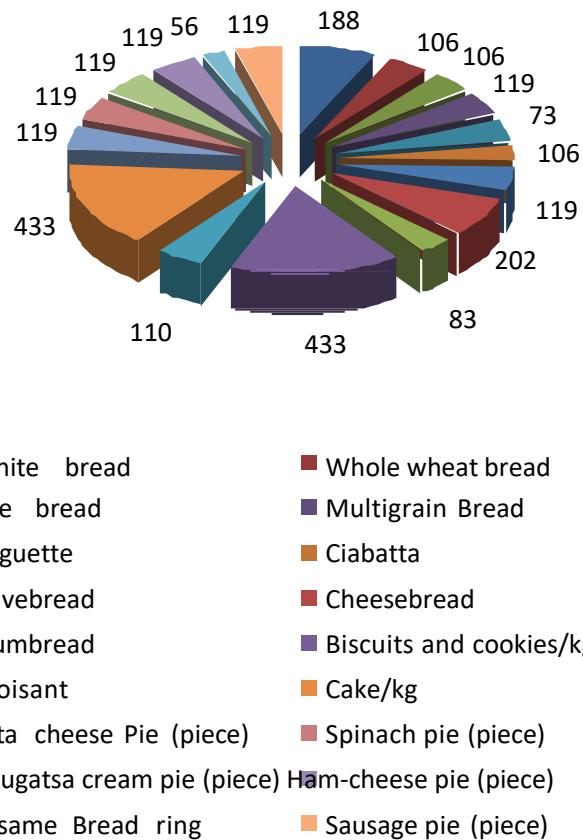
Given that a bakery offers a wide range of products, the break-even point is defined as the optimal product mix beyond that the bakery is profitable.

The calculation of break-even point of a small local bakery is based on sales projection for the first year as it were determined above. The following table summarizes all information necessary for the determination of break-even point:

No	Product	% of Total Annual	Price/item (in €)	Variable cost/item(in	Contribution Margin(in
1	White bread	6.87%	0.80	0.22	0.58
2	Whole wheat bread	3.88%	0.80	0.22	0.58
3	Rye bread	3.88%	0.80	0.22	0.58
4	Multigrain Bread	4.37%	0.90	0.28	0.62
5	Baguette	3.88%	0.80	0.22	0.58
6	Ciabatta	2.69%	0.80	0.22	0.58
7	Olivebread	4.37%	0.90	0.21	0.69
8	Cheesebread	7.39%	1.10	0.21	0.89
9	Plumbread	3.02%	0.90	0.35	0.55
10	Biscuits and cookies/kg	15.86%	8.50	3.85	4.65
11	Croissant	4.03%	1.20	0.29	0.91
12	Cake/kg	15.86%	8.50	2.80	5.70
13	Feta cheese Pie (piece)	4.37%	1.30	0.32	0.98
14	Spinach pie (piece)	4.37%	1.30	0.42	0.88
15	Bougatsa cream pie (piece)	4.37%	1.30	0.42	0.88
16	Ham-cheese pie (piece)	4.37%	1.30	0.32	0.98
17	Sesame Bread ring	2.05%	0.50	0.25	0.25
18	Sausage pie (piece)	4.37%	1.30	0.35	0.95

Table 9: Contribution of each product to break even point.

Contribution of each product to Break-Even Point



Graph 6: Contribution of each product to Break-even point.

5.5 Financial Data Summary

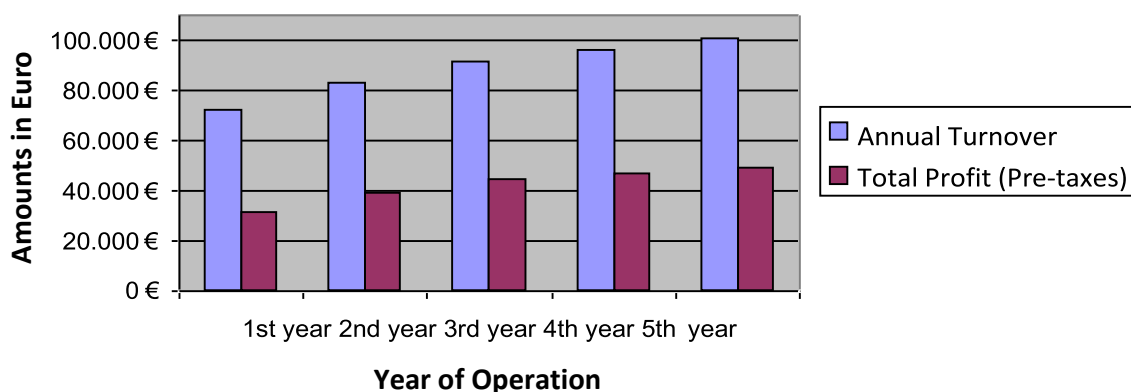
The following table displays a brief income statement of a potential small local bakery. The values of projected accounts were risen based on the assumptions below:

- 1.** Cost of Goods Sold follows increases by 15% in second year, 10% in third year and by 5% in fourth and fifth year respectively.
- 2.** Management cost that includes mainly personnel expenses and other costs related to the management of the business increases steadily by 5% the following years.

(amounts in €)	Projected				
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Turnover	72.333	83.182,95	91.501,25	96.076,31	100.880,12
Costs of Goods Sold	(11.160)	(12.834)	(14.117,4)	(14.823,27)	(15.564,43)
Gross Operating Profit	61.173	70.348,95	77.383,85	81.253,04	85.315,69
Management Cost	(29.880)	(31.374)	(32.942,7)	(34.589,84)	(36.319,33)
Total Profit (pre-taxes)	31.293	38.974,95	44.441,15	46.663,2	48.996,36

Table 10: Brief Income Statement for the next fiveyears

Annual Turnover and Total Profit



Graph 7: Annual Turnover and Total profit before taxes

5.6 Suppliers

The following tables provide indicative lists of companies in Greece that a potential entrepreneur could cooperate with in order to be provided with basic and necessary bakery equipment and raw materials.

5.6.1 Equipment

No	Company	Region	Website
1	Papakyriazis SA	Thessaloniki	http://www.papakyriazis.gr
2	Kourlabas-Theodore Ltd	Athens	http://kourlampas.gr
3	Clivanexport	Volos	http://www.clivanexport.gr
4	Simsirikis	Alexandroupolis	http://www.simsirikis.gr
5	Skaros Group	Athens	http://www.skarosgroup.gr
6	Artel-Konstantinidis	Thessaloniki	http://www.artel.gr
7	A. Skatharoudis SA	Thessaloniki	http://www.skatharoudis.gr
8	Vasa Ovens-Avramidis	Thessaloniki	http://www.vasaovensavramidis.gr
9	Elmach	Thessaloniki	http://www.elmach.gr
10	A.N. Kostopoulos SA	Thessaloniki	http://www.ankostopoulos.com
11	Cronus	Thessaloniki	http://www.cronusequip.gr
12	Giannoulis Bros GP	Piraeus	http://www.mihanimataartopoiias.gr
13	Panagiotis Dimou & Co	Thessaloniki	http://www.pdimou.gr
14	Aksiotis & Co	Piraeus	http://www.mihanimata-artopoiias.gr
15	Familia	Thessaloniki	http://www.familiaovens.gr
16	In.Con.Eq Hellas	Athens	http://www.inconeg.gr
17	G.Touloumidis SA	Thessaloniki	http://www.touloumidis.gr
18	J. Lappas Ltd	Athens	http://www.foodprocessingbakeryequipment.com
19	Epimihaniki	Crete	http://www.epimihaniki.gr
20	Petridis Bros SA	Athens	http://petridis.com.gr
21	Voutiadis Equip	Athens	http://www.voutiadis.gr

Table 11: Suppliers of Bakery equipment

5.6.2 Raw Materials

No	Company	Region	Website
1	Laoudis Foods	Athens	http://www.laoudis.gr
2	Zak Commercial Ltd	Kozani	
3	Lesaffre Hellas	Athens	http://www.zymes.gr
4	Mills of Crete	Crete	http://www.mills.gr
5	Thivaiki Flour Mills SA	Athens	
6	Asopos Mills	Athens	http://www.asoposmills.gr
7	Flour Mills Thrakis	Alexandroupolis	http://myloi-thrakis.gr
8	Kalpanides Flour Mills	Serres	http://www.kaplanidis.gr
9	Petromylos Vasilikon	Thessaloniki	http://www.petromilos-vasilikon.gr
10	Carlina	Larisa	http://carlina.gr
11	Sefco Zeelandia	Athens	http://www.sefcozeelandia.gr

Table 12: Suppliers of raw materials

Sources of Data and Information

Data and information reported in the business plan have been manually collected through the following sources:

- Hellenic Statistical Authority (EL.STAT), <http://www.statistics.gr>
- Enterprise Greece, <http://www.enterprisegreece.gov.gr>
- Foundation For Economic and Industrial Research, <http://iobe.gr>
- Baking Industry Research Trust, <http://www.bakeinfo.co.nz>
- Hellenic Federation of Bakers, <http://www.oae.gr>
- FMI SA, Grigoriadis – Bakery Equipment, <http://www.fmigrigoriadis.gr>
- Traditional Bakery “Tonis”, Ioannina Greece

Business Plan Traditional Pasta Production Unit

October 2015

INTRODUCTION

In recent years in our country has become particularly noticeable dynamic presence in the food industry. Although the industry pasta occupies a prominent position within the relevant investment projects happening out usually in the extension building facilities, purchase of machinery and technological equipment and the establishment of modern quality assurance systems, without customary to carry out major investment projects, such as creation and installation of a Traditional Pasta Companies.

This preliminary study aims to examine the feasibility establishing a traditional pasta production unit in the Greek area. The produced product which is examined in this preliminary study is pasta and more specifically traditional pasta, is the "Pasta with eggs" and "Pasta with milk" or "Pasta eggs and milk."

Startup cost and sources of Financing

The greatest percentage of total startup cost of a pasta industry production unit the equipment cost which includes expenses for purchasing the basic productive equipment and other useful materials for 0.02% market shares. The cost of an investment up to 860.000€, can be covered by a wide variety of sources such as personal savings, bank loans and grants provided by the Government or the European Union. According to this Feasibility and sustainability plan the investment is should be clearly accepted.

PART I - GREEK REALITY

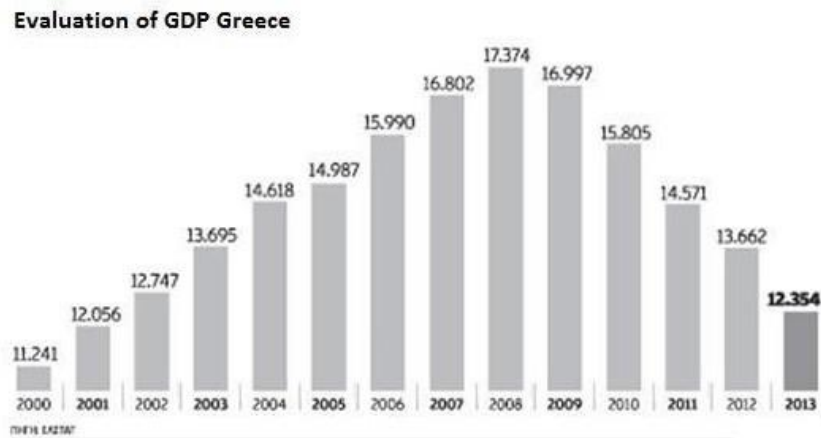
The situation in the business sector of Greece recently is statically made, which is caused of the economic crisis in Greece. For this reason, the unemployed young people could be involved in programs, which made for strengthening of youth entrepreneurship, so that they contribute actively to the development of the sector they are interested.

Aiming at the above follows a feasibility study in order to register the business and productive landscape and identify opportunities that exist in the field of pasta industry. Also the codification of the conditions of the sector and the qualifications needed to lead to success could be essential elements.

A business plan fully covering the essential elements needed to launch a business, it would be reasonable referred to the market analysis, in particular the sector of the pasta industry. Finally, the analysis of financial data and prediction of basic costs for this first year of operation it would help to set goals more properly.

Evaluation of GDP Greece (2000-2013)

Figure 1. Evaluation of GDP Greece (2000-2013)



The GDP, gross domestic product, is the final value of all goods (tangible and intangible) produced within the geographical limits of a country in one year, including those produced by factors of production owned by foreign residents.

The main countries from which imports products Greece, are Russia and Germany, and mainly exports to neighboring countries, such as Italy and Turkey. The main part of the GDP (approximately 80.6%) account for household expenditure on consumption goods and services, giving little space for savings and investments.

1.1 PROSPECTS OF THE COUNTRY FOR AID JUVENILE ENTREPRENEURSHIP

The prospects offered by the Greek market for the development of new companies in the food industry, particularly in manufacturing / formulation meat are positive. However competition from major companies no longer exists, which means that the business owner from the start will have to try to offer to the consumers products that combine the price with quality, but also they will be innovative. This is not done by the first session of the business, but after a reasonable period. The insertion process on the company's activity area takes some time, in which time, the trader would be reasonable to consider his audience, and during this time makes sense that the activity of the company will not be fruitful, but over time will be built a relationship between consumers and business.

PART TWO - ECONOMY

2.1 ECONOMICAL SITUATION OF GREECE

Greece is a developed country with a high standard of living and very high Human Development Index, which ranks her 22nd in the world in 2010 and 22nd in the index of The Economist 2005 for the quality of life worldwide. Based on Eurostat data, per capita GDP in Greece was equal to 94% of the EU average in 2008. Principal large sectors of Greek economy are tourism, shipping, industrial production of food and tobacco processing, textiles, chemicals, metal products, the mining and oil refining units. The GDP growth of Greece is also, on average, from 1990 higher than that of the average of European Union countries. However, the Greek economy faces major problems, including increasing levels of unemployment, bureaucracy and corruption.

In 2009, Greece had the second lowest ranking in the EU according to the Index of Economic Freedom (after Poland), and is ranked 81st worldwide. The country suffers from high levels of political and economic corruption and low competitiveness compared to its European partners.

Because of the global economic crisis, the growth rate of the economy turned negative in 2009 for the first time since 1993. An indicator of overindebtedness trend in recent years is the fact that the ratio of private loans to deposits exceeded 100 units during the first half of 2007.

By the end of 2009 as a result of the combination of the global economic crisis and internal factors (uncontrolled waste just before the elections of October 2009), the Greek economy faced the most severe crisis since 1993, with the highest public deficit (although close to that of Ireland and the United Kingdom) and the second highest debt to GDP ratio in the EU. The public deficit in 2009 reached 15.4% of GDP. That, and rising debt levels (at 127.1% of GDP in 2009) led to high cost of borrowing, which caused a severe economic crisis. Greece is trying to cover excessive government deficit in the footsteps of the global economic crisis.

The workforce of Greece reaches a total of 4.9 million and is the second hardest worker among the OECD countries, after South Korea. To Groningen Development Centre published a survey which revealed that between 1995 and 2005, Greece was the country with the highest percentage of working hours per employee among the European nations. The Greeks worked an average of 1900 hours per year, followed by Spanish (with an average of 1800 hours per year).

2.2 KEY INDICATORS OF ECONOMY OF THE COUNTRY

➤ Euro Exchange Rate | EUR/USD | Greece 1957-2015

The EUR/USD traded at 1.12 dollars on Tuesday 6 October 2015, according to interbank foreign exchange market quotes. The Euro Dollar Exchange Rate

- EUR/USD averaged 1.35 from 1957 until 2015, reaching an all time high of **1.87** in July of 1973 and a record low of 0.70 in February of 1985. The euro was only introduced as a currency on the first of January of 1999. However, synthetic historical prices going back much further can be modeled if we consider a weighted average of the previous currencies.

Figure 2. Euro/ Usd Exchange Rate



➤ Greece Food Inflation 2000-2015

Cost of food in Greece increased 4.34 percent in August of 2015 over the same month in the previous year. Food Inflation in Greece averaged 2.36 percent from 2000 until 2015, reaching an all time high of 12.85 percent in January of 2002 and a record low of -3 percent in June of 2014. Food Inflation in Greece is reported by the National Statistical Service of Greece.

**GREECE FOOD
INFLATION**

Figure 2. Greece Food Inflation

GREECE FOOD INFLATION



SOURCE: WWW.TRADINGECONOMICS.COM | NATIONAL STATISTICAL SERVICE OF GREECE

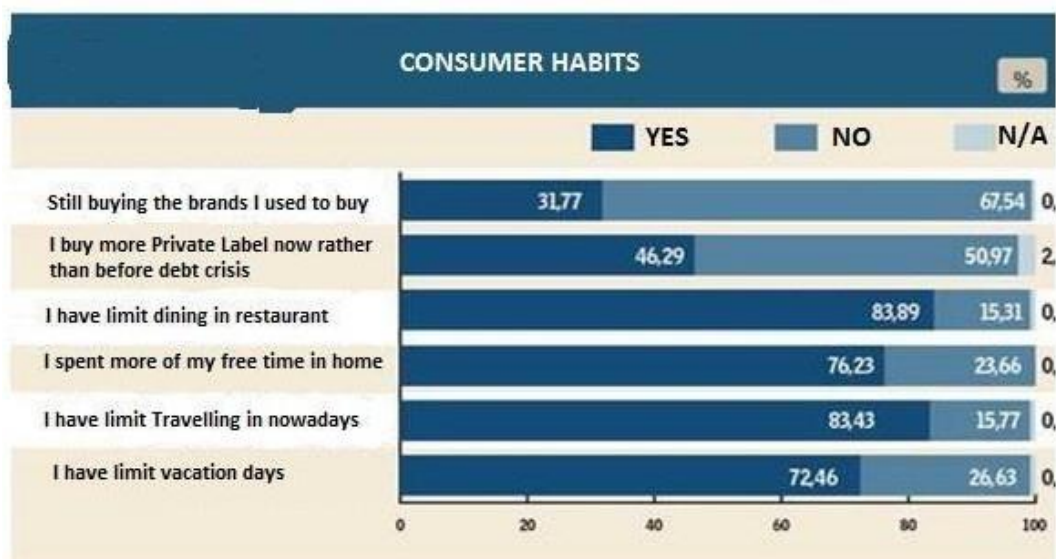
2.3

CONSUMER TRENDS (CONSUMER HABITS)

Radical changes, which are now getting permanent characteristics brought about by the crisis in the consumption habits of households in the country. After five years of recession and drastic cuts in wages and pensions, the Greeks became more cautious in the way they spend their money and try to meet as many needs, with less income at their disposal.

CONSUMER HABITS

Figure 3. Consumer Habits



According to research consumers attach even greater importance to price and offers, with a large proportion of consumers (64.1%) stating that frequently uses discount coupons for shopping and it devotes more time to search for products that are on offer (82, 5%).

Quality and origin

Quality still plays an important role in the way consumers choose, and also the Greek origin of the products and the movement in favor of local producers takes dimensions and sensitizes larger groups of society.

PURCHASING CRITERIA

Figure 4. Purchasing Criteria



By contrast, the packaging and the brand is not "count" as before, owing to the fact that consumers turn to more essential things and not how a product looks and what the company produces. Also interesting is the fact that consumers plan before passing the threshold of the stores, making shopping lists which are completely engaged.

2.4 THE PASTA INDUSTRY

1. General Market Characteristics of Pasta Industry

The market structure where every business intends to enter is comprised by the following key elements: Products, Customers, Competitors, Suppliers and Distribution channels.

1.1. Products

According to Article 15 of the Food and Drink Code as 'pasta' means products that are prepared from semolina which are rich in gluten and water, without yeast, dried in special chambers with slight heating or air, without baking. The production of pasta must be made solely from durum wheat semolina and is forbidden the use of other types of flour.

"Egg pasta" or "pasta with milk" or combination of them, means that pastas are produced by adding eggs, milk or both. Pasta with eggs must be produced with two full fresh eggs at least, for every kilogram of semolina. Similarly, pasta with milk must be produced from full cream milk or full cream milk powder, the amount of milk, is calculated as dry mass and it should not be less than 20 kilograms in 1kilogram of ready pasta.

1.2 Customers

Pastas are high in consumer preferences from all social strata. Pasta's customers are from every age and living standards. A segmentation of Greek market is: Families with children, young couples, Elders, Students and Food facilities- catering (traditional or not).

1.3 Competitors

The main competitors of the Greek Market in Pasta Industry are Seven

(7): MISKO A.E

Avez SA

GIOURIMAK SA

MELLISA KIKIZAS AB & EU

FOOD KORONA PASTA SA

Charalabopoulou TH.AFOI

SA DAKOS P.SP. SA

1.4. Suppliers / Partners

As it knows the (Pasta industry-Traditional Pasta) is highly connected with the semolina's production companies, as Semolina is the basic material for pasta. The semolina is obtained from the milling of durum wheat adding the right amount of water. The companies that produce semolina are relatively few and it is estimated that 90% of their annual production is directed to the pasta industry, a 7% to the sector of pastry and at last the remaining 3% is being promoted to retail market. It is very important for pasta industries to ensure long partnerships with semolina suppliers in order to maintain high quality semolina. More specifically the moisture of the product should be between 13.5% -13.8%. This avoids possible increases in costs production of the final product.

1.5 Distribution

The distribution of the finished products may differ according to the location, the size of each unit, and distribution policy. Distribution may include the transfer of the finished product directly to stores retailers (Food facilities- catering, shops traditional), the wholesale stores who distribute the product accordingly their will, or private warehouses throughout the country and then distribute to interested retailers.

2. Analysis of the Domestic Market

2.1 General Characteristics of Pasta Sector

Greek consumes Pasta mainly because of their low price, the short preparation time, the taste is good and generally the variety of combinations in their food habits. Italians places high in their dietary habits pasta and they consume 25kg around per year, additional consumers such as Swiss they are consuming 9.5kg and Greek they are consuming 9kg per year. The pasta industry in Greece is in maturity presenting low variations in annual consumption. Domestic demand is overridden by domestic production, so the imports quantity of pasta is very limited. For this reason many companies have focused their interest in the export business as there is a small margin. The Pasta market is "controlled" by a small number of production companies which are in place for a long time ago. The degree of the domestic consuming rate is concentrating highly in the two largest companies about 65%. Larger quantities of pasta are distributing to retailers, mostly in supermarkets.

Historically Data Industry

It was until the 18th Century that pasta didn't hold a place in the diet of the people. It was considered mainly as a luxury meals and sweet. In the Greek area several industrial units were developed in the mid-19th. Since then the rise of technology in the production process, allowed to increase production and reduce costs both on wheat crops as well as in the manufacturing process, the pasta was consolidated as a cheap and easy food for all walks. Nowadays pasta are one of the most popular foods worldwide. More specifically, the average Italian consumes about 25kg of pasta annually, countries such as Switzerland and Greece consumes annually about 9.5kg and 9kg respectively.

2.2. International Market

The highest amount of production and consumption of pasta is owned by Italy. Major markets in Europe except Greece are Switzerland and Germany. Domestic production of Germany is in a growth stage and for this reason the coverage of demand is covered by imports. On the other side of the Atlantic, high imports of pasta make the US who source pasta from the European Union, mainly from Italy. Particular emphasis is being placed on private label products as they have been established in several EU countries and the USA.

2.3. Size of Domestic Production

Despite the economic crisis that governs the country, the pasta consumption indicator keeps the upward trend (2008-2014, 11% + 273,56gr.) However, the annual production of durum wheat which is used as A material for the production of pasta, is in decline class (2008-2013, -12% -184 thousand ton). The decrease durum wheat

production has not affected the pasta prices, due to the high domestic demand for the production of pasta.

Figure 5. Pasta Consumption Indicator

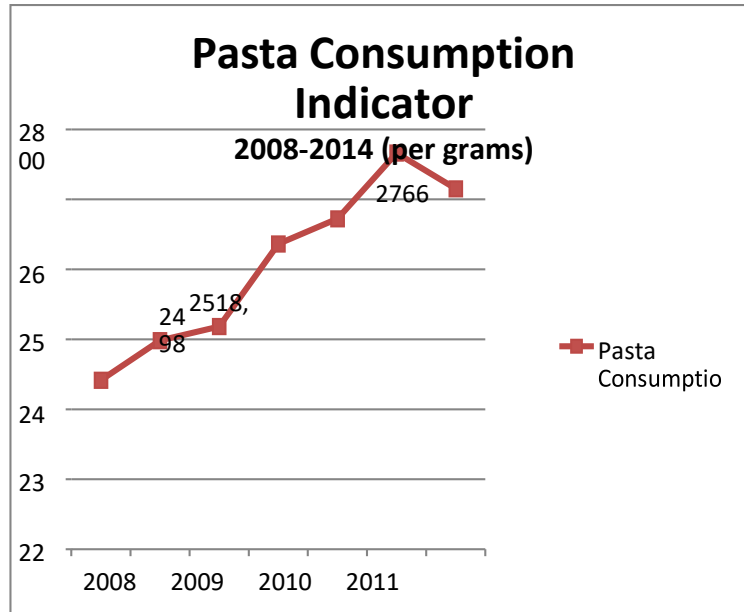
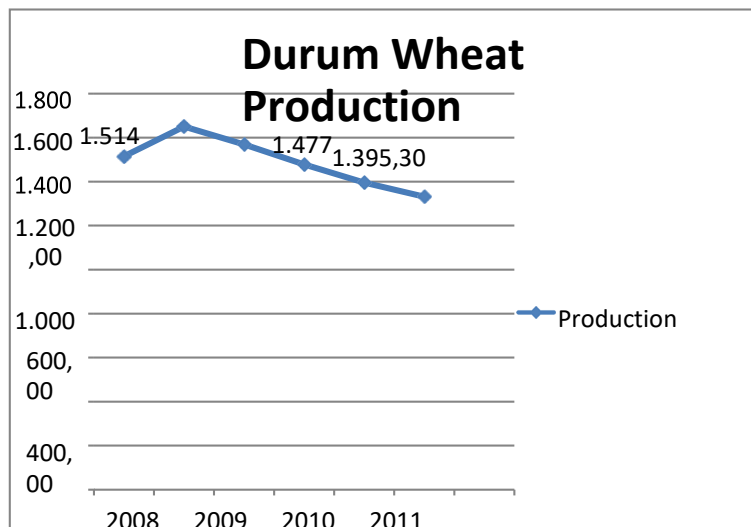


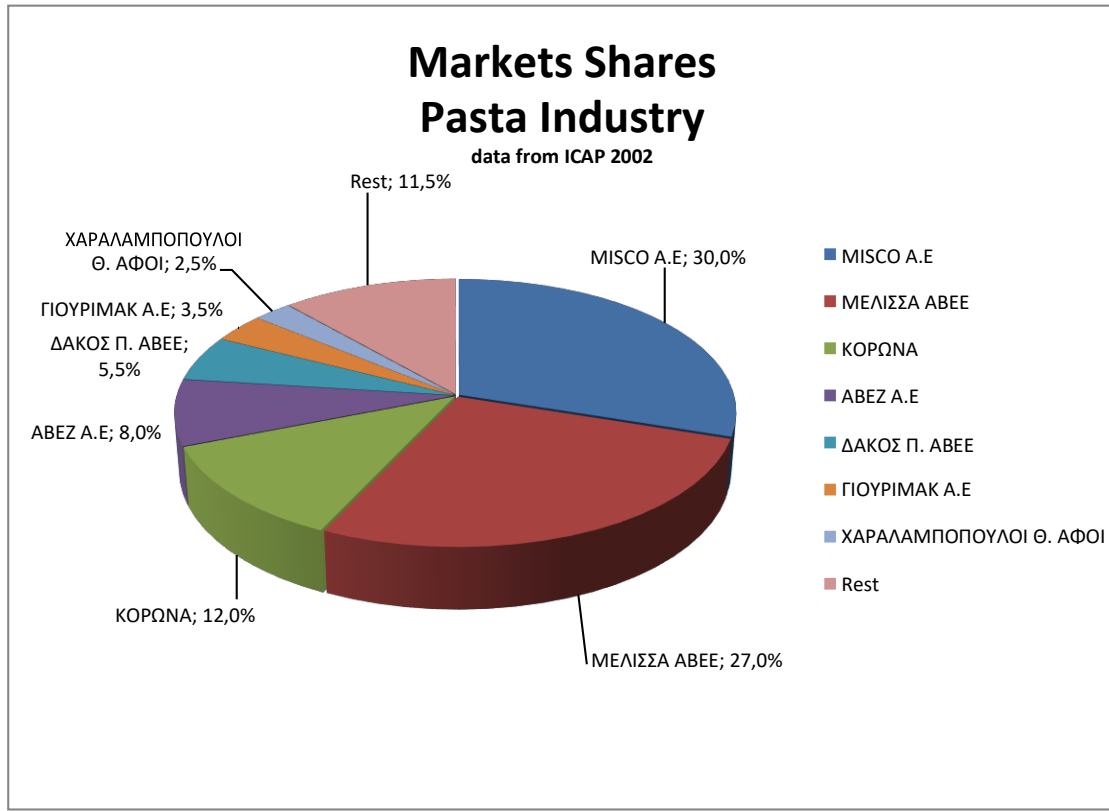
Figure 6. Durum Wheat Production



2.4. Market shares of the major companies

The domestic share of market in pasta industry is held by two (2) companies (Misko SA Melisa SA) which are considered the leaders of the industry. According to studies, these two companies owned more than 50% of the domestic market.

Figure 7. Market Shares Pasta Industry



2.5. Production Shares companies

Similarly as the market shares the domestic market production units are Misko SA and SA MELISSA are producing more than 50% of total production, with vertical integration production process.

2.6. Factors that define Demand

Eating pasta is one of the most popular meals in Greece and also in Southern Europe. There is a large amount of qualitative-quantitative factors that plays an important role in the demand for pasta in our country. The most important are:

➤ Price

Retail prices are quadrupled compared with the previous decade and this is attributed mainly to the devaluation of the drachma and inflationary pressures that prevailed at that time. In recent years, despite increases in their prices pasta still available at low prices and considered a cheap meal for the general public. The pasta can be combined with a wide range of food offering various flavoring combinations. The low price and the benefits above make pasta part of the nutritional habits of the modern Greeks. Furthermore, there are Pasta products with their own brand (own label) in several retail markets (supermarket) with even lower prices.

➤ Modern Lifestyle

The modern lifestyle has imposed a fast paced living both for Greeks and World population. The time of preparation of pasta is relatively small even if it is combined with some kind of sauce. Process of pasta meal is simply as it does not require special skills. As a result of this a meal with pasta is very common to the general public.

➤ **Nutritional Concepts**

According to the Mediterranean diet, which is a globally recognized as healthy eating plan, pasta are at the base of the food pyramid. Pasta is exclusively consisted from vegetable origin, providing energy in the body for long. Also positively affects the demand for pasta in our country, many Italian restaurants have been developed throughout the country.

➤ **Advertising**

Advertising in pasta industry is one of the most important means of influencing consumers to demand, particularly in the direction to the trademarks. The competition between large companies is high so a huge amount of expense is used for advertising services in order to attract more consumers. So far there hasn't been applied a general sectoral advertise that will generally increase the demand for pasta, this happens because there is no common agreement between the companies. Other countries such as Italy, Spain and America there are such advertisements for years aimed to convince consumers of the benefits of consumption of pasta and how to cook pasta properly.

Advertising costs are not shared equally to all media, but varies strongly in instrument and yearly. Each company chooses, depending on their strategy, how, when and where will advertise products (old and new) in order to direct costumers to their trademark.

➤ **Packaging**

Cellophane is used in common packaging pasta. The preferences of the consumers are directed towards package with cellophane film, because is considered more durable, protects the product from moisture and other external factors and is cheaper. There are also more packaging methods such as paper, more presentable than cellophane, however most of the consumers considered it indifferent, especially at ages 25-35years.

➤ **Substitutes**

Potato and rice can be considered as close substitutes for pasta. However there is no particular a shift for these products because pastas are considered a standard food for Greeks, which is the basis of many combinations for other meals. In many rural areas, there is phenomenon of consumption all kinds of household formulations which are similar with the general Pasta products (noodles, frumenty etc.), however their consumption is quite small and tends to disappear over time. Moreover, pastas are considered substitutes for other types of foods such as meat because of their low prices.

➤ **Demographic Factors**

AS it is known demographic factors can positively affect the demand for pasta. Below a table is representing the average consumption overage.

Table 1.Average quantity (Rural/ UrbanAreas)

AVERAGEQUANTITY RURAL / URBAN AREAS				
AREAS	2011,00	2012,00	2013,00	2014,00
URBAN AREA	2658,83	2695,88	2734,36	2658,83
RURAL AREA	2536,92	2570,27	2885,45	2536,92
SUM	2636,14	2671,90	2766,04	2636,14

Table 2. Average Consumption over Age

PAST AVERAGE CONSUMPTION OVER AGE:				
AGE	2011	2012	2013	2014
Until 24 years	1377,32	1478,28	1715,49	1676,22
25 - 34 years	2579,91	2605,11	2605,33	2242,88
35 - 44 years	3158,88	2757,9	2725,46	2977,43
45 - 54 years	2875,33	2747,99	3504,99	3229,2
55 - 64 years	2946,32	3140,29	2980,1	2874,98
65-74 years	2242,14	2533,28	2494,3	2590,65
75 years and above	1964,46	2216,37	2199,17	2197,08
SUM	2636,14	2671,9	2766,04	2714,53

2.8 General Information Competitors

In this section it is important to present some general information about the two (2) major companies in the industry.

➤ Barilla Hellas or Misco A.E

MISKO Company was founded in Piraeus in 1927 and from 1991 is a member of Barilla Group, and trades their products (pasta & sauces Barilla and Passioni biscuits).

In 2000 Misko completed the new ultramodern pasta factory in Eleonas area of Viotia, which is the third largest factory in Europe. In 2001 he joined the Barilla Group and a mill in Volos. The MISKO is the largest pasta industry in Greece with a strong market presence. Thanks to the quality of the pasta, shares the first place in the Greek market. Furthermore, pasta Barilla, are the biggest import of pasta product. In 75 years of the presence MISKO has won 56 gold international quality awards. The leader of pasta MISKO in Greek Market was built thanks to steadily excellent quality product, to the selection of raw material and the dynamic communication in advertising field in Greek Market ('Ακάκιε - τα μακαρόνια να vai MISKO').

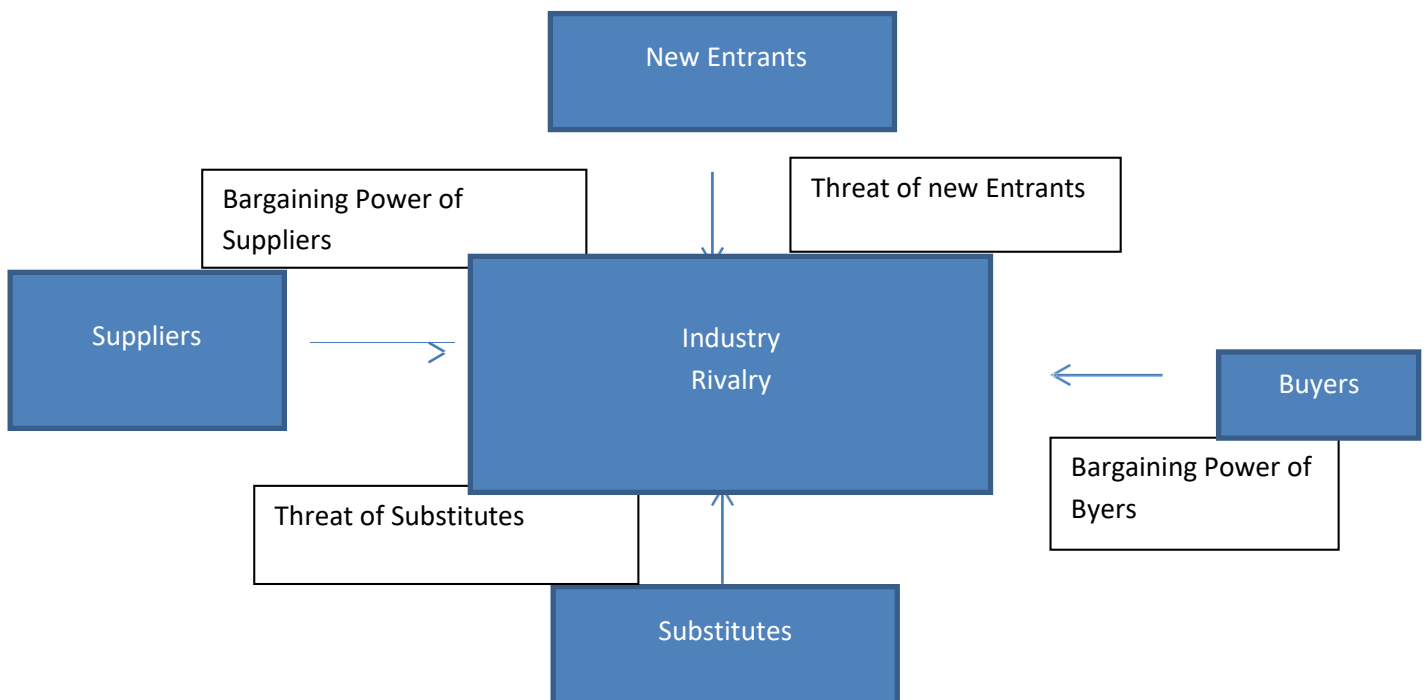
➤ **Melissa KIKIZAS ABEE**

The company was founded in 1947 under the vision of Alexander Kikizas to create a food industry, which highlights the raw materials of our country, processing into high quality products. The production of pasta and semolina is the main activity. Annually absorbs 100,000 tons of high quality Greek durum wheat. The vertically integrated factory complex (mill and spaghetti) located in Larissa, produces annually more than 50,000 tons of pasta, making the industry one of the largest of its kind in Europe! The presence in European market is strengthened with the establishment of subsidiary Atlanta SA, through which it exports number of series Greek products to the Polish market such as, pasta, olive oil, olives, halva and wines. The basic pasta brands of the company are: Melissa and Stella, the premium pasta line "Primo Gusto," "Deveta", and traditional "Vlacha" products.

2.9. Structure analysis of the competitive environment

The attractiveness of the Greek market is highly influenced by the above companies. It is therefore appropriate to analyze the 5 Forces of Porter. Porter five forces analysis is a framework to analyze the level of competition within an industry and business strategy development. The degree of intensity is defined through five basic competitive forces (factors).

2.10. Porter's Five Forces Analysis



➤ **Threat of new Entrants**

Every new entrant in the industry is a threat for existing competitors. "Entry barriers" are called all those financial costs that slow or prevent the entry of new firms in the industry and should be overridden by any new entrant. It is therefore important that businesses must be separated according to their activity level. Companies which are interested in doing business on a nationwide scale their entry are relatively difficult to enter, since high investments required, special know-how and there are already established large companies in the sector which are holding significant market shares and high reputation. On the other hand, companies which are wishing to operate in several local markets are more easily to enter. However high investments are not a deterrent because there is always the possibility of state incentives installation location option that reduce the cost of investment.

➤ **Bargaining Power of Byers.**

In a general context competing businesses are wishing to maximize the profitability of their capital, while buyers want to buy the highest quality at low prices. In pasta industry can be said that the bargaining power of both end consumers and traders is very big. Traders (large chain supermarket) are few in number and fairly large in size. They collect about 75% of the total distribution and with combination of the large volume markets, they are encharging their position. End byers- consumers have also big bargaining power, because they have a great variety in products such as pasta and the prices and quality.

➤ **Threat of Substitutes**

As mentioned before substitutes of pasta are mainly as rice and potatoes. Both occupy an important share of consumer preferences so the power is important. Assuming that there is equality between the Porter's forces then the availability of these products may limit the profitability of the sector and for this reason the newly incoming firms should pay particular attention to them.

➤ **Bargaining Power of Suppliers**

It is well known that suppliers are the main business partners. However, the relationship between companies and suppliers can sometimes be fatal because the dependency is high, (eg in a market with few suppliers, if there is an increase in prices or a reduction of quality of raw material this fact increases the cost of final product and reduced the margin of profit. Sometimes this cost is transferred from the businesses to the final consumer by increasing the price of the final product.

Specifically for pasta market, the number of suppliers is relatively large considering the needs of the sector and also their size is relatively small. This fact is making supplier's power, not so important on pasta businesses. In addition to independence of business from the pressures of suppliers large enterprises have vertically integrated their production, they have developed their own production of raw materials.

➤ **Industry Rivals**

The intensity of competition in pasta industry is an important factor for every company in order to build their strategy. How profitable an industry is depends on the rivalry between the competitors. If the intensity of competition is small that gives the opportunity for businesses to raise their prices and increase their profitability. Unlike greater the competition limits profitability. In the domestic market there are two leading companies (Misko AE and Melissa SA). The rest companies have small market shares and are limited to local markets mainly. In addition there are some imported, mainly Italian and own label, products which also have limited power. In conclusion it can be seen that the intensity of competition is not very high, while the domestic market of pasta has come to maturity.

3. PEST Analysis (Political, Economic, Social, Technological)

It is very important to analyze the external environment of the company. Many studies have been developed for the analysis of the external environment. At this point will be analyzed the most important factors that shapes the macro-environment (political, economic, socio- cultural, technological)

➤ Political Environment

The main feature of the current political environment is the instability. Changes of political decisions are fast, sweeping and painful in their implementation (for the majority of citizens). Additionally the control of funds and the closure of banks, implemented by mid-June 2015, has made it a difficult environment for every business sector. More and more companies, operating in our country, are resorting sum tested strategies, avoiding to take some risk resulting their loss of their development, the conservation effort of any position held in the market and compliance a waiting mode until positive change in the political environment.

➤ Economic Environment

The Eurozone debt crisis has put at risk of the stability system, also shaken vigorously the pasta industry. Fiscal policy currently applied in Greece is very tough and take severe austerity measures. Signing the last agreement our country and Europe are projected to increase corporate tax and VAT cut pensions and salaries of public – private sector . However with the signing of Momentum there will be a recapitalization of banks by the end of 2015 and immediately strengthened at least with 10 bn. Euros. Now there is, no risk of "haircut" on deposits, as required by EU directive on recapitalization banks after 01.01.2016. Furthermore is planned a development package 35 bn. € «Juncker package», also the implementation of the CFP 2014-2020 will provide benefits in the Primary sector as for the vertical integration of the production, and as an financial aid for the establishment of processing .

➤ Social Environment

In modern societies there is a continually that modulates the values, the principles, the beliefs of citizens, the way they face themselves, the others, the businesses, the organizations, the society and the environment. Greece has one of the highest positions in consumption of pasta per capita. The dissemination of the Mediterranean Diet to the general public, the modern way of life, the expansion of Italian restaurants, have affected increased the demand for pasta. Pastas products are targeting all social classes and are not affected by the several of age differences or demographic variables etc.

Moreover, the low price at which marketed make meal which is accessible to all and not considered decades ago as a luxury item.

➤ Technological Environment

Technological progress has greatly affected the production process from raw materials to the final product. In nowadays are being used high tech machines, for durum wheat crops (agricultural tractors, grain harvesters), drying ovens, automated systems supporting the

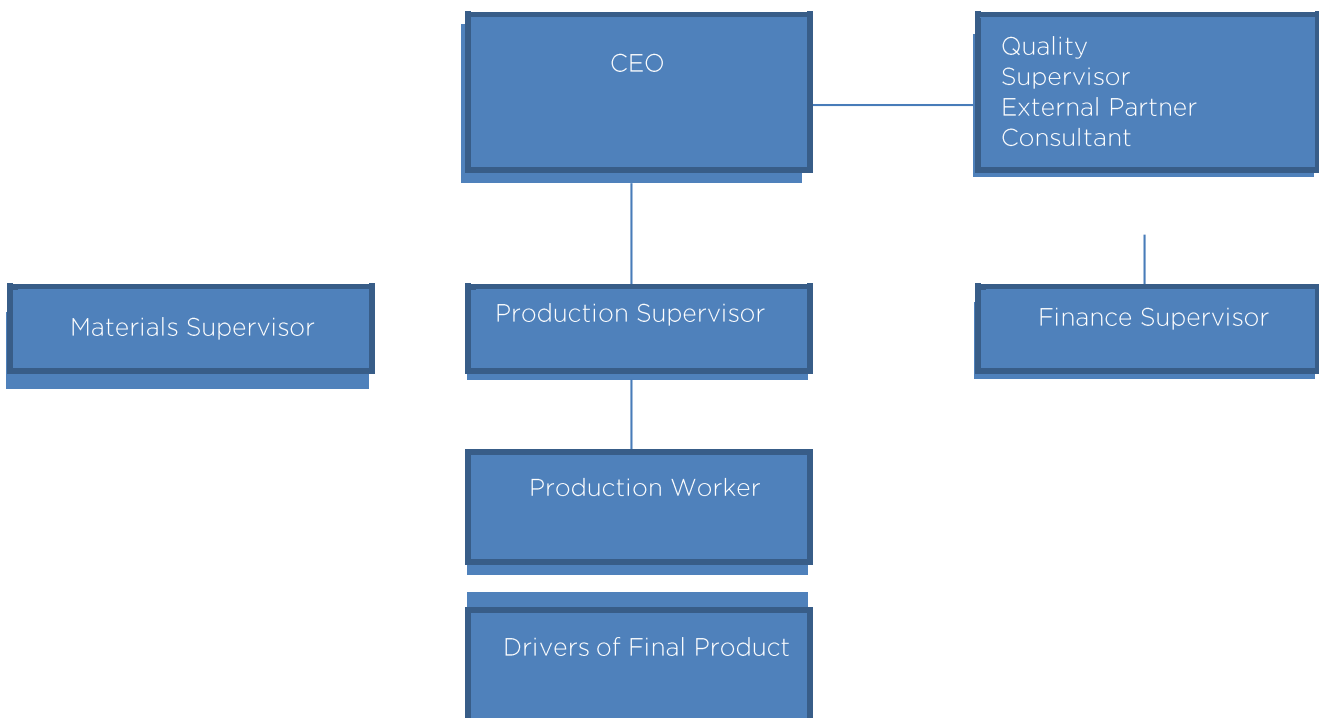
production process (reducing costs), increasing product quality and machines that are more friendly to the environment. Finally companies investing both in equipment and in building facilities in order to encounter the industry competition.

PART THREE – Company Organization

3.1 Organization and Management Unit.

Management is the way that functions and activities are being defined and structured to organizational subunits. These units are controlled by the Supervisory and headquarters staffs which are aiming to control and coordinate in order the business achieve its goals. The organizational structure shows the transfer of responsibility to the various subunits. It is actually a diagram called organizational chart (often called org chart). Usually the organization is planned in parallel with the various business functions such as marketing, production, finance etc.

a. Organization Chart (Org Chart)



- i. **General Manager CEO - Investor-Founder**
The investor - the founder of the production Company takes DG and is the one that deals with the long-term strategic planning, budgeting, coordination and control of all business activities.
- ii. **Finance Supervisor**
The Finance Supervisor deals with the financial management of the plant (invoices, financial statements, audit etc.) in collaboration with the CEO.

- iii. Production Supervisor**
The Production Supervisor deals with planning and executing the daily production also is responsible for the annually maintenance of Production Machines.
- iv. Materials Supervisor**
Materials Supervisor deals with managing all procurement of enterprise (raw materials, consumables) and is responsible for the quality of these.
- v. Production Worker**
Production Worker deals with daily production procedure and follows the Production Supervisor's instructions.
- vi. Drivers of Final Product**
Drivers of Final Product are responsible of final good transportation to costumers with company vehicles. Also they are collaborating with Production Supervisor for the details of every order.
- vii. Quality Supervisor**
Quality Supervisor deals with quality Management Systems (ISO, HAACP) and is responsible for quality and sustainability and integration.

3.2 General Expenses

Expenses in a production plant are of two types: direct costs and indirect costs (General Expenses). Direct includes all those costs are needed to produce the final product e.g., cost of materials, labor, etc. The indirect cost includes costs that are not included in the above category. Below are presented the following costs:

- Maintenance Equipment Cost
- Cost of QMS and Maintenance
- Fee occupational therapist
- Other Expenses

General Expenses charged the company from the 1st operational year and will continue to charge it with +20% annually.

3.3 Raw Materials and other Supplies

1. Raw Materials Features

a. Raw Materials (Pasta basic ingredients)

The basic ingredient of pasta is semolina. The semolina is a durum wheat product, depending on the degree of fineness of the grains is separating into coarse and fine. The coarse semolina used in pastry laboratories, while the thin is used in pasta industry. The numbers of semolina production businesses are quite few. About 90% of the annual production of semolina going to pasta industry, 7% is going to pastry laboratories, and the remaining 3% being promoted to retail market.

b. Other Supplies

Raw Materials enter the processing unit in order to produce final Products. In order to produce final products the production unit should have other supplies which are required in production process. Some of them are:

- i. Auxiliary Supplies , utilities (electricity, fuel, water)
- ii. Packaging Materials
- iii. Spare Equipment
- iv. Work Clothes
- v. Detergents - Disinfectants

2. Input required quantities

The business requirements for the input quantities should be proportionate to the capacity of the production unit. For about 100tn pasta production need approximately 100tn semolina, 16 tons of milk and 16 tons of liquid egg.

Table 3. Input required quantities

INPUT	QUANTIT
RAW MATERIALS	
Semolina (in tones)	432
Egg(liquid form in tones)	70
Milk (in tones)	70
UTILITIES	
Electricity (in kwh)	432.000
Water (in tones)	130
PACKAGING MATERIALS	
Tags	216.000
Packaging Bags	216.000

Containers (cartons)	1.500
WORK CLOTHES	
Working Overalls	10
Head bandanas	10
Gloves	250
Dust-Masks	125
DETERGENTS - DISINFECTANTS	
Detergents (in liters)	5.000
Disinfectants (in liters)	5.000
Spare Equipment	12

3. Availability and supply sources

a. Availability of Materials

The availability of raw materials in quantity should be able to cover the capacity of the production unit. The selection of suppliers is very important in order the business to achieve goals. Suitable suppliers should be selected carefully to ensure the supply of raw materials in quantity and quality as well other supplies which are needed for the production process.

b. Criteria of raw materials (Raw materials, Other materials,Auxiliary materials) Raw Materials:

Semolina - must be low in bran content and the low price per ton.

Egg (in liquid form) - Certified quality with identification stamp in every batch. Milk - Certified quality either in liquid or powder forms.

Other Materials:

Packaging materials and containers (cellophane and cartons) - the price per ton or per item should be low, unlike their quality must be high in standards.

Work Clothes (work overalls, head bandanas, gloves) - The uniforms should be comfortable and functional for workers, also it should be washed and disinfected easily. The head bandanas, gloves should not tear easily and should be made of materials friendly for environment.

Spare Parts: the quality should be high and should be checked the compatibility with production machines.

Detergent-disinfectant -should be checked their power, neutrality for the health of workers and the quality of products and their price.

Auxiliary materials and other services:

Electricity- there are no selection criteria since PPC is almost a monopoly. Water -No selection criteria.

4. Selecting & Rating Suppliers(based on QMS ISO 9001)

The implementation of a QMS according to ISO 9001 aims to limit problems that may occur in the quality of suppliers. QMS should be designed and fully integrated the system in the supplier selection process for both the initial approval and for their continuous evaluation. Especially in the pasta industry must both morally and institutionally should operate an effective QMS that continuously takes care and improve consumer's safety. The implementation of such a system can minimize costs by working with specific certified suppliers who will express their willingness to enter into long-term agreements.

3.4 Technology Equipment

1. Program and Production Unit Capacity

- a. The production unit will operate one production line about 6-7 hours / Production. Each production will last about 6-8 hours in order to cover the seasonal amount (Christmas, Easter) the company will add additional productions per week.

2. Production Planning

- a. The company will have to choose modern technology equipment which is compatible with the Program of Production and flexible for any future improvements.

3. Required Technology

- a. The company should be moved in Equipment Suppliers providing integrated solutions in order to ensure the quality and lowcost.

4. Production Equipment

- a. The stages of the production process for the production line is as follows:
 - i. Power supply of semolina which is transfer to themixing.
 - ii. Stirring / mixing raw materials - Egg, Flour, Milk ,these fermentation.
 - iii. Formatting finished products (Dough)with molds
 - iv. Pre- Drying
 - v. Drying
 - vi. Package
- b. Other Equipment
 - i. Transportation Vehicles
 - ii. Air Ventilation System
 - iii. Office equipment (Pc, Fax)
 - iv. Storage Shelves
 - v. Security Systems (fire, antitheft protection, CCTVs)

5. Purchase & Transfer

The purchase of the technology needed should be with single payment and the whole equipment. The transfer of the equipment in the facilities of the Company will be undertaken entirely by the suppliers who will have full responsibility for loading, transport and installation.

6. Production Equipment Costs

Table 4. Production Equipment Costs

A.Production Equipment Costs	
Power supply of semolina	28.000 €

Stirring / mixing raw materials	30.000 €
Pre- Drying Machine	38.000 €
Drying Machine	30.000 €
Drying Machine	30.000 €
Formatting finished products (Dough)with molds	3.000 €
Boiler trachanas	20.000 €
Package Machines	2.000 €
SUM	181.000 €

B.Other Equipment	
Transportation Vehicles	30.000 €
Office equipment (Pc, Fax)	5.000 €
Storage Shelves	5.000 €
Air Ventilation System	15.000 €
Security Systems (fire, antitheft protection, CCTVs)	4.000 €
SUM	59.000 €

SUM A+B	240.000 €
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3.5 Human Resources

1. Human Resources

There is a fact that without personnel there are no companies. Employees are the most decisive factor in order to run a business and achieve its goals. The difference is making by those who managing or by those who are simply perform. Therefore the personnel staff is considered as a vital choice of the production unit, because machines don't think or try or set goals. The planning of human resources includes all these actions that carried out by the company to acquire, utilize the appropriate and high skill employees who will carry out productive work.

a. Job Descriptions

The individual parts of the business and the requirements needed for each job are detailed bellow.

Position: Quality Supervisor (External Partner - Consultant)

The responsibility is to continuously monitor the firm's compliance with the quality requirements and verify that both raw materials and finished products meet quality and safety standards (ISO and HACCP).

Typical tasks include:

- Inspection of raw materials, intermediate products and other supplies, and their necessary documents.

- Preparation of quality certificates, and decisions on their use,
- Creation of internal standards and procedures,
- Planning to conduct audits / inspections during production, operation and other procedures.
- Monitoring the whole production process, creating proposals for preventive measures in order to achieve the desired quality levels.
- Programming internal audits for quality control,
- Design of the documentation concerning the quality.
- File Storage for the quality and handling of complaints about the quality of products.
- Coordination of actions for the training programs
- Ensures the protection of the environment and natural resources by conducting inspections, proposals and documentation.

Position: Finance Supervisor

The main task is the financial, tax and generally lawful monitoring of financial figures of the company, in order to inform the CEO. Specifically is responsible for:

- Registration of financial transactions in the accounts and compliance with basic accounting company's books according to invoices, cost estimates, the proceeds notes, payment orders and other documents.
- Drafting monthly balances of accounts.
- Drafting of the payroll personnel.
- Also is responsible for organizing the accounting section, conducting internal controls in business administration and draw up the budget in cooperation with the CEO.

Position: Production Supervisor

The production manager is responsible for proper and efficient operation of production machinery in order the production process meets the needs of both wholesale and retail demand. Manages the production processing of raw materials and arranges the production unit individual functions according to existing orders. Furthermore, production supervisor is responsible to maintenance the production equipment in regularly basis.

Position: Drivers of Final Product

The transport driver is responsible for the transportation the pasta to final customers with company's transportation vehicles after request and agreement with the customers. They are obligated to control the vehicle (oil, water, air tires) and rectify any shortcomings. They must keep clean the cabin of the vehicle where the final products are being stored, take care to have the necessary documents (vehicle license, invoices, insurance, MOT, etc.) and should inform for any vehicle faults the senior management CEO.

Position: Material Supervisor

He is responsible for:

- Identifying and selecting the most appropriate supplier base on ISO, HACCP procedures. Defines and maintains good relations with them.

- Minimize the cost of the supply chain both outside company's environment suppliers and also inside the company during the production process inputs of raw materials.
- Minimize the supply interruption risk and excessive market cost increases, inventory Amsterdam materials.

2. Staffing and Recruiting

a. Recruiting Availability

The location of the unit production plays an important role of finding manpower. The company must set special incentives to attract suitable employees (e. g. high fees, additional benefits etc.)

b. Attracting Candidates

Recruiting candidates is meaning the process of finding and attracting the most suitable employees to fill the empty vacancies. Attraction can be as follows:

- Post ads to relevant online workplace
- Post ads in media (local newspapers and magazines)
- Post ads in industry magazines

c. Staffing Candidates

Staffing Candidates is the process of gathering information and evaluation the candidate profile in order to fill the job vacancies. The selection of the right candidate will be after a personal interview with the CEO of the Company.

3. Salary - Labour Costs

Salary and rewards are key factors for attracting suitable candidates to stay and their level of performance.

a. Instant Economic Benefits

The instant economic benefits consists salary, basic salary (net) and incentives - prizes paid to the employee depending on the level of performance

b. Indirect Economic Benefits (Health and Safety Insurance)

The indirect economic benefits consists some other obligations of the employer (social and medical insurance) and some benefits that are not directly related to work performance.

4. Performance Evaluation

In general, the recruiting process includes gathering information and data and evaluation of them. The resulting information from that performance evaluation is useful for the company itself and for the employee himself. This fact will determine which employees perform properly their work and who not. The aim is to take additional measures if some workers do not perform properly and to improve their performance directly. The Quality Supervisor is responsible of the design of the evaluation system.

3.6 Location - Site Location - Surroundings

1. Search and selection of Site

a. Basic requirements of location

The Investor - founder of the company must choose a site that will meet some basic requirements for the installation of the production unit.

- i. Recruiting Availability
- ii. Raw Material Supply
- iii. Easy Transportation (road network)
- iv. Public Utilities(electricity, water, communications)
- v. Not creating problems in local ecological and cultural environment

2. Environment Protection

The operation of the production unit should operate under optimum conditions and should not affect the natural resources of ecosystems, causing destruction and deterioration. Environmental policy should cover all activities of the company. This policy commits the company to continual improvement and prevention of pollution and compliance with national and Community legislation to the whole company activities. The policy will be reviewed by management annually, published to all employees by displaying in prominent places in the facilities and offices and will be available to the public.

3. Facilities Costs and Layout.

After selection and analysis of production equipment follows the design of the planned Surveys project (plant layout) of the plant. The plan should be in harmony with the production program, technology and equipment. The area of production will be located right next to the storage of raw materials. In the area of production the technological equipment will be placed in order of proportion to the production line. Essentially, the production unit will consist of a building installation of 150 sq.m. which will include:

- The main building of 70 sq. m. which houses the single production line, and in which the production takes place on an almost daily basis.
- Two Storage Facilities, one for raw material and other supplies storage (30sqm) and while the second will be for the storage of finished products. These spaces (30sqm) (total 60 sq. m.).
- The office house, 20 sq. m. to house the Finance Supervisor and the Material Supervisor.

Finally, in front of the main building there will be a special Parking area for both Transportation vehicles that will transport the finished products the customer and the vehicles of customers who will stop at the point to make their purchases.

PART FOUR - STRATEGIC MARKETING

4.1 STRATEGIC MARKETING

The "making" of Strategic Marketing analyzes the aims and objectives of the company, the target market and product positioning.

1. Target – Mission of the Company

The main goal of the established production unit is to post a significant market share from existing production companies of pasta in the wide area of the company's location and also to post a small share across the country from the leader companies in pasta industry. In order to be able to extract a very small market share from the leading companies, the production company should distribute the final products to the supermarket, seeking partnerships with the central supermarket in the wider region and with local shops of traditional products.

A competitive advantage of the production unit will be the production of traditional pasta with high and certified quality at low prices which will be affordable for consumers. The purchase of modern technological equipment and the implementation of QMS (ISO & HACCP) will aim at reducing operating costs and producing consistent high quality products. Furthermore the company will purchase modern transportation vehicles to deliver the finished product to the final customer. This fact will shape the final sales price reducing the cost of production and transportation costs.

The average per capita consumption for 2008 reached 2,5kg month and the annual domestic consumption reached 300,000 ton. For the year 2014 the annual domestic consumption reached 324.000tn. For the 2015 if we consider the average increase of 4%, annual domestic consumption is projected to reach 336.000tn. For the 2016 350.179tn, 364.187tn 2017 and 2018 378.754tn.

Table 5. Forecast of Domestic Consumption (4%)

Forecast domestic Consumption (4%)	
Year	Quantity in tons
2015	336.711
2016	350.179
2017	364.187
2018	378.754
2019	393.904
2020	409.660
2021	426.047
2022	443.089
2023	460.812
2024	479.245
2025	498.415

The Production unit has an annual nominal output power production for about 480tn. If we calculate that it uses 90% of its power then the actual production for the first year of operation will be around 432tn. This corresponded to 0.13% share of the domestic market.

The goal for 10 years company plan is to increase its productivity by + 10% each year. At the end of the program (10 years) the company will possess 0.21% share of the domestic market.

In addition, the table below refer and revenues from sales expected to have an annual basis (sales plan) until 2025, the last year of this project. In order to remain competitive selling price of traditional pasta will be adjusted to the annual production power.

Table 6. Sales Forecasting 2006-2025

Sales forecasting 2016-2025			
Year	Quantity in kg	Average Sales price(€)	Sales(€)
2016	432.000	1,50 €	648.000 €
2017	475.200	1,50 €	712.800 €
2018	522.720	1,50 €	784.080 €
2019	574.992	1,50 €	862.488 €
2020	632.491	1,50 €	948.737 €
2021	695.740	1,50 €	1.043.610 €
2022	765.314	1,50 €	1.147.972 €
2023	841.846	1,50 €	1.262.769 €
2024	926.030	1,50 €	1.389.046 €
2025	1.018.633	1,50 €	1.527.950 €

2. Targeting (Costumers type)

Targeting aims to the selection of the market, which there is a certified quality and affordability demand for traditional pasta. The traditional pasta industry should be close to many traditional foodservices and traditional shops. These shops offering their clients a wide range of traditional products, from every social layer (costumers of all ages who visit the local area).

The company will distribute its products in wholesale prices to traditional foodservice and in retail price to traditional shops, as well as to large supermarkets, which are located in the local area or across the whole country. Moreover, the company will sell its products in retail prices from its location of the production unit. The company will be located at a central point - point pass from where the villagers and residents of nearby villages or passers will pass. Of course, important customers for the company would constitute the "passing by " costumers that will ride to their tourist destination of the LocalArea.

The aim of the company is to provide to the aforementioned customers traditional pasta with certified quality and in affordable price. Certified quality is particularly important when we talk about the distribution of the product in Foodservices which are visited daily by dozens of people of all ages, while the affordable price is certainly a prerequisite test for candidates to consume traditional pasta and integrate them in their diet.

3. Registering of Trademark

The culmination of the marketing strategy which the newly company will follow, is the collection of all data obtained previously and to register and choose a trademark for a strong brand (brand name). The trademark must contain certain desirable qualities, which will make it competitive and will introduce it powerfully in the wider environment of the Company. Finally, the name should be discreet and not pompous, which will be recognized and memorized easily.

4.2 BUSINESS ANALYSIS (SWOT)

1. STRONG POINTS

One of the strengths of the pasta industry lies in its diversity. From traditional pasta products, to high-end gourmet dishes found in restaurants, pasta is a staple for diners of all races, ages and income levels. Pasta dishes can also accommodate a wide range of tastes, from spicy pad thai to home-style macaroni and cheese. Pasta dishes can also include a wide range of meats, vegetables and sauces for special diets.

2. WEAK POINTS

Despite the versatility of its dishes, one of the biggest weaknesses in the pasta industry is its huge competitors. While the fast-food industry as a whole has such diverse choices as hamburgers, pizza, fried chicken and tacos, pasta-based restaurants have yet to capture the imagination of the Greek public.

3. OPPORTUNITIES

Just as world-famous fast-food giants such as McDonald's, Pizza Hut and Taco Bell popularized their versions of everyday foods, the pasta industry has the opportunity to develop its own place in Greek dining pantheon through restaurant franchising.

4. THREATS

A major concern for the Pasta industry lies with public and media scrutiny over the health impact of pasta dishes. Concerns over dishes containing high amounts of sodium, carbohydrates and gluten have caused diners to move away from traditional pasta dishes.

5. MARKETING TACTICS

The goal of the new company is to offer the market a successful product. In order to achieve its goals the company will adopt competitive marketing tactics that will allow it to create a mix marketing that will make the product more attractive than its competitors. This mix marketing should clearly define the product itself and its individual features. Below is presented the famous, modern framework of the Four P: Product, Price, Promotion, and Place.

1. Product

The Company intends to produce and market the following items:

- a. Noodles
- b. Traditional Noodles
- c. Barley
- d. Screws pasta
- e. Achivadaki
- f. Frumenty (sour, sweet, spicy)

All pasta will be available in packs of 500gr. The packaging product will have common features to all kinds of products and is expected to be visible the content and to be recognizable the company's brand. Also the net weight of the product, the expiration date and the certified quality should be easily visible.

2. Price

The company should pursue a pricing policy which will bring it one step ahead of the competition. The QMS will reduce the defective batch and individual production costs which will undoubtedly lead to greater profits. The main goal of the company is to minimize costs in the production process in order to satisfy the value of the business: delivering certified quality products in low prices. Additionally pricing policy, it should be noted periodic (every four to six months) policy of discounts and offers. Discounts are projected to be approximately 5% to 10% of the original selling price, whereas the offers will be of the form: "three packages for the price of two." This policy has primary purpose to add incentives to new customers in order to become permanent consumer of the company's product, since, as we know, nowadays there are many customers who want to receive as many benefits as possible from each product.

3. Promotion

In order to increase sales and to possess the desired market share the company will make some steps that will promote the certified quality and low prices.

- a. Design & Trademark printing, corporate & brochures
- b. Advertising in local media (newspapers, magazines)
- c. Sales promotion through the creation of partnerships with local traditional stores and some large supermarkets.
- d. Create Website & E-shop for online promotion of the company and e-ordering.

4. Place

The distribution of the final products in the domestic market becomes will mainly be with the company's transportation vehicles. The products will be transferred either to the warehouses of retailers (traditional shops, foodservices, super market) where they are easily and inexpensively accessible, or to wholesaler's warehouses from where it can be distribute to retailers. Of course, the company location will be a retail space to sell company's products.

PART FIVE - FINANCIAL PLAN

5.1 INSTALLATION COST (MECHANICAL, LAND, GENERAL)

Cost of equipment

The cost of production equipment is divided to main equipment and the other equipment.

A.Production Equipment Costs	
Power supply of semolina	28.000 €
Stirring / mixing raw materials	30.000 €
Pre- Drying Machine	38.000 €
Drying Machine	30.000 €
Drying Machine	30.000 €
Formatting finished products (Dough)with molds	3.000 €
Boiler trachanas	20.000 €
Package Machines	2.000 €
SUM	181.000 €

B.Other Equipment	
Transportation Vehicles	30.000 €
Office equipment (Pc, Fax)	5.000 €
Storage Shelves	5.000 €
Air Ventilation System	15.000 €
Security Systems (fire, antitheft protection, CCTVs)	4.000 €
SUM	59.000 €
SUM A+B	240.000 €

Facilities Costs.

Table 7. Facilities Costs

Description	Costs
Construction Costs Facilities	100.000 €
Indoor - Outdoor formatting	25.000 €
SUM	125.000 €

5.2 ESTIMATED GENERAL COSTS

Table 8. Estimated General Costs

Estimated General costs	
Description	Cost(€)
Maintenance Equipment	6.000 €
QMS costs	5.000 €

Fee occupational therapist	1.000 €
Other Expenses	2.500 €
SUM	14.500

5.3 ANNUAL OPERATING COST (RAW MATERIALS, HUMAN RESOURCES, STORAGE AND MARKETING)

1. Cost of raw materials and other supplies

Estimated assessment of raw materials and other supplies costs for all years, forecasting each individual cost will vary each year by +10%.

Table 9. Estimated operating Costs: Raw & other Materials

Estimated operating Costs: Raw materials & other Supplies			
INPU T	QUANTIT Y	Cost(per unit)	1 st Year Cost (€)
RAW MATERIALS			
Semolina (in tones)	432	500 €	216.000 €
Egg(liquid form in tones)	70	1.000 €	70.000 €
Milk (in tones)	70	300 €	21.000 €
SUM			307.000 €
UTILITIES			
Electricity (in kwh)	432.000	0,06 €	25.920 €
Water (in tones)	130	1 €	130 €
SUM			26.050 €
PACKAGING MATERIALS			
Tags	216.000	0,05 €	10.800 €
Packaging Bags		0,03 €	6.480 €
	216.000		
Containers (cartons)	1.500	0,04 €	60 €
SUM			17.340 €
WORK CLOTHES			
Working Overalls	10	10 €	100 €
Head bandanas	10	0,05 €	1 €
Gloves	250	0,04 €	10 €
Dust-Masks	125	0,04 €	5 €
SUM			116 €
DETERGENTS - DISINFECTANTS			
Detergents (in liters)	5.000	0,20 €	1.000 €
Disinfectants (in liters)	5.000	0,30 €	1.500 €

SUM			2.500 €
Spare Equipment			
Spare Equipment	12	5 €	60 €
SUM			60 €

2. Human Recourses Costs

The cost of human resources for the employees in the pasta production company is shown in the table below. Extras and liabilities are carried in a factor of 1.3 which is set to cover the contribution of the employer, while total fees will be adjusted each year by 1%. The table below estimates the cost of human resources for the first year of operation. The annual cost is calculated by multiplying the monthly salary by the number of employees for 12 (months year plus bonuses) and by 1,3(rate employer obligations and additional benefits).

Table 10. Human Recourses Costs 1st Year

Human Recourses Costs 1 st Year			
Position	NUMBER	MONTH LY	YEAR COSTS(
Finance Supervisor	1	1.000 €	12.000 €
Production Supervisor	1	1.000 €	12.000 €
Materials Supervisor	1	800 €	9.600 €
Production Worker	1	600 €	7.200 €
Drivers	2	700 €	16.800 €
SUM	6		57.600 €

3. Marketing Expenses

For marketing expenses the company will allocate 5% of gross sales promotion of any kind, including the placing of a further 5% of sales to other types of marketing costs, sales and distribution. In other words, all marketing expenses 10% will be per annum turnover.

Table 11. Marketing Expenses (10% per sales)

YEAR	SAL	Marketing Expenses 10% per Sale
2016	648.000 €	64.800 €
2017	712.800 €	71.280 €
2018	784.080 €	78.408 €
2019	862.488 €	86.249 €
2020	948.737 €	94.874 €
2021	1.043.610 €	104.361 €
2022	1.147.972 €	114.797 €
2023	1.262.769 €	126.277 €
2024	1.389.046 €	138.905 €
2025	1.527.950 €	152.795 €

4. Annual Production Cost 2016

The Annual Production Cost (Operating Expenses) includes raw materials, Human Resources, General Expenses, Marketing expenses and finally depreciation (cost of equipment + building facilities). For the method of depreciation is chosen the constant factor. The table below shows the annual cost for 2016.

Table 12. Annual Production Cost 2016

Annual Production Cost 2016	
Raw Materials	353.066 €
Human Resources	57.600 €
General Expenses	14.500 €
Marketing Expenses	64.800 €
Depreciation (cost of equipment + building facilities)	36.500 €
SUM	526.466

5.4 SALES

The Company products in average selling price amounts to 1,5 €. Below are estimates table with annual production growth of + 10%.

Table 13. Sales Forecasting 2016-2025

Sales Forecasting 2016-2025			
YEA	Quantity in kg	Price per unit	SALE
2016	432.000	1,50 €	648.000 €
2017	475.200	1,50 €	712.800 €
2018	522.720	1,50 €	784.080 €
2019	574.992	1,50 €	862.488 €
2020	632.491	1,50 €	948.737 €
2021	695.740	1,50 €	1.043.610 €
2022	765.314	1,50 €	1.147.972 €
2023	841.846	1,50 €	1.262.769 €
2024	926.030	1,50 €	1.389.046 €
2025	1.018.633	1,50 €	1.527.950

5.5 TOTAL INVESTMENT

The total investment include all those costs (Production Equipment, Facilities, General Expenses, Human Recourses , Raw materials and Marketing expenses) that need to be paid by the company in the 1st year . Below is shown table.

Table 14. Total Investment

TOTAL INVESTMENT	
PRODUCTION EQUIPMENT	240.000 €
FACILITIES	125.000 €

GENERAL EXPENSES	14.500 €
HUMAN RECOUSES	57.600 €
RAW MATERIALS	353.066 €
MARKETING EXPENSES	64.800 €
SUM	854.966

5.6 FUNDING THE PROJECT

1. Funding Sources

The total investment will be covered by specific sources of funding. Specifically this project will be funded by the Ministry of Agriculture, by private capital and business investment loans.

Table 15. Funding Sources

FUNDING SOURCES		
Description	Participation	Costs
1. Government Funding	50%	425.983 €
2. Private Funding	20%	170.393 €
3. Bank Loan	30%	256.490 €
Σύνολο	100%	854.966 €

The company in order to cover the total investment of the project, it should resort to third-party financing (borrowing) taking a long-term loan of 256.000 €. The interest of this loan is calculated based on a fixed annual nominal rate of 4.45% (including the contribution of 0.6% for banks). The repayment period of the loan will be equal to 10 years and grace period will be equal for two years from the conclusion of the loan, which will be completed by 2025.

To calculate the annual obligations of the company's loan, it should calculate the series of periodic payments of equal amounts, to be paid at the end of each period, that is, equal installments of the loan to be paid at the end of each year of the payback period of 10 years. Thus, the compound interest formula is used:

$A = P (A/P, i\%, N)$, where:

i = Interest of loan, equal to 4,

$45\% N$ = Loan Period, equal to 10

years

A = price annuity, annual obligations (installment loan) of loan, the end of each

period P = Present Value 256.000€

$(A/P, i\%, N)$ = Capital recovery factor, equal to: 0,16

Άρα, η ετήσια δόση για την εξυπηρέτηση του δανείου θα είναι ίση με:

$$A = 256.000€ * 0,16 \quad \underline{A} = 41.482,11 €$$

2. Loan Servicing

Table 16. Loan Servicing

BANKING				
YEAR	INSTALLMENT	INTEREST T=4,45%	REPAYMENT	PRINCIPAL OUTSTANDING
2016		GRACE		256.000,00 €
2017		GRACE		278.784,00 €
2018	41.482,11 €	29.676,65 €	11.805,46 €	249.107,35 €
2019	41.482,11 €	31.024,53 €	10.457,58 €	218.082,83 €
2020	41.482,11 €	32.433,63 €	9.048,48 €	185.649,20 €
2021	41.482,11 €	33.906,73 €	7.575,38 €	151.742,47 €
2022	41.482,11 €	35.446,74 €	6.035,37 €	116.295,73 €
2023	41.482,11 €	37.056,69 €	4.425,42 €	79.239,05 €
2024	41.482,11 €	38.739,76 €	2.742,35 €	40.499,28 €
2025	41.482,11 €	40.499,28 €	982,83 €	- €

3. Evolution of Production Costs 2016-2025

The analysis of the annual cost of production for each of the under premeditation years will rely on annual total production costs for the first year of production and will take additional account of those financial obligations of the firm and the annual forecast each factor of production analyzed in previous chapters. On this basis, the evolution of the total production costs will appear in the table below:

Table 17. Production cost Analysis 2016-2025

PRODUCTION COSTS ANALYSIS 2016-										
Description	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Raw Materials	353.066 €	388.372 €	427.209 €	469.930 €	516.923 €	568.616 €	625.477 €	688.025 €	756.827 €	832.510 €
Human Recourses	57.600 €	58.176 €	58.758 €	59.345 €	59.939 €	60.538 €	61.144 €	61.755 €	62.373 €	62.996 €
General Expenses	14.500 €	17.400 €	20.880 €	25.056 €	30.067 €	36.081 €	43.297 €	51.956 €	62.347 €	74.817 €
Marketing Expenses	64.800 €	71.280 €	78.408 €	86.249 €	94.874 €	104.361 €	114.797 €	126.277 €	138.905 €	152.795 €
Loan Obligations	Grace Period	Grace Period	41.482 €	41.482 €	41.482 €	41.482 €	41.482 €	41.482 €	41.482 €	41.482 €
Depreciation	36.500 €	36.500 €	36.500 €	36.500 €	36.500 €	36.500 €	36.500 €	36.500 €	36.500 €	36.500 €
SUM	526.466 €	571.728 €	663.237 €	718.562 €	779.785 €	847.577 €	922.697 €	1.005.995 €	1.098.434 €	1.201.100 €

4. [Income Statement](#)

The projected income statements for the company are presented below. We observe that in the first business year are presented net profit 78.997 € while

Table 18. Projected Income Statement (2016-2025)

in the coming years the annual net profits go growing.

PROJECTED INCOME STATEMENT										
SALES	648.000 €	712.800 €	784.080 €	862.488 €	948.737 €	1.043.610 €	1.147.972 €	1.262.769 €	1.389.046 €	1.527.950 €
PRODUCTION	526.466 €	571.728 €	663.237 €	718.562 €	779.785 €	847.577 €	922.697 €	1.005.995 €	1.098.434 €	1.201.100 €
GROSS MARGIN	121.535 €	141.072 €	120.843 €	143.926 €	168.952 €	196.033 €	225.275 €	256.774 €	290.612 €	326.850 €
TAX (35%)	42.537 €	49.375 €	42.295 €	50.374 €	59.133 €	68.612 €	78.846 €	89.871 €	101.714 €	114.397 €
NET PROFIT	78.997 €	91.697 €	78.548 €	93.552 €	109.819 €	127.421 €	146.429 €	166.903 €	188.898 €	212.452 €

5. Financial evaluation of Investment

The payback method (yield) of the investment cost (payback period method) gives the number of years required to be reimbursed, the capital cost of the initial investment is calculated through net cash flows of the project. This method provides an indication of the risk and the liquidity of the investment, the shorter the payback period, the less "Risky", presumably, is the investment. However, this method does not take into account the size and timing of the net cash flows (RTP) during the period of recovery, which it considers as a whole and this should be used alongside other investment evaluation methods. Firstly is estimated the annual net cash flow scheduled to show in the preliminary design business. Net Cash Flow of investing for each year is defined as follows:

Table 19. Net Cash Flow (EURO)

NET CASH FLOW (EURO)								
YEAR	SALES	PRODUCTION COST	GROSS MARGI	TAX(35 %)	NET MARGIN	DEPRECIATION	NCF	CUMULATIVE NCF
2016	648.000 €	489.966 €	158.035 €	55.312 €	102.722 €	36.500 €	139.222 €	139.222 €
2017	712.800 €	535.228 €	177.572 €	62.150 €	115.422 €	36.500 €	151.922 €	291.144 €
2018	784.080 €	626.737 €	157.343 €	55.070 €	102.273 €	36.500 €	138.773 €	429.917 €
2019	862.488 €	682.062 €	180.426 €	63.149 €	117.277 €	36.500 €	153.777 €	583.694 €
2020	948.737 €	743.285 €	205.452 €	71.908 €	133.544 €	36.500 €	170.044 €	753.737 €
2021	1.043.610 €	811.077 €	232.533 €	81.387 €	151.146 €	36.500 €	187.646 €	941.384 €
2022	1.147.972 €	886.197 €	261.775 €	91.621 €	170.154 €	36.500 €	206.654 €	1.148.037 €
2023	1.262.769 €	969.495 €	293.274 €	102.646 €	190.628 €	36.500 €	227.128 €	1.375.165 €
2024	1.389.046 €	1.061.934 €	327.112 €	114.489 €	212.623 €	36.500 €	249.123 €	1.624.288 €
2025	1.527.950 €	1.164.600 €	363.350 €	127.172 €	236.177 €	36.500 €	272.677 €	1.896.966 €

It is easy to understand from the cumulative (NCF) the 854.966 € will be repaid in the first 5 years of life investment. Therefore, the payback period of the investment cost will be about five years. This constitutes a relatively satisfactory in the case of investment, if we can calculate the amount of the total investment.

6. Internal Rate of Return (IRR)

Internal Rate of Return is the ratio of the annual net profit of the business after depreciation, interest and taxes to the capital invested. In evaluating investments like this are usually used two performance factors:

- The Internal Rate of Return of whole capital (total investment).
- The Internal Rate of Return of Private Capital.

The Internal Rate of Return on total investment (854.966 €) with banking loan will be calculated using the formula:

$$R = (\text{Net Margin}) * 100 / \text{Total Investment}$$

The Internal Rate of Return on Private Capital (170.993 €) calculated using the formula:

$$Re = (\text{Net Margin}) * 100 / \text{Private Capital}$$

Thus, using the above two formulas substituting the respective values (Internal Rate of Return excluding interest) gives the following summary table:

Table 20. Internal Rate of Return (EURO)

Internal Rate of Return										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
NET	78.997 €	91.697 €	78.548 €	93.552 €	109.819 €	127.421 €	146.429 €	166.903 €	188.898 €	212.452 €
TOTAL INVESTME	854.966 €									
R	9%	11%	9%	11%	13%	15%	17%	20%	22%	25%
NET	78.997 €	91.697 €	78.548 €	93.552 €	109.819 €	127.421 €	146.429 €	166.903 €	188.898 €	212.452 €
PRIVATE INVESTME	170.993 €									
Re	46%	54%	46%	55%	64%	75%	86%	98%	110%	124%

It is observed that the Internal Rate of Return in the first years is not very satisfactory for both the total investment capital and for private capital. However, more interesting is the Internal Rate of Return on private capital because a large proportion of the total investment is funding by the Government (427.483 €), which should not be taken into account in the evaluation of the rate.

7. BREAK EVEN POINT

Break-even point (BEP) is the point at which cost or expenses and revenue are equal: there is no net loss or gain, and one has "broken even." A profit or a loss has not been made, although opportunity costs have been "paid," and capital has received the risk-adjusted, expected return. It is shown graphically as the point where the total revenue and total cost curves meet. In the linear case the break-even point is equal to the fixed costs divided by the contribution margin per unit.

Sales Revenues = Cost of Production

Sales Revenue = (Sales Volume) * (Price per Unit) and

Production Cost = (Fixed Costs) + (Variable costs per unit)

*(Sales volume) So, if:

X = the volume of sales in neutral

Y= the sales value

t = price per unit

m = variable costs (directly dependent on production power) per

unit p = fixed costs regardless of output

Will be:

$$Y = t * x \quad \square \quad y = c + x * m \quad \square \quad t * x = c + x * m \quad \square \quad x = p / t - m$$

The allocation of variable and fixed costs of the company (production volume of 432,000 pounds and unit price 1.50 €), during the first year of operation (2016), presented in the table below.

Table 21. Allocation of Variable & Fixed Costs (2016)

Allocation of Variable & Fixed Costs (2016)			
Description	FIXED COSTS	VARIABLE COSTS	VARIABLE COSTS PER
Marketing Expenses	-	64.800 €	0,15 €
Raw Materials	-	353.066 €	0,82 €
General Expenses	14.500 €	-	
Human Recourses	-	57.600 €	0,13 €
Loan Obligation	Grace Period	-	-
Depreciation	36.500 €	-	-
SUM	51.000 €	475.466 €	1,10 €

Based on the above table will be:

$$X = p / (t-m) = 51.000 \text{ €} / (1.50 \text{ €} - 1.10\text{€}) = 127.696 \text{ kg.}$$

Therefore, the "Break Even" point of sales revenue will be:

$$Y = t * x = 1.50\text{€} * 127.696 = 191.544 \text{ €}$$

8. List of Equipment Suppliers

Table 22 Suppliers of Equipment

Suppliers of Equipment			
No	Company	Region	Website
1	AEMKO	Athens	http://www.atemko.gr/
2	Kourlabas-Theodore Ltd	Athens	http://kourlampas.gr
3	Ioannidou	Larissa	http://www.ioannidou.gr/
4	Simsirikis-Commercial Kitchen and Laundryequipment	Alexandroupoli	http://www.simsirikis.gr
5	Varanakis	Athens	http://www.varanakis.com/
6	Artel-Konstantinidis	Thessaloniki	http://www.artel.gr
7	A. Skatharoudis-Bakery and Pastry Equipment	Thessaloniki	http://www.skatharoudis.gr
8	EXANA	Athens	http://exana.gr/
9	Elmach	Thessaloniki	http://www.elmach.gr
10	In.Con.Eq Hellas	Athens	www.inconeq.gr
11	Cronus	Thessaloniki	http://www.cronusequip.gr
12	Leonidas	Athens	http://www.oleonidas.gr/
13	Panagiotis Dimou & Co-Bakery and Pastry FoodMachines	Thessaloniki	http://www.pdimou.gr
14	Texart	Thessaloniki	http://www.texart.gr/
15	TGS HO.RE.CA	Ioannina	http://www.tsiligiannis.gr/
16	Frigio Hellas	Thessaloniki	http://www.frigohellas.gr/
17	MATSAS EQUIPMENT	Agrinio	http://m-estiasi.gr/
18	Zantequip	Zakinthos	http://www.zantequip.com.gr/
19	Chrissomallis S.A	Thessaloniki	http://www.chrissomallis.gr/

9. List of raw materials Suppliers

Table 23 Suppliers of Raw Materials

Suppliers of Raw materials			
No	Company	Region	Website
1	Papafili	Corinthos	http://www.papafili.gr/
2	Zak Commercial Ltd	Attiki	http://www.golden-eggs.gr/
3	Marras S.A	Corinthos	http://mills.marras-sa.gr/
4	Mills of Crete	Crete	http://www.mills.gr
5	Sarantopoulos S.A	Athens	http://www.ksarantopoulos.gr/
6	Asopos Mills	Athens	http://www.asoposmills.gr
7	Flour Mills Thrakis	Alexandroupolis	http://myloi-thrakis.gr
8	Kalpanides Flour Mills	Serres	http://www.kaplanidis.gr
9	Petromylos Vasilikon	Thessaloniki	http://www.petromilos-vasilikon.gr
10	Carlina	Larisa	http://carlina.gr
11	Sefco Zeelandia	Athens	http://www.sefcozeelandia.gr
12	SOVIMO	Attiki	http://www.sovimo.gr/
13	Kallas Papadopoulos	Athens	http://www.kallas-pap.com/

REFERENCES

<https://www.dei.gr>

[http://www.eydap.](http://www.eydap.gr)

[gr](http://www.eydap.gr)

<http://www.piraeusbank.gr/el/epiheiriseis-epaggelmaties/logariasmoi-diathesima/ependyseis>

<http://www.themanager.org/Models/p5f.htm>

Traditional pasta Parnassos Amfiklia J.Mpalomenos, tel : 0030-2234022362 <http://www.statistics.gr>

Questionnaire answered by the representatives of the companies by interviews

QUESTIONNAIRE

1. *Short company's history*

- Start up by present owner
- Family business, 1st, 2nd generation
- Bought company
- Turner over for the last 3 years

2. *What were the main challenges that you faced when setting up your company?*

- Advice on choosing the right machinery
- Lack of networks (professional networks, suppliers etc)
- Too few customers, erratic orders, difficult orders, not credit worthy customers
- Not enough operating capital
- Less than perfect product
- Disorganized
- Limited knowhow (untrained - underpaid personnel)
- Others

3. *Please classify your products:*

- Traditional (local)
- Common (classical)
- Specialties (e.g. buffalo)
- Innovative

4. *What is the market size of your sector in Greece (volume, sales turnover, number of companies)? Where can we find such information?*

5. *Please state the main product ranges your company produces:*

6. *Which associations, cooperatives operate in your market? Are you a member? How would you evaluate their activities?*

Please describe your competition:

7. *How do your products achieve competitive advantage (tick as appropriate):*

- high product quality
- traditional product
- low prices
- product innovation
- heavy advertising & promotion
- powerful sales forces
- distribution channels
- other

8. *How would you characterize the quality of your products compared to competition?*

5	4	3	2	1
excellent				poor

9. *Are your products PDO / PGI certified?*

- Yes
- No

10. *Have you patented your products?*

- Yes
- No

11. *Please state your quality certifications:*

- HACCP 22000
- IFS FOOD
- Other

12. *Please describe the distribution channel(s) of your company:*

13. *Do you have contact with any academic institution , which and how you evaluate your collaboration*

14. *What are your expectations and needs from an Academic Institution*

28. *What would you advise a newcomer who plans to enter your market?*
29. *What is the cost range for a newcomer to establish a small but viable meat processing company (in euros)?*
- o Bellow 200.000
 - o 200 – 500.000
 - o 500.000-1.000.000
 - o Over 1.000.000
30. *Please describe the procedure for establishing a new processing company of your sector.*
31. *Please state some of the suppliers of your processing line? (name / telephone / can we visit him?)*
32. *Exports represent of your sales turnover:*
- o No exports
 - o 0-20%
 - o 20-50%
 - o 50-70%
 - o 70-100%
33. *In which countries do you export your products?*
34. *The major barriers that you face when entering foreign (European) markets (exports) are:*
35. *Do you know the meaning of brand and branding?*
36. *How do you differentiate your products (added value / positioning) in foreign markets?*
37. *Do you face any difficulties finding raw materials? And what is the main origin of them*
38. *What competition do you face from importers?*

39. *Potential of the sector for the promotion of culinary tourism:*

40. *Are you satisfied with the financial results of your company?*

41. *What are your expectations for the next 5 years ?*

42. *Please add any comments you want to make:*

Sample Interview Reports



Study No & title: #4 Bakery , confectionary and pasta	Researcher/s: N. CHATZILIAS	Date: 03/10/2015
Company title: AVEROF O.E		Business Type: bakery confectionary and catering production
Address: 11 Vas. Georgiou Str., 54640 Thessaloniki tel.: +30 2310 814284 fax: +30 2310 861695		www.averof.gr
Contact person: Marios Aberof	Mobile: 697800882 0	GPS location N E
Main activity sector: B2B B2C		Other activities: President of the GREEK professionals of confectionary business organization and vice president of the E.E confectionary business representatives
Year of establishment: 1962	Management & ownership:	

Annual turnover:

- o Up to 200.000
- o 201.000 – 400.000
- o 401.000 – 600.000
- o 601.000 – 800.000
- o 801.000 – 1.000.000
- o 1.000.001 and over

No of employees (TF equivalent):

- o Up to 10
- o 11 – 20
- o 21 – 30
- o 31 – 40
- o 41 – 50
- o 51 & over

Level of activity:

Production and sales with their shops of confectionary and bakery products. Catering business

If exporter, main markets:

If importer, national origin of main imports: Italy , France and Germany

In Greece, main geographical Markets: Region of Thessaloniki

Short company history/ researcher notes:



The AVEROF bakeries opened their doors to the public in 1962 and since then continue to write the sweetest history in pastry in Thessaloniki .In their long history, they have always been the benchmark for many taste Thessalonians.

In 1996 he opened his shop in Perikleous 48 Kalamaria and from 1997 began to work part company with products without sugar and low-calorie. Philosophy of our company is the production of fresh and quality products daily.

o Up to 10

o 11 - 20

o 21 - 30

o 31 - 40

o 41 - 50

o 51 & over

Level of activity: the company designs and manufactures in Greece full series stainless steel construction for food laboratories, stoves and refrigerators baking stoves, refrigerators, appliances for baking and catering, and a host of other products for laboratories and shops of food.

The company represents exclusively for the Greek market, selected European factories, of which you briefly mention the following:

Polin & C. Spa, Bravo S.p.A., Alma, Zelaieta, Comenda S.p.A., Pomati, Merand S.A., Acfri.

If exporter, main markets:

If importer, national origin of main imports: world wide machineries

In Greece, main geographical Markets: whole Greece

Short company history/ researcher notes: Plus the Forum. PAPAΚΙΡΙΑΖΙΣ SA, engaged for three generations with the complete equipment Laboratory Confectionery - Bakery - Food Processing, CATERING, Plants and Food and is now one of the largest factories in the area: Area Production 1,500 sq.m. - Warehouses A & B Materials 500 sq.m. - Warehouses of finished goods 1,000 sq.m.

Our long cooperation with the biggest and oldest factory in Italy, the POLIN over 45 years, producing ovens and machinery since 1929 and undoubtedly one of the largest in the world of its kind, gave us the possibility and the opportunity to gain such experience and knowledge so we can give solutions to the problems of the customers both in the operational machine and in matters of the production line.

Thanks to years of experience, highly trained staff, its modern mechanical equipment, the continuous research in new areas of technology, and its cooperation with major foreign firms (POLIN GROUP (POLIN, OSTALI, MIXER), BRAVO, ACFRI, ZELAIETA, ALMA, PRIMITALIA, COMENDA, POMATI, etc.), has acquired the knowledge to propose the best quality at the lowest possible cost.



Study No & title: #4 Bakery , confectionary and pasta	Researcher/s: N. CHATZILIAS	Date: 08/10/2015
Company title: KOKKINOS FOURNOS I.K.E		Business Type: BAKERY AND CONFECTIONARY SHOPS
Address: 1, Apostolou Pavlou str. & Manolaki Kiriakou 4 & Armenopoulou Thessaloniki Tel. +30 2310 206337		www.kokkinosfornos.gr
Contact person: Giannis Tsiaras	Mobile:	GPS location N E
Main activity sector: <input type="checkbox"/> B2B <input checked="" type="checkbox"/> B2C		Other activities: catering ,
Year of establishment: 1960	Management & ownership:	
Annual turnover: <input type="checkbox"/> Up to 200.000 <input type="checkbox"/> 601.000 – 800.000 <input type="checkbox"/> 201.000 – 400.000 <input type="checkbox"/> 801.000 – 1.000.000 <input checked="" type="checkbox"/> 401.000 – 600.000 <input type="checkbox"/> 1.000.001 and over		
No of employees (TF equivalent): <input type="checkbox"/> Up to 10 <input type="checkbox"/> 31 - 40 <input checked="" type="checkbox"/> 11 - 20 <input type="checkbox"/> 41 - 50 <input type="checkbox"/> 21 - 30 <input type="checkbox"/> 51 & over		
Level of activity: production bakery and confectionary products		
If exporter, main markets:		
If importer, national origin of main imports:		
In Greece, main geographical Markets: Region of Thessaloniki		

Short company history/ researcher notes:



In 1960 Michael Tziallas, a artotechnitis second generation from Epirus, made his entrepreneurial dream a reality. Opened in RED OVEN in the center of Thessaloniki at the Rotunda.

In the last 20 years works with equal success a branch RED OVEN in a

neighborhood of Ano Toumba Street Triantafyllopoulou while the immediate future plans of the company is expanding with the opening of a third store in Eastern Thessaloniki

Study No & title: # 4 Bakery confectionary and pasta	Researcher/ N. s: Chatziliias	Date: 25/11/2015
Company title: LOULIS SA		Business Type: INDUSTRIAL FLOUR MILLS
Address: LOULIS MILLS S.A. - VOLOS 82, Iasonos Str. 882 21 Volos TEL. +30 24210 94 550 - FAX +30 24210 94 555		www.
Contact person: DESPOINA LOYLI	Mobile: 694565497 2	GPS location N E
Main activity sector: B2B B2C	Other activities: PRODUCTION OF RAW MATERIALS FOR CONFECTIONARY AND BAKERY SCHOOLS	
Year of establishment: 1782	Management & ownership:	
Annual turnover: <ul style="list-style-type: none"> o Up to 200.000 o 201.000 - 400.000 o 401.000 - 600.000 o 601.000 - 800.000 o 801.000 - 1.000.000 o 1.000.001 and over 		

No of employees (TF equivalent):

- o Up to 10
- o 11 - 20
- o 21 - 30
- o 31 - 40
- o 41 - 50
- o 51 & over

Level of activity:

INDUSTRIAL FLOUR MILLS

If exporter, main markets: Balkan countries

If importer, national origin of main imports:

Europe

In Greece, main geographical Markets:

All around Greece

Short company history/ researcher notes:

We are not only one of the long established Greek companies with a history dating back to 1782, but we are also one of the oldest mills with a longstanding presence on the internet. The page that you are visiting is the 3rd version that we have developed over the last 10 years.

Our goal is to provide a user friendly environment where you can learn more about our company and comprehend our philosophy. We have attempted to provide comprehensive insight so that visitors to the site can feel that they have really become acquainted with us after their visit.

This time we have created an easy to use recipe search engine for all the essential recipes required by the Modern Greek baker, by posting over 100 recipes on our site. Our customers can use this search engine to easily and quickly find the flour they are interested in as well as the recipes that have been prepared by the top technical bakers at our company.

References

1. Business Monitor international (2015) BMI Research database: industry Research & Data.. (available at <http://www.bmiresearch.com>)
2. Eurostat (2015) Structural Business Statistics. (available at <http://ec.europa.eu/eurostat/web/structural-business-statistics/data/database>)
3. Greek Statistical Authority (2015) Research on Family Budgets 2014. (available at <http://www.statistics.gr/statistics/-/publication/SFA05/2014>)
4. Greek Statistical Authority (2015) Greece in Figures 2014. (available at <http://www.statistics.gr/greece-in-figures>)
5. Greek Statistical Authority (2015) International Trade Database. (available at <http://www.statistics.gr>)
6. Pasta Technology Introduction to Pasta Technology, Bühler AG Ali Kocak, Process Engineer
7. Eurostat Structural Business Statistics,
8. Hellenic Statistical Authority (EL.STAT), <http://www.statistics.gr> Enterprise Greece, <http://www.enterprisegreece.gov.gr>
9. Foundation For Economic and Industrial Research, <http://iobe.gr> Baking Industry Research Trust, <http://www.bakeinfo.co.nz>
10. Hellenic Federation of Bakers, <http://www.oae.gr>
11. FMI SA, Grigoriadis – Bakery Equipment, <http://www.fmigrigoriadis.gr>
12. Traditional Bakery “Tonis”, Ioannina Greece
13. Traditional pasta Parnassos Amfiklia J.Mpalomenos, tel : 0030-2234022362 <http://www.statistics.gr>
14. IOBE, Food and beverages: Facts and Figures 2014 European Union, sectoral library European Central Bank, library, Figures
15. [Issue 5 2014](#) / 27 October 2014 / Frank A. Manthey and Elena de la Peña, North Dakota State University
16. [Issue 6 2013](#) / 2 January 2014 / Alexis Freier, Research & Development and Technical Services Manager, Dakota Growers Pasta Company

17. [Issue 2 2012](#) / 1 May 2012 / Mian N. Riaz, Head Extrusion Technology Program, Food Protein R&D Center, Texas A&M University and Brian Plattner, Process Engineering Manager, Wenger Manufacturing Co
18. [Issue 6 2010](#) / 15 December 2010 / Maria Ambrogina Pagani, Professor of Cereal Technology, University of Milan, [Developments in Food Engineering](#) pp 304-306 Chapter
19. Modelling Pasta Cooking Processes L. Piazza, M. Riva, P. Masi
20. Pasta and Semolina Technology Ron Kill, K. Turnbull John Wiley & Sons
21. The Technology of Bread-Making, Including the Chemistry and Analytical and Practical Testing of Wheat Flour, and Other Materials Employed in Bread-Making and Confectionery by William Jago
22. Figoni, Paula I. (2011). *How Baking Works: Exploring the Fundamentals of Baking Science* (3rd ed.). New Jersey: John Wiley & Sons.
23. Pfister, Fred. "[Pfister Consulting: History of Baking – How Did It All Start? Yes people](#)". Archived from [the original](#) on 3 February 2013. Retrieved January 1, 2013.
24. Morgan, James (2012). *Culinary Creation*. [Routledge](#). pp. 297–298. Rochelle, Jay Cooper (2001). *Bread for the Wilderness: Baking As Spiritual Craft*. Fairfax, VA: Xulon Press. p. 32
25. The Chorleywood Bread Process, By S P Cauvain, formerly BakeTran, UK, L S Young, formerly BakeTran, UK
26. Davidson, Alan (2014). [The Oxford Companion to Food](#). Oxford University Press. p. 213. International Food Information Service, ed. (2009). [Dictionary of Food Science and Technology](#) (2nd ed.). Chichester, U.K.: Wiley–Blackwell. p. 106.
27. Edwards, W.P. (2000). *The Science of Sugar Confectionery*. Cambridge: Royal Society of Chemistry. p. 1. <http://www.historicfood.com/The%20Art%20of%20Confectionery.pdf>
28. Jerry Richardson, Geert Andersen, "Confectionery" in Ullmann's Encyclopedia of Industrial Chemistry 2005 Wiley-VCH, Weinheim. [doi:10.1002/14356007.a07411](https://doi.org/10.1002/14356007.a07411)
29. *International Food Information Service, ed. (2009). Dictionary of Food Science and Technology (2nd ed.). Chichester, U.K.: Wiley–Blackwell. p. 39*
30. [Issue 2 2008, Past issues](#) / 13 June 2008 / Francesco Pantò, Roberto Ranieri and Renzo Rizzo, R&D, Barilla G. e R. Fratelli
31. [Issue 2 2008, Past issues](#) / 13 June 2008 / David W. Hatcher and James E. Dexter, Canadian Grain Commission Grain Research Laboratory

32. <https://www.dei.gr> <http://www.eydap.gr>
33. <http://www.piraeusbank.gr/el/epiheiriseis-epaggelmaties/logariasmoi-diathesima/ependyseis>
34. <http://www.themanager.org/Models/p5f.htm>