MASTER IN BUSINESS ADMINISTRATION

MASTER THESIS

“INVESTING IN GREECE: FRAMEWORK AND ANALYSIS”

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Abstract.

Greece has entered in a period with major similarities with the historic period of “Great Depression”. There is huge unemployment, severe economic crisis, austerity measures, fiscal instability and long term recession. Under these conditions, except of the necessary reforms, investment is the vaulting horse which can bring the country back to prosperity. This major economic process is the subject of this master thesis, the framework and analysis of investment in Greece. The analysis is implemented by an internal research of the structural framework and an external research of the political, economic, social and technological forces that contribute to the determination of the investment environment. The analysis shows that the structural framework such as Investment Law, the Fast Track, National Strategy Reference Framework, “Invest in Greece” Agency and privatisation program play a significant role but not the crucial one. The major forces are the macroeconomic environment, inefficient public administration, bureaucracy, and access to financing. On the contrary, Greece is placed in an important geopolitical position, with inhabitants that work very hard, under the international attention and foreign rescue packages, and major willingness for reforms and growth. At this point the thesis raises the point for further research in identifying the economic sectors that are attractive for foreign investment and can exploit the national competitive advantage.
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Chapter 1. Introduction.

The “Great Depression” is the historical period that most countries and the world faced a severe economic depression in the decade preceding World War II. It was the longest, deepest and most widespread recession of the 20th century. It started after the stock market crash in United States in 1929, quickly spread to almost every country of the world and lasted until about 1939. It has devastating effects in personal income, tax revenue and profits. Trade was plunged, industry hit hard, unemployment rose, construction was virtually halted, demand dropped, banking panics occurred and most areas of the economic activity suffered. Is has also effects in social and cultural environment.

Regarding to the causes of that period, there are those who believe that it was primarily a failure of free markets and those who believe it was primarily a failure of government that compounded the problem.

The leading sources of recovery were currency devaluations and monetary expansion. John Maynard Keynes in his book “The general theory of employment, interest and money” which published in 1936 argued that the solution to Great Depression was to stimulate economy through and inducement to invest. This investment was primarily government in the sector of infrastructure and resulted to income injections, which drove to income spending, which in turn stimulated production and investments involving still more income. This stimulation starts a cascade of events, whose total increase in economic activity is a multiple of the original investment. A historical example of the Keynesian approach was “The New Deal” that implemented a series of economic programs in United States during 1933-1936 by President Franklin Roosevelt.

In nowadays there is a country which is too small to influence Europe and very reluctant to reform it self. There are signs of a not wealthy or even mildly society. The production sector of the economy has taken a back seat to accounting and finance. There is an environment of panic lenders, bailout packages from foreign organisations, default rumours and rating agency’s downgrades. The Gross Domestic Product falls, economic declined for fourth year is meet, private consumption dropped and also investments plus net exports dropped. Unemployment rose reaching historical high of other periods and small businesses have closed. Wages and salaries have been cut.

In this condition of economic freefall there have been implemented austerity measures targeting in the sustainability of sovereign debt and balancing of budget deficits. These measures had not realistic results, moved the country to a greater recession and brought to the brink of a “Great Depression” like the historical one which was described above. The similarity between the past period and modern is defined in the common characteristics in economic and social environment. And as it previous stated there must be also a similarity in the tools and measures that must be implemented driving the country out of the recession and giving hope to its inhabitants.

These measures apart from the necessary reforms can be found in business activity and investment process, which operates as an economic and income multiplier, returning the country to growth.

This country, which influenced the world in the past with its great civilisation and targets the attention of the world in nowadays for the negative achievements, is Greece.
Having in mind the conditions of the Greek State and the socio-economic environment, as was described in summary, the analysis and investigation of investments in Greece as a vaulting horse to growth and prosperity is up to date and important as much then ever in previous decades.

This analysis comprises the goal of the thesis which is going to be presented in next chapters. This analysis will determine the forces that contribute and influence the national investment environment and also the structure framework which determines and support these forces.

In the chapter of literature review is described the definition and meaning of the process of investment and the dissociation related to economic and finance criteria. It is defined the relation with international businesses and are described the categories of international business. The international theories of trade are pointed with their specific characteristics and the theories of international investments. Also are defined the theories and forces that contribute to the success of a nation in international business and investments among with the stages of national competitive development.

In the chapter of methodology are defined the stages that determine the process of management decisions and investment plans. Also is described the stage of environmental scanning and the characteristics of it in identifying the investment environment. This environment has two parts, the internal which is connected to the national investment framework and the external which is related to political, economic, societal and technological forces. The implement that is used for the analysis of the external environment is the PEST analysis which is described with the specific characteristics of the thesis.

In the chapter of internal environment scanning is described the national investment framework related to regulation, legislation and mechanisms that contribute to the investment process. These mechanisms are the National Strategic Reference Framework, the Investment Law, the Fast Track Law and the Public Private Partnership Law. Also is described the official state agency that promotes and facilitates investments in Greece, the “Invest in Greece SA” Agency and the official state digital network related to investments processes.

In the chapter of external scanning are described the forces of the national investment environment using the PEST analysis. These forces are political with focus on the agreements between the Greek State and international organisations that define the future national direction and not in the internal political system which has limited power in determine that direction, economic which describe the macroeconomic and microeconomic conditions in relation with competitiveness and business process, societal related to lifestyle trends and public opinion, and finally technological related to national Research & Development and innovation characteristics.

The final chapter describes the conclusion of internal and external environmental scanning focused on investment framework and investment analysis. The conclusion determines the specific characteristics of the environment and analyses the effectiveness of them to create an attractive international context of businesses and investments in addition with the identification of the factors that contribute negatively in pulling them.
Chapter 2. Literature review.

A simple definition of investment suggests that is the process of product goods that will be used to promote other goods. This simplistic approach defines that investment is a process of putting money for profit or material result and anything that worth buying because it may be profitable in the future.

There is a different approach of investment process regarding to the criteria. From economic aspect can be defined as the amount purchased per unit time of goods which are not consumed but are used for future production. It is also a variable of Gross Domestic Product as everything that remains of total expenditure after consumption, government spending and net exports.

From finance aspect investing is a process of putting money into something with the expectation of gain within an expected period of time as a result of through analysis and a high degree of security for the principal amount and the return.

Invest is one of the most important variables of economics and a factor that deals to economic growth because increases an economy’s capacity to produce

As a process is closed related and identified with international business and international environment regarding to the interaction between domestic and foreign environmental forces. Above are described the actions of international businesses.

The international business can be divided in four categories, which are:

- International merchandise trade which defined as the market and selling of products between companies and organisations of two countries (imports and exports of goods).
- International service trade which defined as the market and selling of services between firms of two countries (finance services, telecommunications, real estate, insurance services etc).
- International portfolio investments which presents the purchase of stocks and bonds to obtain a return on the funds invested.
- Foreign direct investments (FDI) which are direct investments in structures, organisations and equipment in a foreign country at a level that is sufficient to obtain management control.

It is essential to be described the theories of international trade and investment as a source of understanding the principles and forces that contribute to the investing process.

The international trade theories are:

- Mercantilism, a theory which evolved in Europe during the 16\textsuperscript{th} and 17\textsuperscript{th} century and pointed that a nation’s wealth depends on accumulated treasure (gold) and that government policies should promote exports and discourage imports due to increase their wealth. Independently of the fact that the theory was discussed centuries ago is still up to date through the Neo-Mercantilism or Protectionism.
- The theory of absolute advantage which was developed from Adam Smith and presented in his book “The wealth of nations” in 1776. The main element is that a nation has an absolute advantage when it produces a larger amount of goods for the same amount of inputs as another country can. Through that theory Adam Smith presented his argument to the theory of Mercantilism.
The theory of comparative advantage which was developed from David Ricardo in his book “The principles of political economy and taxation” in 1817. It presented that a nation having absolute disadvantage in the production of two goods compared with another nation has a comparative or relative advantage in the production of the good that the absolute advantage is less.

The theory of relative factor endowments or the Heckscher-Ohlin theory presented by Eli Heckscher and Ertil Ohlin in 1933. The theory argued that nations must export products that require large amount of their abundant production and must import products that require large amount of their scare production factors.

The theory of international product life cycle which was developed from Raymond Vernon in the beginning of 1960 and presented why a product that begins as a nation’s export eventually becomes its import. The theory has four stages, the innovation stage, the growth stage, the maturity stage and the decline stage.

The international investment theories are:

- The monopolistic advantage theory which argued that foreign direct investments are made from firms in oligopolistic industries possessing technical and other advantages over endogenous firms.
- The product and factor market imperfections theory which presented that company invests overseas were in industries that typically engaged in heavy product research and marketing efforts.
- The financial factors theory which argued that companies with overvalued currencies are attracted to invest in countries with undervalued currencies.
- The international product life cycle theory that discussed above and presented the connection between the natural stage of foreign direct investments and the life of a product.
- The follow the leader theory which argued that industries follow the firms which are the leader in an oligopolistic industry.
- The cross investment theory which presented that foreign direct investment is a defence measure by oligopolistic firms to each other’s home countries.
- The internalization theory which argued that a firm will transfer its superior knowledge to a foreign subsidiary rather then to sell it in the market as a concept to obtain a higher return on investments.
- The dynamic capabilities theory which showed that a firm must have not only ownership of resources but the ability to export capabilities over time to invest successful overseas.
- The eclectic theory of international production which argued that an investment process overseas must have three specific characteristics, location-specific, internalization and ownership-specific.

Except of the theories that were developed about trading and investing it is described the environment in a national and state level and not in a corporate and firm state regarding to the understanding of the forces that contribute to failure or success of a hall country to attract international businesses and investments and the national competitiveness as an ability to design, produce and distribute products in an international trading context in parallel with increasing earnings returns on resources.
Michael Porter in his book “The competitive advantage of nations” (1990) tried to raise the basic question referring to why some nations succeed and others failed in international competition. This question is closely related to the attractiveness of specific countries to investments and the failure of others to attract investors. In his model, he used the “diamond” as an endogenous factor and two other aspects as exogenous. He also focused on the national competitive stages of development, which demonstrate the basic characteristics of a nation related to the sources of economic development and the connection between the “diamond” model and the stages of development. These stages in parallel with the nation’s competitive advantage can determine the specific parts of the economy that are worth investments plans and procedures.

The stages of national competitive development are (figure 2.1):

- **Factor driven** regarding to nations that the advantage draw almost from basic factors of production, like natural resources, and inexpensive semi-skilled labour force. This economy is sensitive to world economic cycles and conditions.
- **Investment driven** regarding to the willingness and ability of a nation to invest aggressively. They invest in foreign processes and technologies through licenses and joint ventures. They invest to construct products equipped with the best technology on global markets. These methods are not just applied but improved upon.
- **Innovation driven** related to a condition where the mix of industries and segments of a nation can successfully compete internationally. Especially nations not only improve foreign technology but can create it.
- **Wealth driven** regarding to nations that begin to lose competitive advantage in international environment, they are in the stage of decline and the economy is driven by past wealth that has already been achieved.

Figure 2.1. Four stages of national competitive development.
The determinants of national advantage are (figure 2.2):

- Factors conditions regarding to the nation’s position in factors of production related with infrastructure and skilled labour that are necessary to compete in international environment.
- Demand conditions related to home demand of specific products or services.
- Related and supporting industries regarding to the presence or absence in the nation of supplier industries and related industries.
- Firm strategy, structure and rivalry exploring the conditions in governing related to companies’ creation, organisation, management and the nature of domestic rivalry.

These determinants as a system or individually are responsible for a nation’s succeed in specific industries because they create a home environment that is dynamic, challenging and attractive for companies which gain a competitive advantage. This advantage is a result of pressure on firms to innovate and invest, to understand the direction in which resources and skills are deployed, to satisfy the goals of managers and stakeholders and finally to explore the availability of resources and skills necessary to achieve a competitive advantage in specific economic sectors.

Figure 2.2. Determinants of national advantage.

Apart from the above determinants of nation’s competitive advantage there are two additional variables that are important and influence the presence or absence of specific industries. These variables are changes and government. Changes regarding to events that are outside the control of a company’s or even the control of an independent state like external political developments, violent conflicts, social instability, breakthroughs in basic technologies, inventions and major shifts in foreign market demand.

Government regarding to regulation and legislation which can affect domestic rivalry through antitrust policy, can pressure for innovation and R&D research, and can alter home demand conditions and through public purchases has the ability to stimulate supporting and related industries.
These two variables in parallel with the four factors of national competitive advantage are more important and up to date than ever because of the international environment which characterized from globalisation as a factor of economic, social and political approach.

A different approach to Porter’s “diamond” was given by Daniel Van Den Bulcke, Alain Verbeke and Wenlong Yuan in the survey “Handbook of small nations in global economy” (2009). The main topic suggested that in small nations, like the Greek, the “diamond” model with the four sets of parameters is unlikely to exist if only domestic elements are taken into account. The thesis presented that “small nations increasingly need to rely heavily on both home-grown and foreign multinationals enterprises to achieve domestic economic success”. This conclusion configures the importance of investments in economies with characteristics like the Greek. So they suggested three basic factors that generate a successful national investment strategy. These factors are:

- The border must be made as permeable as possible to international trade and investment flows meaning that the state environment makes it easy for foreign investors to bring raw materials, personnel, intermediate goods and capital.
- The sectors targeted for priority development must be those where are at least a latent location advantage that can be unlocked meaning that strategic location, climate conditions or underutilized resources can have a significant role.
- Once an investment process is taking place and positive outcome are achieved it must be reinvested in developing locations advantages at the macro and sector levels.

The combination of the Porter’s theory and the survey about small nations gives a matrix that in vertical axis has the four determinants of national competitive advantage and in horizontal axis has the three main sources between domestic economy and foreign economies (table 2.1).

Table 2.1. The single diamond in small economies.

<table>
<thead>
<tr>
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<th>Improving permeability of borders</th>
<th>Unlocking latent location advantages</th>
<th>Crafting new location advantages</th>
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<td>Factor conditions</td>
<td>Weak Strong</td>
<td>Weak Strong</td>
<td>Weak Strong</td>
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<td>Demand conditions</td>
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<tr>
<td>Related and supporting industries</td>
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<tr>
<td>Strategy, structure and rivalry</td>
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The key element of the matrix is which of and what measures must be taken for the activation and implementation of the twelve right grey shaded columns that will create an attractive investment environment for a small nation like the Greek.

These approaches were first discussed from Alfred Marshall, who is known as one of the founders of economics, in his book “Industry and trade” published in 1919 more as empirical and less as a theoretical attempt.

He suggested that firms tend to cluster together in a geographical basis because of:

- Advantages associated with pooling on a common labour force.
- Gains from the development of specialized local suppliers.
- Benefits from the sharing of technological information within the geographic region.
Chapter 3. Methodology.

The process of investing, regardless of the type and the way, is part of the strategic management process. This process requires specific steps that determine in a more accurate mean the successful completion of the decisions that were made in relation to investment procedures. The process has four specific elements (figure 3.1) and is both rational and prescriptive, meaning that the model that is followed is what a person or a corporation should do in terms of strategic management and not what any particular may actually do. This model predicts, especially in an uncertainty environment like the one which is going to be described, the external conditions of a state like the Greek trying to explain all the necessary and possible factors that determine the investment process. Is important to be determined that in the analysis of the Greek investment environment the first stage of the model will be used because is the one that describes more accurately the changing situation. The others three parts are not used in the thesis because they are not answering the basic principle of it which is the analysis and framework of investments in Greece.

So environmental scanning can be determined as the monitoring, evaluating and disseminating of information from the external and internal environment of the Greek State and its purpose is to identify the strategic factors that determine key decisions and future strategies of investment processes.

Figure 3.1. Basic elements of strategic management process.

This model was first presented as a Strategic Management Model to Society for Advancement of Management (SAM) in the international meeting at Richmond USA in 1981 by Thomas L Wheelen.

The environmental scanning process has two parts (figure 3.2). The first part is the analysis of internal environment and the second part is the analysis of the external environment.

The analysis of the external and internal environment of the Greek State describes the two parts of the thesis. The external environment is described by the analysis of investment environment and the internal environment is described by the framework of investments.

The analysis of investments identifies all the political, social, technological and economic conditions that describe in a more accurate way the conditions of Greece. The description of the framework identifies all the legal procedures that are implemented by the Greek State in relation to investments and also describes the
public authorities and legislation which is responsible for the formulation and implementation of investment plans.

**Figure 3.2. Scanning the environment.**

The scanning and analysis of the external environment is implemented by using the PEST Analysis. This process is also described in bibliography as STEP Analysis by the acronyms of political, economic, social and technological. It may be found as PESTEL or STEPLE by adding the acronyms of legal or recently described as STEEPLE or STEEPLED by adding the acronyms of ethics and demographics. An updated version of PEST framework is the STEER Analysis, affected by the environmental sustainability responsibility, by the acronyms of socio-cultural, technological, economic, ecological and regulatory factors.

The factors that are described in PEST Analysis are:

- Political forces that provide laws, regulations and allocate power.
- Economic forces that regulate the exchange of money, materials, information and energy.
- Social forces that regulate customs, values and styles of society.
- Technological forces that generate problem solving inventions.

<table>
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<tr>
<th>Political forces</th>
<th>Economic forces</th>
<th>Social forces</th>
<th>Technological forces</th>
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<td>Memorandum of policies</td>
<td>Macroeconomic and economic facts</td>
<td>Human Development In.</td>
<td>Domestic expenditure on R&amp;D</td>
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<td>Central administration</td>
<td>Business environment</td>
<td>Eurobarometer-public opinion</td>
<td>Number of high-tech enterprises</td>
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<td>Medium-term strategy</td>
<td>Competitiveness</td>
<td>Consumer lifestyles</td>
<td>Patent applications</td>
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<td>The 26th decision</td>
<td>Labour force</td>
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<td>Athens Exchange</td>
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The above table describes the PEST Analysis of the external Greek State investment environment as it is presented in the different parts of the thesis in the bellow chapter.

The simplest and most used way for conducting environmental scanning above the PEST Analysis is the SWOT Analysis. The process is described by the acronyms of strengths, weaknesses, opportunities and threats. The external environment is formulated by the description of opportunities and threats. The internal environment is described by strengths and weaknesses. The external environment is consisted from factors that are outside the organization and not typically within the short-run control of top management. The internal environment consisted from forces that operate within an organization’s specific environment. The organisation could be the simplest form of corporation or even a hall state.

The conclusions that are contacted after the internal and external analysis are qualitative and not quantitative. This fact presents a difficulty and a threat of subjective observation and conclusion. The way to differentiate from that threat is the use and implementation of a large amount of sources from different organisations, statistical authorities, public and international entities. This implementation has a static and dynamic character, depending on the source of information.

The authorities that are used in the thesis are the Organisation for Economic Co-operation and development (OECD), the International Monetary Fund (IMF), the European Union (EU), the European Central Bank (ECB), the Hellenic Republic, the Bank of Greece, the Invest in Greece Organisation, the European Statistical Authority (Eurostat), the Hellenic Statistical Authority (Elstat), the Foundation for Economic and Industrial Research (IOBE), the Euromonitor International, the World Bank, the United Nations Development Program (UNDP), the United Nations Conference on Trade and Development (UNCTAD), the Eurobarometer, the Transparency International (TI), the World Economic Forum, the International Finance Corporation, Athens Stock Exchange (Athex), the European Investment Bank and the Institute for International Finance (IIF).

The sources from the above authorities contain an amount of surveys both qualitative and quantitative that are implemented for illation and analysis. These surveys are:

- The European Statistical Authority database and publications.
- The Hellenic Statistical Authority database and publications.
- The OECD database and publications.
- The IOBE database and publications.
- The World Bank database and publications.
- The Corruption Perceptions Index.
- The Bank of Greece database and publications.
- The ECB database and publications.
- The Standard Eurobarometer 2011.
- The Athex Factbook 2011.
- The Innovation Union Scorecard.
- The IMF database and publications.
- The Invest in Greece publications.
Chapter 4. Framework of investments.


The National Strategic Reference Framework (NSRF) is a reference document for development strategy under the provision of European Union funds for the period 2007-2013. The strategy focuses on the need to implement policies at national and regional level in a way to provide growth rate and increase productivity so that regions will become an attractive place for business installation without ignoring the same time the living standards of regional citizens and reducing disparities.

In the programming period 2007-2013 Greece aims at becoming an outward-looking country with strong international presence, productive and competitive economy, with emphasis in innovation, technology, education and sustainable development. This target will expand Greece’s growth potential and increase productivity at levels higher than the European Community average, with prospect to achieve real convergence, improve quality of citizens and boost employment.

The strategy approach relies on simplified planning and implementation mechanisms which serve specific objectives. These objectives are:

- **Invest in human capital.** The aim is to concentrate on developing quality human resources that contribute to sustainable growth and improve competitiveness. Human capital is directly linked to introduction of new forms for organising work in a way to expand knowledge, integration of good practices, skills and flexible adaptation.

- **Invest on sustainable infrastructure.** Priority will be given to operational interconnections of transport, completion of projects, exploitation of interventions and projects already implemented. Especially in energy sector priority will be given on developing environmentally friendly forms of energy and improve country’s energy supply.

- **Promote innovation, entrepreneurship and research.** Strategy focus on promoting high-capacity entrepreneurship and support Small and Medium Enterprises (SMEs). Also on compensating for the deficit in innovation, research and technology with emphasis in the participation of private sector and orientation to Knowledge Society.

- **Upgrade the institutional environment.** Target is the modernization of the public sector at all administration levels and simplifying the regulatory framework. Priority is the reform of legislative and regulatory framework with incorporation of Communities directives.

An important element of the strategy is that it focuses in the regional dimension and specification of development interventions. Every Greek Region plays a significant role to the development of the country and requires structural interventions in regional economy. Strengthening the competitiveness of the region is of utmost importance as the country and the future of Greek Regions depends on the increase of the productive sector which directly linked to investments in this sector.

The development is linked directly to the territory which defines the content of spatial growth and examines specific elements that arise from the physical-geographical dimensions of the region with priority to society, environment and economy.
The NSRF defines five thematic priorities, which are:
- Investment in the productive sector of the economy.
- Knowledge society and innovation.
- Employment and social cohesion.
- Institutional framework.
- Attractiveness of Greece and its Regions as a place to invest, live and work.

All the above priorities of the strategy (NSRF Report 2007) are analyzed below specifically.

1) Investment in the productive sector of the economy.

**Objective 1**: enhance Foreign Direct Investment inflow and extroversion.
This objective focuses on:
- Consolidating Greece’s position as a financial and international business centre.
- Improving the outward-looking position of the country’s productive system.
- Attracting investors.
- Exploring the country’s advantage to the broader region of South East Europe.

**Objective 2**: develop entrepreneurship and increase productivity.
This objective focuses on:
- Supporting innovative entrepreneurship in sectors of competitive advantage.
- Promoting the entrepreneurial dimension in environmental protection.
- Moving from necessity-based to high-potential corporate entrepreneurship.
- Boosting the trend for entrepreneurship.

**Objective 3**: diversify Greece’s tourist product.
This objective specified as follows:
- Promoting, and
- Enriching the country’s tourist product.

2) Knowledge society and innovation.

**Objective 4**: improve the quality and the intensity of investments in human resources to upgrade Greece’s educational system.
This objective is specified as follows:
- Enhancing lifelong learning.
- Improving the attractiveness of professional education and training.
- Tackling early school leaving and developing cross cultural education.
- Promoting reforms in the educational system and improving the accessibility.

**Objective 5**: reinforce Research & Development and promote innovation in all sectors.
This objective focuses on:
- Implement a horizontal action on human resources in the sectors of innovation, technology and research.
- Generate new knowledge in priority sectors of country’s productive fields.
- Turn knowledge into innovative products, services and processes, especially in Small and Medium Enterprises.
- Promote extroversion through European and international cooperation in the field of technological development.

**Objective 6**: achieve Greece’s digital convergence through the use of Information and Communication Technologies (ICTs) in economic activity sectors.
This objective is specifies as follows:
- Improving the quality of life by use of ICTs
- Improving productivity through ICTs.

3) Employment and social cohesion.

**Objective 7**: reinforce the adaptability of workers and enterprises.
This objective focuses on:
- Improving quality and productivity at work.
- Reinforcing the adaptability of enterprises, especially SMEs.
- Implementing the national system for linking education and training to employment.

**Objective 8**: enhance access to employment.
This objective focuses on:
- Reinforcing the employment of young people.
- Reinforcing female employment and promoting their equal access to the labour market.
- Activating at least 25% of the long term unemployment.
- Improving, reforming and broadening the effectiveness of the active labour market policies.
- Upgrading and modernizing the structures of the labour market.
- Tackling undeclared work and unregistered unemployment.

**Objective 9**: promote social inclusion.
This objective is specified as follows:
- Ensuring equal access to the labour market for all and prevent marginalization and exclusion.

**Objective 10**: establish an efficient and economically sustainable health system.
This objective focuses on:
- Developing the network of Primary Health Care and Public Health.
- Promotion of Information Technology and e-health solidarity services.
- Improving the responsiveness of Secondary Health Care.

**Objective 11**: enhance the economic, social and development aspects of gender quality issues.
This objective focuses on:
- Promoting specialized measures to support women.
- Promoting effective adjustment of the gender dimension to regional policies.

4) Institutional framework.

**Objective 12**: improve the quality and effective implementation of national policies to facilitate entrepreneurial action and upgrade citizens’ quality.
This objective focuses on:
- Improving the quality of national policies.
- Creating mechanisms to support implementation.
- Developing the human resources of Public Administration.
- Modernizing the institutional framework for regulating structures of Public Administration services.

5) Attractiveness of Greece and its Regions as a place to invest, live and work.

**Objective 13**: develop and modernize physical infrastructure and the relevant services.
This objective is specified as follows:
- Upgrading infrastructure.
- Developing and expanding urban transport.
- Connecting Greece’s regions with the European transport networks.
- Developing combined transport.
**Objective 14**: supply Greece with energy in a safe way, based on sustainability. This objective focuses on:
- Integrating country’s electricity network.
- Dealing with climate change.
- Reducing the dependence of the country from oil supply.
- Dealing with European Union’s external dependence on natural gas and oil imports.

**Objective 15**: manage environment in a sustainable way. This objective focuses on:
- Sustainable management of the natural environment.
- Rational management of the soil systems.
- Water resources management.
- Handling on the climate change.

**Objective 16**: implement effective environmental policy. This objective is specified as follows:
- Activating the society on issues of environmental protection.
- Improving the planning of environmental policy.

**Objective 17**: promote culture as a factor of Greece’s economic growth. This objective focuses on:
- Boosting demand in the field of culture.
- Reinforcing the cultural infrastructure of the country.

The totally contribution of the NSRS is estimated to 20,050 million Euros and is allocated to all the thematic priorities and general objectives that are described above (table 4.1.1).

<table>
<thead>
<tr>
<th>Thematic priority</th>
<th>Contribution allocation (million €)</th>
<th>Financial burden</th>
<th>General objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in the productive sector of the economy</td>
<td>1,432</td>
<td>7%</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Knowledge society and innovation</td>
<td>4,488</td>
<td>22%</td>
<td>4,5,6</td>
</tr>
<tr>
<td>Employment and social cohesion</td>
<td>2,975</td>
<td>15%</td>
<td>7,8,9,10,11</td>
</tr>
<tr>
<td>Institutional framework</td>
<td>505</td>
<td>3%</td>
<td>12</td>
</tr>
<tr>
<td>Attractiveness of Greece and its Regions as a place to invest, live and work</td>
<td>9,844</td>
<td>49%</td>
<td>13,14,15,16,17</td>
</tr>
<tr>
<td>Horizontal priorities</td>
<td>806</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td><strong>20,050</strong></td>
<td><strong>100%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Economy and Finance.

Investment Law 3908/2011 replaced Law 3299/2004 and introduces both substantive and procedural changes to the regime of state aid. The new law provides the same type of aid as the previous law except for cash grant for payroll expenses related to new employment positions. The law is harmonized with the Regional Aid Map that applies to the EU for the period 2007-2013.

The investment categories that are described by the Law 3908/2011 (The New Investment Incentives Law Report 2011) are:

- **General entrepreneurship.** This category focuses in all enterprises irrespective of sector and provides tax breaks of up to 100% of the maximum allowable amount of aid.

- **Regional cohesion.** This category targets to investors with projects that addresses local needs or capitalize on local competitive advantages. Provides all forms of aid, the subsidy rate and leasing subsidy may reach up to 70% of the maximum amount of aid. Especially for new enterprises this percentage is increased by 10 percentage points.

- **Youth entrepreneurship.** This category focuses to investors from 20 years to 40 years old. Provides aid for virtually all costs for five years from the start of the business. Total aid may reach up to 1.000.000 €.

- **Technological development.** This category targets to enterprises that invest in innovation and upgrade their technology infrastructure. Provides all forms of aid and the rate of subsidy and leasing subsidy may reach up to 80% of the allowable amount of aid.

- **Partnerships and Networking.** This category focuses on partnerships and networking configurations or clusters, which shall be compromised at least ten enterprises in the Region of Attica and Thessalonica and of at least five enterprises in other prefectures operating in a form of consortium. Provides any form of aid.

- **Large investment plans.** This category interests investments with a budget at least 50.000.000 €. Provides all forms of aid and the level decreases as the amount of investment increases. The percentage of the subsidy may not exceed 60% of total aid.

- **Integrated, multi-annual business plans.** This category focuses on companies legally formed at least five years previous to application, to implement integrated multi annual plans with a budget at least 2.000.000 € in total. 100% of the maximum regional aid applicable shall be granted.

The types of aid that are promoted to the above categories are:

- **Tax relief:** compromises exception from payment of income tax on pre-tax profits which result from any and all of the enterprises activities.

- **Subsidy:** gratis payment of a sum of money covers part of the subsidised expenditure of investment.

- **Leasing subsidy:** includes payment of a portion of the instalments paid under a leasing agreement executed to acquire new machinery and other equipment.

- **Soft loans by ETEAN (National Fund for Entrepreneurship and Development):** the amount to be covered by a bank loan may be funded by soft loans from credit institutions that corporate with ETEAN enterprises.
The amount of subsidy provided from the investment law depends on the size of the qualifying enterprise and on the prefecture in the investment will take place. In any case the highest subsidy available is 50% of the qualifying cost of the investment. According to the above Greece is divided to three zones based on the degree of development of each prefecture with the highest percentages applying to investments implemented in the least developed zones.

The percentage of the investment subsidized depending on the zone described as follows:

- **Zone A (Attica and Viotia)** 15% to 25%.
- **Zone B** (prefectures with gross national product exceeding 75% of the country’s average) 30% to 40%.
- **Zone C** (prefectures with gross national product less than 75% of the country’s average) 40% to 45%.

Other important issues related to the investment law are described below.

Applications for qualifying investments under the law are filed in months of April and October and at any time for substantial investments.

Applications must be accompanied by a feasibility study, evidence of payment and any supporting documents required as evidence of the reason for which a subsidy is requested.

The evaluation of each application will be carried out by the competent authority according to Presidential Decrees to be issued by the Ministry of Economy and Ministry of Competitiveness and Maritime.

Enterprises which qualify under the law must be established in Greece in the form of sole trader, company-partnership or co-operative.

The investor’s participation is maintained at 25% of the qualifying expenses or of the investment cost where the subsidy is a cash grant or tax relief.

Enterprises that receive incentives under the investment law must fulfil specific obligations set by the law for five years following their submission to the incentives regime. These obligations are continuous operation, restrictions on transfers of subsidized assets, approved restructures, capitalization and distribution of the tax free reserves and acquisition of equipment at the end of lease agreement. In a case of violation the law imposes serious sanctions.


According to the Government Gazette July 2009 “Fast Track” is a new law developed by the Ministry of Economy and Finance that accelerates the licensing procedure for investments in Greece. The Law is applicable in energy, tourism, industry, advanced technologies and innovation projects and includes those investments which come under the Investment Law.

Law 3894/2010 replaces Law 3775/2009 for the acceleration and transparency of Strategic Investments. These investments are implemented either by the Greek State or by the private sector or by public private partnerships (PPP) pursuant the Law 3389/2005 or by combination of the above. Strategic Investments are determined by their importance and positive impact to the national economy and mostly related to investments in the construction, renovation and expansion of infrastructures and networks in tourism, energy, transportation, communication, industry, health services, waste disposal management, high technology applications and innovation.
The criteria and prerequisites that must be followed in order for investments to qualify for “Fast Track” (The Fast Track Report 2010) are:

- The total value of the investment must exceed 200 million Euro (200.000.000 €).
- The value of the investment must 75 million Euro (75.000.000 €) and the investment must provide for the creation of 200 new jobs.
- The investment value must be at least 1 million Euro per annum (1.000.000 €) in advanced technologies and innovation projects irrespective of the total amount of the investment.

The criteria for evaluation of investments plans to “Fast Track” are:

- Viability of the investment plan.
- Credibility of the investor.
- Spin-off benefits from investment (regional development, improved competitiveness, increase in employment, reinforcement of entrepreneurship, increase in export activity, transfer of technology and innovation).

The benefits that added for investor business plans under the Fast Track Licensing Law are:

- The investment agency (“Invest in Greece” Agency) provides technical and supporting consultant services during the phase of application and document collection and issuance of the required documents in preparation of the process.
- The investment agency undertakes the complete licensing procedure.
- The agency provides regular progress reports and monitors the licensing process.
- Investors enjoy priority status and within 15 days receive verification of files required supporting documentation by the supervising authorities.
- Investors are assured of an institutional commitment by public service organizations to expedite licences as quickly as possible and smooth investment implantation.
- Investors are assured that if there is no documented response from the authorities within 3 months of submission of the license application than the licence will be considered as issued.

The Fast Track Licensing Law draws on the experience of “Invest in Greece”, which plays a significant role in its implementation. “Invest in Greece” Agency operates as an Investment Service Centre to expedite the issuing of all required licences as quickly as possible in order to ensure that without delay all investments precede. The Agency reports to the Ministerial Committee on Investment, which decides whether and investment falls under “Fast Track”. The Committee has as its Chairman the Minister of Economy and Finance; other members include the Minister of Development and members of the government who participate strictly upon invitation of the Chairman.

The assignment of the projects or approval of a proposal as a Strategic Investment will be effected by as specific law issued for each such investment which will grant certain tax incentives.

Law 3389/2005 establishes a legal framework of the implementation of Public-Private Partnerships (PPP). Specifically the law defines the Public Entities (Central Administration, local government organizations) that can implement partnerships contracts with Private Entities in areas falling within the scope of their competence. Also provides incentives for both public entities and private entities to be engaged in partnerships for constructing services through the simplification of relevant procedures. Define the content of a PPP contract with clear description of the rights and obligations of both parties in specific issues such as financing, the payment mechanism, granting of permits, and protection of the environment, treatment of archaeological findings and participation of the public entities. In additional PPP projects are not only aim at securing financial resources but also at benefiting from private know-how, innovative approach, human resources and the ability to manage complex projects.

PPP projects focuses in:
- Infrastructure (motorways, ports, airports).
- Education (schools, universities).
- Environment (waste management, desalination).
- Health (hospitals).
- Public sector building (courthouses, prisons, municipal, prefecture buildings).
- Public sector real estate development.

Public-Private Partnerships shall not be allowed to engage in projects or activities that are the direct and exclusive province of the Greek State and the Constitution of the Hellenic Republic such as police work, the execution of judicially imposed penalties and sentences, the award of justice and the national defence.

The public partner undertakes:
- The determination of the general PPP scheme.
- The evaluation of the private partners’ proposal.
- The support of the implementation of the project.
- The monitoring of the implementation of the project.

The private partner undertakes:
- The elaboration of the design of the project.
- The construction of the project.
- The securing of the financial resources.
- The management and operation of the project.
- The transfer of the project to the public sector at the end of the contractual period.

The Law establishes two administrative bodies in aim to support Public Authorities and improve the effective preparation and management of PPP projects. These bodies are (Guide for the implementation of Public Private Partnerships in Greece, 2006):
- The Inter-Ministerial Committee for Public-Private Partnerships (IM PPP Committee) that is a collective governmental body that defines and specializes in PPP policy, approves PPP projects, coordinates and monitors the implementation of PPP projects.
- The Special Secretariat for Public-Private Partnerships (PPP Unit) that is established within the Ministry of Economy and Finance. This Unit identifies
projects, promotes their implementation, and provides support and assistance to IM PPP Committee and to other Public Bodies in the context of all necessary procedures for the finalization of the project.

PPP projects are divided in three categories according to their financing scheme. These categories are:
- Projects that are designed, built, financed and operated by the private sector and their cost is repaid directly by the public sector.
- Projects where the cost of capital is shared between the State and the private sector while the private sector has the total responsibility of the project.
- Free-standing financial projects where the investment is repaid via revenues from the end-users of the project and is financed by the private sector.

Finely the private sector is responsible for the financing of the project, maintenance and delivery of the services during the lifetime of the contract. The State procures works or services without the obligation of financing them immediately, since their initial financing is provided by the public sector. The invested private funds return to the private sector through periodic payments by the state which knows beforehand the precise amount of payments that have to be made during the contractual period. These payments cannot increase if the private sector faces issues with risks undertaken since the private sector assumes the construction risk, the financing risk and the availability-demand risk.

The evaluation criteria that the PPP Unit takes under consideration (Guide for the implementation of Public Private Partnerships in Greece, 2006) are:
- The competence of the Public Entity to implement the project.
- Financial criteria like the feasibility, bankable and value for money of the project.
- Socioeconomic criteria such as the necessity of the project and the necessity of it.
- The maturity of the proposed PPP project.
- Technical criteria such as the improved quality of services to the end users.


“Invest in Greece SA” is the official Investment Promotion Agency of Greece that promotes and facilitates private investments. Is operated and incorporated since 1996 as a Government Legal Entity under the supervision of Ministry for Development, Competitiveness and Shipping.
Agency’s main aim is to identify market opportunities and provide investors with assistance, analysis, advice and aftercare support. It also identifies potential partners,
assists in legal and licensing procedures, locates sites, analyses investment proposal, explains incentives available to investors and furnishes economic information. The assistance is given to those who want to invest and grow their business in Greece, the region of Southeast Europe and the Eastern Mediterranean.

The agency is certified and comprised of five units. These units are:

- **Investment Proportion Unit** which is responsible for all outreach activities that promote Greece as an investment location and introduce to the advantages and opportunities of the country.
- **Investors Service Unit** that provides comprehensive facilitation services to investors and guide them to through every stage of the investment process.
- **Policy and Planning Unit** that prepares the background material of the investor in order to create a successful venture. In addition the Unit formulates and puts the optimal policies that satisfy the investors’ needs.
- **Finance and Administration Unit** which handles all day-to-day administrative details to ensure the smooth running of the Agency so that investors receive professional services.
- **Communication and Public Relations Unit** which maintains and executes the open communication policies to all investors around the world.

The investment sectors that are promoted through the Agency are:

- **Tourism** with emphasis in integrated resorts, conference and congress centres, golf, marinas, spa/thalassotherapy centres and thematic tourism (wellness and medical tourism, theme parks, sports tourism, religious tourism, adventure travel, archaeological tourism, wine and gastronomy tourism, ecotourism).
- **Energy** with emphasis in wind energy, solar energy, geothermal energy and biomass/biofuels energy.
- **Information and telecommunications technology (ICT).**
- **Life science.**
- **Food and beverage.**
- **Environmental management** with emphasis in waste management.

The Agency is responsible for the implementation of “Acceleration and transparency of implementation of strategic investments” Law more known as “Fast Track Law”. The Agency reports to the Ministerial Committee on Investment, which decides whether and investment falls under “Fast Track”. The Committee has as its Chairman the Minister of Economy and Finance; other members include the Minister of Development and members of the government who participate strictly upon invitation of the Chairman.

**4.6. “StartUp Greece”**
“StartUp Greece” is a digital information, networking and collaboration space with aim to create new generation of entrepreneurs and inform entrepreneurs from all around the world about Greece.

The service is supported by the Ministry of Development, Competitiveness and Shipping and the Greek government in collaboration with communities of entrepreneurs.

Through the service it is possible to communicate ideas, draw information, search for best practices, draw inspiration for success, share valuable ideas, meet people from Greece and abroad, learn from failure, network with corporations and associations, find events and attend to seminars.

The service is addressed to citizens, organizations, research institutes, and associations, economic and social entities.

It combines an online entrepreneurship community with knowledge and information database specialized in the field of doing business and investments in Greece.

This database includes:

- Public or private funding initiatives so that all available resources can be brought together on one web site.
- Procedures, laws and regulations.
- Events on entrepreneurship, innovation and mentoring events.
- Entrepreneurship and innovation competitions.
- “How to” articles in business field.
- Useful data and trends.
- Success and failure stories of doing business and investments in Greece.

The online community is designed in a way that all stakeholders may be involved; entrepreneurs and young people interested in starting businesses, business experts, private investors and business angels, financial organization executives, public administration officials and executives working in investments.

The members are classified in categories, which are:

- Entrepreneurs and other members (young people, business experts, union and associations).
- Investors and financial organizations executives.
- Government or Public Bodies executives.
Chapter 5. Analysis of investments.

5.1. Political analysis.

5.1.1. Memorandum of Economic and Financial Policies.

The Memorandum of Economic and Financial Policies (MEFP) outlines the economic and financial policies that the Greek Government will implement during the period 2010-2013 to strengthen market confidence and Greece’s fiscal and financial position. The MEFP is signed between the Greek State and the European Commission (EU), the European Central Bank (ECB) and the International Monetary Fund (IMF).

The policies and sectors that are been targeted and implemented under the Memorandum are economic, fiscal, financial and structural.

In detail the economic priorities (Memorandum of Economic and Financial Policies Report 2010) are:

- Fiscal adjustment will have to be the cornerstone of the program.
- Incomes and social security policies need to buttress the fiscal adjustment effort and restoration of competitiveness.
- Financial sector policies need to maintain stability.
- Structural reforms that boost the economy’s capacity to produce save and export will be critical.

The fiscal policies are:

- Greek government recognizes the need to implement a frontloaded multi year adjustment effort given Greece’s very high and growing debt ratio and fiscal deficit.
- Fiscal strategy is anchored in placing the debt-GDP ratio on a declining path from 2013 and reducing deficit to well bellow 3% of GDP by 2014.
- For 2011 and beyond further revenue and expenditures measures will be implemented to secure fiscal targets.
- Government will initiate series of important structural fiscal reforms in pension system, healthcare, tax administration, public financial management and dept management.

The financial sector policies are:

- Facing the challenges of the Greek banking system.
- Managing the immediate challenge of tight liquidity conditions.
- Putting in place a new safety net to preserve the sound level of banking equity, the Financial Stability Fund (FSF).
- The primary purpose of the FSF is to preserve the financial sector’s soundness and thus its capacity to support Greek economy.

The structural policies are:

- Modernizing public administration.
- Strengthening labour markets and income policies.
- Improving the business environment.
- Managing and divesting state enterprises.
- Improving the absorption of the EU structural and cohesion funds.

The program financing is expected to cover through bilateral lending support from EU members states by 80 billion Euros and through the IMF support by 30 billion Euros.
The total amount of support that is projected to finance the public gap is around 110 billion Euros. Greece will draw on these resources in parallel through the program period in a ratio of 8 to 3 in each disbursement.

Progress in the implementation of the policies under the program will be monitored through quarterly and continuous quantitative performance criteria and indicative targets, structural benchmarks, program reviews and consultation clauses. According to plan there going to be seven reviews, the first in Q2-2010 and the last in Q4-2011.


The Medium-Term Fiscal Strategy 2012-2015 submitted to Greek Parliament on June 2011 and focuses in fiscal consolidation efforts and detailed plan measures amounting 28.3 billion Euros or 12% of GDP for the period 2011-2015 that will allow Greece to achieve its fiscal targets.

The main objective of the MTFS is to reduce the structural elements of the deficit by introducing targeted measures at every sector of the General Government that achieve permanent fiscal consolidation and protect vulnerable social groups.

The key measures to achieve the objective of MTFS (Greece: Medium-Term Fiscal Strategy 2012-2015 Report 2011) are:

- Rationalization of the public sector wage bill with focus on the reduction of the public sector workforce by 150,000 between 2011-2015, extension of weekly working hours, reduction in contractual staff, implementation of a new remuneration grid and introduction of part-time employment.
- Public sector downsizing with aim in savings from closure/merger of public entities, reduction is subsidies and operational expenditures, reduction in Public Investment Budget expenditure and savings from the reorganization of State-owned Enterprises.
- Controlling healthcare costs and pharmaceutical expenditures with rationalization of public healthcare and pharmaceutical procedures.
- Means-testing, targeting and rationalization of social benefits with adjustment in size of supplementary pensions and freeze through 2015, cuts in lump-sum payments paid on retirement, reform of pension system and means-testing in unemployment benefits.
- Increased revenues of Social Security Funds and reduction in contribution evasion with action plan for reduction of undeclared employment and introduction for solidarity contribution for unemployed.
- Broadening of the tax base and reduction in tax exemptions with focus on broadening the base for VAT rates and property tax.
- Improved tax compliance and reduction of tax evasion with aim in increasing revenues from improved compliance in VAT, personal and company income taxation.

Also the MTFS includes a privatization programme (Table 5.1.2.1) that aims to reduce public dept, attract private know-haw and capital and support economic recovery. The programme includes shareholdings in listed and non-listed state companies and banks, shareholdings in public infrastructure (airports, highways, and ports), monopoly rights (gaming licences) and real estate. It includes a detailed inventory of targeted assets and timeline for divesting each asset.
The assets under the programme have an estimated value in excess of 50 billion Euros based on established valuation techniques (Greece: Medium-Term Fiscal Strategy 2012-2015 Report). The revenue targets are 5 billion Euros by the end of 2011, 15 billion Euros by the end of 2012 and 50 billion Euros by the end of 2015.

The programme outlines the steps for the development of the State’s real estate portfolio with the implementation of specific legislation for surface rights, tourism properties, clear land titles and land use.

To accelerate transaction the State will establish a Privatization Agency (National Wealth Fund) into which to place assets for privatization. The fund will become the sole shareholder of transferred assets, will have a mandate to privatize them at market conditions, will not be able to transfer assets back to the government unless a transaction is completed and ensure the irreversibly of the process. It will finance its operations by an initial capital injection by the State and from portion of privatization proceeds. It will be able to raise money by discounting or selling revenue streams from specified assets.

The fund will be established under Greek Law for 6 years and governed by a Board of Directors by appointment to the Ministry of Finance and the Parliament. The European Commission and Eurogroup may appoint two observers in the board of Directors.

Table 5.1.2.1. Privatization Programme 2011-2015.

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Date</th>
<th>Participation</th>
<th>For sale</th>
<th>Type of sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>Hellenic Telecommunications Organisation (OTE)</td>
<td>Q2</td>
<td>16.0%</td>
<td>10.0%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>Thessalonica Water Supply and Sewerage</td>
<td>Q3</td>
<td>74.0%</td>
<td>40.0%</td>
<td>Sale of SPV shares</td>
</tr>
<tr>
<td></td>
<td>Athens International Airport</td>
<td>Q3</td>
<td>100.0%</td>
<td>-</td>
<td>Concession extension</td>
</tr>
<tr>
<td></td>
<td>Hellenic Football Prognostics Organisation 1</td>
<td>Q3</td>
<td>100.0%</td>
<td>-</td>
<td>Concession extension</td>
</tr>
<tr>
<td></td>
<td>Hellenic Football Prognostics Organisation 2</td>
<td>Q3</td>
<td>100.0%</td>
<td>-</td>
<td>New gaming licenses</td>
</tr>
<tr>
<td></td>
<td>Thessalonica Port</td>
<td>Q3</td>
<td>74.3%</td>
<td>23.3%</td>
<td>Sale of SPV shares</td>
</tr>
<tr>
<td></td>
<td>State lotteries</td>
<td>Q3</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
</tr>
<tr>
<td></td>
<td>Piraeus Port</td>
<td>Q4</td>
<td>74.1%</td>
<td>23.1%</td>
<td>Sale of SPV shares</td>
</tr>
<tr>
<td></td>
<td>Hellenic Defence Systems (EAS)</td>
<td>Q4</td>
<td>99.8%</td>
<td>99.8%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>Hellenic Postbank</td>
<td>Q4</td>
<td>34.0%</td>
<td>34.0%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>Public Gas Corporation (DEPA)</td>
<td>Q4</td>
<td>65.0%</td>
<td>55.0%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>National Natural Gas System Operator (DESFA)</td>
<td>Q4</td>
<td>65.0%</td>
<td>31.0%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>Railway Operator (TRAINOSE)</td>
<td>Q4</td>
<td>100.%</td>
<td>100.%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>LARCO (nickel plant)</td>
<td>Q4</td>
<td>55.2%</td>
<td>55.2%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>Alpha Bank</td>
<td>Q4</td>
<td>0.6%</td>
<td>0.6%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>National Bank of Greece</td>
<td>Q4</td>
<td>1.2%</td>
<td>1.2%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td></td>
<td>Hellenic Horse Racing Company (ODIE)</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of shares</td>
</tr>
<tr>
<td>Company/Project</td>
<td>Quarter</td>
<td>Ownership %</td>
<td>Sale %</td>
<td>Action</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>---------</td>
<td>-------------</td>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Mobile Telephony</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Concession extension</td>
<td></td>
</tr>
<tr>
<td>Casino Mont Parnes</td>
<td>Q4</td>
<td>49.0%</td>
<td>49.0%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Vehicle Industry (ELBO)</td>
<td>Q4</td>
<td>72.6%</td>
<td>72.6%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Football Prognostics Organisation</td>
<td>Q4</td>
<td>34.0%</td>
<td>34.0%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Hellinikon 1</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Four Airbus Aircraft</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale</td>
<td></td>
</tr>
<tr>
<td>Real Estate Assets 1</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>2012 Athens International Airport Hellenic Petroleum (ELPE)</td>
<td>Q1</td>
<td>55.0%</td>
<td>≥21%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Piraeus Bank</td>
<td>Q1</td>
<td>1.3%</td>
<td>1.3%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Agricultural Bank (ATE)</td>
<td>Q1</td>
<td>77.3%</td>
<td>26.2%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Egnatia Odos Motorway</td>
<td>Q1</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Post</td>
<td>Q1</td>
<td>90.0%</td>
<td>≥40%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Athens Water Supply and Sewerage Company</td>
<td>Q2</td>
<td>61.3%</td>
<td>27.3%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Loan and Consignment Fund</td>
<td>Q2</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Real Estate Assets 2</td>
<td>Q2</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Public Power Corporation</td>
<td>Q3</td>
<td>51.1%</td>
<td>17.0%</td>
<td>Sale of shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Motorways 1</td>
<td>Q3</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Regional Airports 1</td>
<td>Q3</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Hellinikon 2</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Real Estate Assets 3</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Digital Dividend 1</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of rights</td>
<td></td>
</tr>
<tr>
<td>Thessalonica Water Supply and Sewerage Company</td>
<td>Q4</td>
<td>34.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Goldmines 1</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>2013 Offshore Gas Storage Facility</td>
<td>Q1</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Regional Airports 2</td>
<td>Q2</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Ports 2</td>
<td>Q2</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Real Estate Assets 4</td>
<td>Q3</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Goldmines 2</td>
<td>Q3</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Digital Dividend 2</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of rights</td>
<td></td>
</tr>
<tr>
<td>Athens Water Supply and Sewerage Company</td>
<td>Q4</td>
<td>34.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Hellenic Motorways 2</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>2014 Hellenic Motorways 3</td>
<td>Q4</td>
<td>100.0%</td>
<td>100.0%</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Real Estate Assets</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>2015 Hellenic Motorways 4</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
<tr>
<td>Real Estate Assets</td>
<td>Q4</td>
<td>100.0%</td>
<td>-</td>
<td>Sale of SPV shares</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Finance.
5.1.3. The 26\textsuperscript{th} October 2011 Decision.

The override objective of the decisions taken by European Union is to bring Greece dept back to sustainable level. The decision opens the door to an appropriate degree of voluntary involvement of private sector investments which allow proceeding to a second financial assistance program. Necessary steps are that Greece must continuous with its structural reforms and fiscal consolidation measures in order to transform its capacity to growth. It must be well clear (Euro Summit Statement October 2011) that the programme is Greek and its implementation is responsibility of the Greek authorities. The context of the program is in cooperation of Troika (EU, ECB, IMF), continuous the decision of 21 July 2011 Summit and it will be lade down in a new Memorandum of Understanding. Especially in the field of recapitalization of Greek banks the governance of the Hellenic Financial Stability Fund (HFSF) will be strengthen in agreement with the Greek government and Troika. The Private Sector Involvement (PSI) has a vital role in establishing the sustainability of the Greek dept and implementing the context of the program. Therefore it is decided between Greek government and private investors an ambitious reform program where PSI should secure decline of the Greek debt to GDP ratio with an objective of reaching 120\% by 2020, to do so private investors and all parties decide to develop a voluntary bond exchange with a nominal discount of 50\% on national Greek dept. The Euro Zone members will contribute to the programme up to 30 billion Euros; on that basis it will be provided additional financing up to 100 billion Euros until 2014, including the recapitalization of Greek banks. The program should be agreed by the end of 2011 and the exchange bonds should be implemented at the beginning of 2012.

5.1.4. Central Administration of Greece.

According to the \textit{Review on Central Administration} published by OECD in 2011 there are specific issues that have been pointed and describe the conditions of the Greek political system and the central Greek governance. These issues are:

- There is no strategic vision of where Greece wants to take its economy and society. There is an absence of central sheering, clear ownership of reforms or accountability for results. The strategic vision and direction of public for public policies must be implemented by a high level structure that does not exist in public administration and political system.
- The public administration system generates the condition for corruption and facilitates inappropriate behaviours, rent seeking and cliental relationships.
- There is a little co-ordination between and within ministries. The administration operates in ‘silos’, fragmentation and overlaps among structures and tasks are common and discourage co-operation.
- Ministries take decisions which in most cases are not reflected in concrete results. Central administration and the rest of public sector have weak relations that need attention.
- The pace of changes is to slow and fragmental especially in the fiscal policy where it is very hard to control and monitor expenditures.
- There is no effective structure in middle management. Ministries are affected by organizational sprawl, redundant structures and too many units.
• The administration does not have the ability of keeping records, the capacity
to extract information from data and generally of managing organisational
knowledge.
• Laws, regulations and formal policies shape the work of the public
administration, leaving little space for effective policy making.

5.2. Economic analysis.

5.2.1. Macroeconomic facts and figures.

The economic growth of Greece since the entry in the Euro currency and until the
economic crisis of 2008 averaged 4%, double the pace recorded in the Euro Area.
This growth was driven by domestic demand and consumption which on average
amounted to over 90% of GDP between 2000 and 2009 (Eurostat 2011). The general
government deficit averaged 6% of GDP between 2000 and 2008 and the current
account deficit exceeded 9% of GDP the same period.
By the end of 2009, as a result of a combination of international and local factors, the
Greek economy faced its most severe crisis in post war history when the government
revised its deficit from an estimated 6% to 12.7% of GDP (the exact number of the
deficit is still a mark of contestation).
The factors that accelerated the crisis in international confidence in Greece’s ability to
repair its sovereign debt are described below.
Greek GDP declined by 2% in 2009 and indicators suggested further decline in 2010
and 2011. Fiscal budget deficit and public debt where significantly worse than had
been reported by previous governments that resulted to increase of financing cost and
suffers of growth and employment.
These conditions exposed the weak fiscal position of Greece which entered the
downturn with a large underlying public debt. As a result financial system has been
affected especially in the field of government bonds where rating agencies
downgraded and investors started to backing out them driving up their yields.

Figure 5.2.1.1. GDP growth rate.

![GDP growth rate chart](source: Eurostat 2011)
The annual growth rate (figure 5.2.1.1) is negative in 2010 and 2011 with projections for positive growth in 2012 (fact that is under consideration) after the implementation of the rescue package from EU, ECB and IMF. This negative growth rate for three continuous years drove to an austerity shock for the Greek society.

The GDP per capita and the purchasing power of Greeks was just below the EU-27 average (figure 5.2.1.2) in 2009 with a decline tendency in 2010 and 2011 because of the austerity measures.

Figure 5.2.1.2. GDP per capita (Purchasing Power Standards, PPS, EU-27=100).

Source: Eurostat 2011.

The root of the problem of the Greek economy lies in that spends more than it produces while State spends more than it collects. Figure 5.2.1.3 shows the general government revenue, expenditure and budget deficit which describes simply the above conclusion. It is quite clear that until the entrance in 2001 at the European Monetary Union the deficit was in controllable levels and after the Olympic Games of 2004 was getting bigger every year.

Figure 5.2.1.3. General government revenue/expenditure/deficit (% of GDP).

Source: IOBE 2011.
There is a chronological connection (figure 5.2.1.4) between the Greek interest rate spreads and the spreads of Portugal, Ireland, Spain and Italy (countries which are implementing a rescue package from Troika or willing to implement). Especially for Greece after the national elections in October 2009 and the revision of the budget deficit from the new government, the interest rates of 10-year bonds were getting bigger reaching a level which is prohibitive for the fiscal stability. This growth is a result of lack of confidence to Greece’s debt viability and to speculative actions from the markets.

Figure 5.2.1.4. Interest rate spread.

The Greek debt (figure 5.2.1.5) in the beginning of 2000 was just around 100% of GDP to reach to 143% at 2010, especially after 2008 there is a gradually increase. This fact explains the rise in interest rate spreads and the inability of Greece to repay its sovereign dept.

Figure 5.2.1.5. Greek debt to GDP in comparison to EU.
The consumer price index (figure 5.2.1.6) shows a relative increase from 2008 until 2011 that is concerned with the impact that specific products (fuels) have in the formulation of it. This increase is one of the biggest in the EU and OECD countries and much more than the average.

Figure 5.2.1.6. Consumer price index (2005=100).

[Graph showing consumer price index from 2008 to 2011 with labels for each month.
Source OECD 2011.

The economic recession resulted to unemployment which is at its highest levels of previous decades. In 2009 (figure 5.2.1.7) the unemployment was approximately below 10%, in 2010 13% and in 2011 16% with the number of unemployed reaching 792.6 thousands (Eurostat) which is the second highest in EU-17 following that of Spain. The most vulnerable categories are women, young people, long term unemployed and individuals with low educational level.

Figure 5.2.1.7. Total unemployment rate.

[Graph showing unemployment rate per country from 2009 to 2010. Each country is color-coded with a legend indicating 2009 in blue and 2010 in red.
Source: Eurostat 2011.

The impact of budget restrictions included in the economic adjustment program was especially pronounced in private consumption. Wage and pension cuts in parallel with increases in direct and indirect taxes contributed to a market drop in household income. The only factor that contributed to an opposite direction than the one of declining in private consumption is the size of shadow economy which plays an important role in Greek economy and is estimated in approximately 25% of the GDP (figure 5.2.1.8).

[Graph showing shadow economy as percentage of GDP.
Source: Eurostat 2011.
5.2.2. Labour force facts and figures.

In tables 5.2.2.1, 5.2.2.2 and 5.2.2.3 are presented the number of employment by economic sector, the number of employment by economic activity and the educational level of the Greek labour force from data given by the Hellenic Statistical Authority for the year 2010.

Table 5.2.2.1. Number of employment by sector 2010 (000s and %).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment (000s)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary sector</td>
<td>533</td>
<td>12.4%</td>
</tr>
<tr>
<td>Secondary sector</td>
<td>821.1</td>
<td>19.1%</td>
</tr>
<tr>
<td>Tertiary sector</td>
<td>2,944.8</td>
<td>68.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,299</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


Table 5.2.2.2. Number of employed by economic activity 2010 (000s).

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Employment (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, livestock, fishing</td>
<td>533.8</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>14.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>448.8</td>
</tr>
<tr>
<td>Electricity, Gas, Water</td>
<td>57.6</td>
</tr>
<tr>
<td>Construction</td>
<td>298.6</td>
</tr>
<tr>
<td>Trade</td>
<td>795</td>
</tr>
<tr>
<td>Restaurants, Hotels</td>
<td>296.7</td>
</tr>
<tr>
<td>Transport and Communication</td>
<td>293</td>
</tr>
<tr>
<td>Banking and finance</td>
<td>113.9</td>
</tr>
<tr>
<td>Real Estate</td>
<td>5.1</td>
</tr>
<tr>
<td>Public Administration</td>
<td>369.9</td>
</tr>
<tr>
<td>Education</td>
<td>313.1</td>
</tr>
<tr>
<td>Health and social welfare</td>
<td>243.1</td>
</tr>
<tr>
<td>Other services</td>
<td>516.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,299</strong></td>
</tr>
</tbody>
</table>

Table 5.2.2.3. Educational level of labour force 2010 (000s).

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Number (000s)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD and/or Master’s degree</td>
<td>109,2</td>
<td>2,54%</td>
</tr>
<tr>
<td>University degree</td>
<td>777,7</td>
<td>18,09%</td>
</tr>
<tr>
<td>Technical degree</td>
<td>749,7</td>
<td>17,44%</td>
</tr>
<tr>
<td>Secondary Education Certificate (Lyceum)</td>
<td>1,388,2</td>
<td>32,29%</td>
</tr>
<tr>
<td>Basic Education</td>
<td>467,3</td>
<td>10,87%</td>
</tr>
<tr>
<td>Lower Education</td>
<td>806,9</td>
<td>18,77%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,299</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


Figure 5.2.2.1 shows that Greece has one of the biggest shares of self-employed among the OECD countries in 1990 – 2009 reaching almost 40%.

Figure 5.2.2.1. Share of self-employed in total employment.

![Figure 5.2.2.1. Share of self-employed in total employment.](image)

Source: OECD 2011.

Greece has a small average size of enterprises (figure 5.2.2.2) compared to other Mediterranean countries and the EU in number of employees.

Figure 5.2.2.2. Average size of enterprises (employs per enterprise) 2003-2007.

![Figure 5.2.2.2. Average size of enterprises (employs per enterprise) 2003-2007.](image)

Source: OECD 2011.

Figure 5.2.2.3 shows the labour productivity, which is defined as GDP per hour worked, from 1990 until 2010. It is clear that there is a major growth to the productivity of the Greek labour force with a sign of decline after the beginning of the recession period in 2009. This significant growth is still much lesser than the average of OECD and EU countries.
Figure 5.2.2.3. Labour productivity.

Source: OECD 2011.

Figure 5.2.2.4 shows the average hours worked per person from the year 1990 until 2010. It clearly presents that the average hours were more than 2000 for the entire period and this number is much more than the OECD and EU countries average.

Figure 5.2.2.4. Average hours worked per person.

Source: OECD 2011.

Figure 5.2.2.5 shows the unit labour cost, which is defined as the labour cost calculated as the quotient of total labour cost and the real output, from year 1993 until 2010. There is a significant growth in the unit labour cost which is much bigger than the OECD and EU countries.

Figure 5.2.2.5. Unit labour cost (base year 2005=100).

Source: OECD 2011.

Figure 5.2.2.6 shows the strictness of employment protection from 1998 until 2008. OECD uses indicators of the strictness of regulation on dismissals and the use of temporary contracts. The specific indicator is the weighted average of sub-indicators for regular employment and temporary employment. Year 2003 is the benchmark for the specific indicator which is much bigger than the OECD countries.

Figure 5.2.2.6. Strictness of employment protection.

Source: OECD 2011.
Figure 5.2.2.6. Strictness of employment protection.

The regulations on professional services were among the strictest in OECD countries, indicating much scope for liberalization and enhancing consumer welfare. In 2011 a comprehensive reform opened up more than 150 closed professions. The legislative changes abolish fixed prices or compulsory minimum fees and reduce geographical restrictions for professions like layers and also fixed profit margins for professions like pharmacists. This legislation also removes the requirement for an administrative licence to practice a profession, substituting instead simple notification which is accompanied by the necessary supporting credentials. These reforms have large growth potential but the key question is the implementation of the specific legislation.

5.2.3. Economic facts and figures.

Foreign Direct Investments reached in 2010 below 2 billion Euros (figure 5.2.3.1) with the same tendency in 2009. At the period 2005-2010 there were two years, 2006 and 2008, where the FDI reached more than 4 and 3 billion Euros respectively.

Figure 5.2.3.1. Foreign Direct Investments inflows (million €, current prices).
The main source of FDI is Germany (figure 5.2.3.2), followed by France and United Kingdom. The countries that are the main investment origins are most from the European Union for the period 2003-2010.

Figure 5.2.3.2. Total FDI by country of origin 2003 – 2010 (million €)


In manufacturing sector the main areas of FDI are chemical products, food and beverage, machinery and metal products (figure 5.2.3.3).
In service sector the main areas are post-telecom, financial intermediation, trade, real estate and tourism.

Figure 5.2.3.3. Structure of FDI inflows in manufacturing and services 2003 – 2010.
The percentage of manufacturing and service as part of the Greek GDP has a steady tendency for the period 2005-2010, with the majority of it to be showed in service sector (figure 5.2.3.4).

Figure 5.2.3.4. Manufacturing and services as a % of GDP 2005 – 2010.

Greek imports are reached in 2010 more then 20.000 million Euros and exports the same period reached more then 60.000 million Euros. The chronological tendency between imports and exports follows is the same for the period 2005-2010. An important element is the imbalance that is showed and reflected to the balance of payments (figure 5.2.3.5).

Figure 5.2.3.5. Imports and exports 2005 – 2010 (million US$).
The main origins of Greek exports are Germany, Italy, Cyprus, and Bulgaria (table 5.2.3.1).

Table 5.2.3.1. Greek exports by country of origin 2008 – 2010.

<table>
<thead>
<tr>
<th>Country</th>
<th>2010 (€)</th>
<th>2009 (€)</th>
<th>2008 (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1,770,247,868</td>
<td>1,596,583,928</td>
<td>1,821,302,945</td>
</tr>
<tr>
<td>Italy</td>
<td>1,756,112,060</td>
<td>1,591,270,468</td>
<td>2,001,859,507</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1,160,653,944</td>
<td>1,047,761,547</td>
<td>1,102,980,598</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1,049,266,645</td>
<td>968,158,262</td>
<td>1,236,989,886</td>
</tr>
<tr>
<td>UK</td>
<td>849,293,260</td>
<td>629,390,865</td>
<td>820,061,877</td>
</tr>
<tr>
<td>Romania</td>
<td>594,014,657</td>
<td>557,719,536</td>
<td>772,417,242</td>
</tr>
<tr>
<td>France</td>
<td>619,595,228</td>
<td>538,459,813</td>
<td>668,378,714</td>
</tr>
<tr>
<td>USA</td>
<td>658,601,437</td>
<td>715,203,755</td>
<td>885,416,085</td>
</tr>
<tr>
<td>Turkey</td>
<td>858,286,681</td>
<td>607,257,141</td>
<td>621,674,009</td>
</tr>
<tr>
<td>Others</td>
<td>6,932,290,607</td>
<td>6,141,084,945</td>
<td>7,402,065,542</td>
</tr>
</tbody>
</table>


The main sectors of exports are industrial products, food-animals, chemicals, mining-fuels and machine-transport equipment (table 5.2.3.2).

Table 5.2.3.2. Greek exports by sector 2008 – 2010.

<table>
<thead>
<tr>
<th>Sector</th>
<th>2010 (€)</th>
<th>2009 (€)</th>
<th>2008 (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food-Animals</td>
<td>3,050,945,301</td>
<td>2,716,132,982</td>
<td>2,710,096,053</td>
</tr>
<tr>
<td>Beverage-Tobacco</td>
<td>546,641,503</td>
<td>589,483,683</td>
<td>578,341,454</td>
</tr>
<tr>
<td>Raw Material apart from fuels</td>
<td>944,974,227</td>
<td>711,925,390</td>
<td>775,375,313</td>
</tr>
<tr>
<td>Mining - Fuels - Lubricants</td>
<td>1,791,502,177</td>
<td>1,362,461,960</td>
<td>1,902,868,998</td>
</tr>
<tr>
<td>Oils &amp; grease of animal or plant origin</td>
<td>287,262,357</td>
<td>283,188,880</td>
<td>328,947,021</td>
</tr>
<tr>
<td>Chemicals</td>
<td>2,363,726,040</td>
<td>2,093,096,455</td>
<td>2,307,113,322</td>
</tr>
<tr>
<td>Industrial products</td>
<td>3,255,261,188</td>
<td>2,827,842,824</td>
<td>3,926,616,193</td>
</tr>
<tr>
<td>Machine &amp; Transport Equipment</td>
<td>1,937,992,854</td>
<td>1,954,798,927</td>
<td>2,431,869,413</td>
</tr>
<tr>
<td>Others</td>
<td>2,076,056,740</td>
<td>1,853,936,186</td>
<td>2,371,918,488</td>
</tr>
</tbody>
</table>


The main Greek origins of imports are Germany, Italy, Russia, France, China and Netherlands (table 5.2.3.3).

Table 5.2.3.3. Greek imports by country of origin 2008 – 2010.

<table>
<thead>
<tr>
<th>Country</th>
<th>2010 (€)</th>
<th>2009 (€)</th>
<th>2008 (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>5,921,833,644</td>
<td>5,873,685,972</td>
<td>7,235,138,117</td>
</tr>
<tr>
<td>Italy</td>
<td>4,711,332,868</td>
<td>5,434,756,390</td>
<td>6,918,490,534</td>
</tr>
<tr>
<td>Russia</td>
<td>4,668,914,942</td>
<td>2,477,328,297</td>
<td>4,454,048,615</td>
</tr>
<tr>
<td>France</td>
<td>2,337,504,867</td>
<td>2,611,574,693</td>
<td>3,098,017,147</td>
</tr>
<tr>
<td>China</td>
<td>2,880,290,521</td>
<td>3,045,391,531</td>
<td>3,347,145,360</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2,521,993,972</td>
<td>2,575,712,919</td>
<td>2,806,938,547</td>
</tr>
<tr>
<td>Belgium</td>
<td>1,627,125,413</td>
<td>1,856,415,382</td>
<td>2,139,897,833</td>
</tr>
<tr>
<td>Spain</td>
<td>1,441,446,270</td>
<td>1,741,548,489</td>
<td>2,133,684,559</td>
</tr>
<tr>
<td>UK</td>
<td>1,433,080,824</td>
<td>1,644,644,880</td>
<td>1,956,907,714</td>
</tr>
<tr>
<td>USA</td>
<td>1,220,662,129</td>
<td>1,392,150,799</td>
<td>1,650,730,741</td>
</tr>
<tr>
<td>Others</td>
<td>19,857,172,506</td>
<td>19,434,258,896</td>
<td>24,935,472,377</td>
</tr>
</tbody>
</table>


The main sectors of imports are machine-transport equipment, mining-fuels, chemicals, industrial products and food-animals (table 5.2.3.4).
Table 5.2.3.4. Greek imports by sector 2008 – 2010.

<table>
<thead>
<tr>
<th>Sector</th>
<th>2010 (€)</th>
<th>2009 (€)</th>
<th>2008 (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food-Animals</td>
<td>4,850,085,214</td>
<td>4,815,166,138</td>
<td>5,240,870,654</td>
</tr>
<tr>
<td>Beverage-Tobacco</td>
<td>680,043,050</td>
<td>826,561,783</td>
<td>770,411,263</td>
</tr>
<tr>
<td>Raw Material apart from fuels</td>
<td>1,187,768,333</td>
<td>1,014,676,040</td>
<td>1,667,456,593</td>
</tr>
<tr>
<td>Mining - Fuels - Lubricants</td>
<td>11,229,053,323</td>
<td>7,191,464,429</td>
<td>12,118,128,955</td>
</tr>
<tr>
<td>Oils &amp; grease of animal or plant origin</td>
<td>232,287,163</td>
<td>208,812,911</td>
<td>290,359,758</td>
</tr>
<tr>
<td>Chemicals</td>
<td>7,277,469,133</td>
<td>7,708,957,523</td>
<td>8,308,019,965</td>
</tr>
<tr>
<td>Industrial products</td>
<td>5,064,280,509</td>
<td>5,187,835,247</td>
<td>8,011,927,143</td>
</tr>
<tr>
<td>Machine &amp; Transport Equipment</td>
<td>11,536,204,512</td>
<td>14,687,892,818</td>
<td>16,453,025,783</td>
</tr>
<tr>
<td>Others</td>
<td>5,664,131,519</td>
<td>6,446,699,430</td>
<td>7,819,291,457</td>
</tr>
</tbody>
</table>


5.2.4. Business facts and figures.

The business environment is analyzed from data given by *The Doing Business 2012 Report* and other sources with consideration in specific issues. *Doing Business* is a report that highlights how easy or difficult it is to open and operate a medium-sized business when complying with relevant regulations. The report is a result of The World Bank and The International Finance Corporation for the year 2012. The regulations under research affect ten areas of the business life cycle and are comparable among 183 countries. These regulations are:

- Starting a business.
- Dealing with construction permits.
- Getting electricity.
- Registering property.
- Getting credit.
- Protecting investors.
- Paying taxes.
- Trading across borders.
- Enforcing contracts.
- Resolving insolvency.

The methodology that is used does not include the proximity to large markets, the quality of infrastructure services, the security of property, the transparency of government procurement and the macroeconomic conditions.

Figure 5.2.4.1. Ease of doing business.

Figure 5.2.4.1 and 5.2.4.2 presents the rank of Greece in doing business and the total rank in the 10 topics that are described above.

Figure 5.2.4.2. Ranks on doing business topics.


In next part are presented selected topics which are described in more detail. These topics are starting a business, paying taxes and trading across borders.

Starting a business.
It is measured the ease of starting a new business in the Greek economy by recording all procedures that are officially required to start up and operate an industrial or commercial company in comparison with the time required to complete each procedure, the cost required to complete each procedure and the paid-in minimum capital. In particular requires 10 procedures, takes 10 days, costs 20,1 % of income per capita and requires paid-in minimum capital of 22,8% of income per capita.
The procedures are more then the OECD countries average, the time required is less then the OECD countries average, the cost is much more then the OECD countries average and the paid-in minimum capital is just a little more then the OECD countries average.
Specific reforms where implemented by setting up a one-shop stop, making procedures simple and faster by introducing an electronic platform which interconnects government agencies and reducing minimum capital requirements.
Table 5.2.4.1 shows the rank and the issues that are analyzed over the year from 2004 until 2012.
Table 5.2.4.1. Rank and other issues of starting a business over the years.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>149</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td>Procedures (number)</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Time (days)</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Cost (% of income per capita)</td>
<td>32.7</td>
<td>32.5</td>
<td>22.0</td>
<td>21.7</td>
<td>21.1</td>
<td>22.5</td>
<td>20.2</td>
<td>20.7</td>
<td>20.1</td>
</tr>
<tr>
<td>Paid-in Min. Capital (% of income per capita)</td>
<td>135.2</td>
<td>125.7</td>
<td>121.4</td>
<td>116.0</td>
<td>104.1</td>
<td>19.6</td>
<td>21.4</td>
<td>22.3</td>
<td>22.8</td>
</tr>
</tbody>
</table>


Paying taxes.
It is measured the taxes (value added tax, sales tax or good and service tax) and mandatory contributions that a medium-sized company must pay in a given year as well as the administrative burden of paying taxes and contribution, the frequency of filling and payments and time taken to comply with tax laws. On average firms make 10 tax payments a year, spent 224 hours a year filling, preparing and paying taxes and pay profit taxes amounting 13.4%.
In particular the payments per year are less then the OECD countries average, the time required is more then the OECD countries average and the total tax rate (% of profit) is more then the OECD countries average.
Table 5.2.4.2 shows the rank of Greece and the other issues that are analyzed for the formulation of the results.

Table 5.2.4.2. Rank and other issues on taxes.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>83</td>
</tr>
<tr>
<td>Payments (number per year)</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Time (hours per year)</td>
<td>264</td>
<td>264</td>
<td>264</td>
<td>224</td>
<td>224</td>
<td>224</td>
<td>224</td>
</tr>
<tr>
<td>Total tax rate (% profit)</td>
<td>54.6</td>
<td>50.1</td>
<td>49.6</td>
<td>47.4</td>
<td>47.4</td>
<td>47.2</td>
<td>46.4</td>
</tr>
</tbody>
</table>


Table 5.2.4.3 shows a summary of tax rates and the administrative burden that it is required for a company in parallel with the OECD high income countries.
Table 5.2.4.3. Summary of tax rates and administrative burden.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Greece</th>
<th>OECD high income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payments (number per year)</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Time (hours per year)</td>
<td>224</td>
<td>186</td>
</tr>
<tr>
<td>Profit tax (%)</td>
<td>13.4</td>
<td>15.4</td>
</tr>
<tr>
<td>Labor tax and contributions (%)</td>
<td>31.7</td>
<td>24.0</td>
</tr>
<tr>
<td>Other taxes (%)</td>
<td>1.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Total tax rate (% profit)</td>
<td>46.4</td>
<td>42.7</td>
</tr>
</tbody>
</table>


Trading across borders.
It is measured the time end cost (excluding tariffs) associated with exporting and importing of goods and the number of documents necessary to complete the transaction. These documents include bank documents, custom clearance documents and terminal handling documents.

On average exporting a standard container of goods requires 5 documents, takes 20 days and cost 1153 US Dollar. Importing the same container requires 6 documents, takes 25 days and costs 1265 US Dollar.
The documents to export are more than the OECD countries average, the time to export is much more than the OECD countries average, the cost to export is more than the OECD countries average, the documents to import are more than the OECD countries average, the time to import is much more than the OECD countries average and the cost to import is more than the OECD countries average.

Table 5.2.4.4 shows the rank of Greece and the analysis of the issues related to trading.

Table 5.2.4.4. Rank and other issues on trading across borders.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>86</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Documents to export (number)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Time to export (days)</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Cost to export (US$ per container)</td>
<td>998</td>
<td>998</td>
<td>998</td>
<td>1,153</td>
<td>1,153</td>
<td>1,153</td>
<td>1,153</td>
</tr>
<tr>
<td>Documents to import (number)</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Time to import (days)</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Cost to import (US$ per container)</td>
<td>1,245</td>
<td>1,245</td>
<td>1,245</td>
<td>1,265</td>
<td>1,265</td>
<td>1,265</td>
<td>1,265</td>
</tr>
</tbody>
</table>

Table 5.2.4.5 shows the comparison between Greece and OECD high income countries related to the indicators that are been examined.

Table 5.2.4.5. Summary of indicators on trading.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Greece</th>
<th>OECD high income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents to export (number)</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Time to export (days)</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Cost to export (US$ per container)</td>
<td>1153</td>
<td>1,032</td>
</tr>
<tr>
<td>Documents to import (number)</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Time to import (days)</td>
<td>25</td>
<td>11</td>
</tr>
<tr>
<td>Cost to import (US$ per container)</td>
<td>1265</td>
<td>1,085</td>
</tr>
</tbody>
</table>


5.2.5. Competitiveness.

The Global Competitiveness Report 2011-2012, published from The World Economic Forum in 2011, is a document produced for over three decades as a comprehensive tool that measures microeconomic and macroeconomic foundations of national competitiveness. According to the report competitiveness is defined “as the set of institutions, policies and factors that determine the level of productivity of a country”. This level sets the boundaries of prosperity that can be earned by an economy and determines the rates of return obtained by investments, which in turn are the fundamental drivers of growth. More simply a more competitive economy is one that is likely to grow faster over time.

The report measures 12 different pillars by a weighted average form of components (table 5.2.5.1) to produce specific results of numerical conclusions. These pillars are:

1. Institutions regarding to the legal and administrative framework within which individuals, firms and government interact to generate growth.
2. Infrastructure regarding to the reduction of the effect of distance between regions intergrading the national market at connecting it at low cost with other countries.
3. Macroeconomic environment related to stable conditions which are important for business and for the hall country.
4. Health and primary education related to a healthy workforce which is vital to a country’s productivity.
5. Higher education and training related to well educated workers who are able to adapt rapidly knowledge to a continuous changing environment.
6. Goods market efficiency regarding to markets that are well positioned to produce the right mix of products and services given their supply and demand conditions and to ensure that these goods can be traded in economy effectively.
7. Labour market efficiency regarding to the assurance that workers are allocated to their most efficient use in the economy and are given with incentives to get their best effort.
8. Financial market development related to a central role of a sound and well-functioning financial sector for economic activities.
9. Technological readiness related to the ability of an economy to adopt technologies and enhance the productivity of its industries with emphasis on ICT technologies.

10. Market size related to how large or small is the market of a country which allows forms to exploit economies of scale.

11. Business sophistication regarding to business practises which are conductive to higher efficiency in the production of goods and services.

12. Innovation related to technological exploitation of new ideas which in long run enhance the standards of living.

It is important to be mentioned that the pillars described above are not fully independent but are connected with each other in the determination of conclusions.

Greece is characterized as an innovation driven economy (among 35 more economies) related to the fact that its GDP per capita (US Dollars) is more then 17.000 (table 5.2.5.1).

Table 5.2.5.1. The 12 pillars of competitiveness.

Greece shows its higher rating (figure 5.2.5.1) in market size pillar, infrastructure pillar, health and primary education pillar, higher education and training pillar and technological readiness pillar. The lowest ratings are showed in macroeconomic environment, labour market efficiency, financial market development, institutions, goods market efficiency and innovation.

Table 5.2.5.2. The Global Competitiveness Index.

Greece is ranked in the 90th position among 142 countries (table 5.2.5.2) in the competitiveness index for 2011-2012 and in the past was 83 and 71 for the two previous years. It is quite obvious that countries which are compared to Greece are characterized, regarding to their stage of development, as efficiency-driven and factor-driven countries and also Greece is the last among the 35 countries which are in the highest level of development.

5.2.6. Banking system: facts and figures.

The main aspects that reflect the conditions of the Greek banks are:

- The financial crisis resulted to the downgrade of the sovereign credit ratings of Greece which resulted to the downgrade of the credit ratings of the banks, their subsidiaries and their issues.
- Liquidity and market risk were affected negatively in rely of the banks exclusively to the Eurosystem for funding as a result of inaccessibility to international money and capital markets.
- The deteriorations of the macroeconomic environment have putted an additional strain to the financial conditions of households and non-financial corporations resulting to the increase of non-performing loans ratio and the increase of difficulty in servicing their debt.

Total deposits and repos, excluding General Government, peaked at 274 billion Euros in September 2009, but in May 2011 had declined to 215 billion Euros (figure 5.2.6.1). If it is included liabilities associated to securitization and the part of non-euro area the deposits peaked at 320 billion Euros in September 2009 but by May 2011 they had declined sharply to 247 billion Euros (Bank of Greece 2011).

Figure 5.2.6.1. Total deposits and repos excl. General Government (million €).

Liabilities to the Eurosystem (figure 5.2.6.2), as a source of financing bank’s needs, have increased from 4 billion Euros in January 2008 to 118 billion Euros in September 2011. This is a major fact of the decrease of access to money from the “real economy” as it is reflected to private consumption of Greek households and non-financial organisations (Bank of Greece 2011).

Figure 5.2.6.2. Liabilities to the Eurosystem (million €).


5.2.7. Athens Exchange (ATHEX).

The Athens Exchange is the only official market for shares, derivative products and bonds trading in Greece both for private and institutional investors. It provides the regulatory framework for conducting transactions and for dissemination of information related to its listed companies. The main priority of it is the possibility to raise capital for the companies and to satisfy investors demand for securities.

Figure 5.2.7.1. Evolution of the number of listed companies on ATHEX.

Source: ATHEX Factbook 2010.
Figure 5.2.7.1 shows the evolution of the number of listed companies in ATHEX with a clear tension of decline from 2002 until 2010 and a peak in 2004, year where the Olympic Games hosted in Athens.

Figure 5.2.7.2. ATHEX market capitalisation (billion €).

The capitalisation of ATHEX (figure 5.2.7.2) was 66 billion Euros in 2002 with a clear tension of growth until 2007, reaching the 196 billion Euros, and a decline period after the start of the international and domestic economic crisis in 2008.

Figure 5.2.7.3. Bonds market capitalization (million €).

The ATHEX bonds market capitalisation (figure 5.2.7.3) follows a growth tension since 1993 reaching in 2010 approximately the 240 billion Euros with the majority being public bonds and a small amount of corporate bonds.
Figure 5.2.7.4. ATHEX composite stock price index.

Figure 5.2.7.4 shows the composite stock price index of ATHEX from 1993 until the end of 2010. Point and critical moments that worth mentioning is the sharp growth and decline in 1999 that was characterized as the Greek crash, the growth during and after the Olympic Games of 2004 and the decline after the economic crisis of 2008.

An important fact is also the share ownership of the ATHEX structure (figure 5.2.7.5) that shows the attractiveness of foreign investors in the Greek economic environment related to the stock, derivatives and bonds market. As it is presented the foreign investors are the majority of ATHEX in 2010.

Figure 5.2.7.5. ATHEX share ownership structure 31/12/2010.

5.2.8. Corruption.

The Corruption Perceptions Index (CPI) ranks countries according to perception of corruption in the public sector. According to Transparency International (TI) corruption is defined “as the abuse of entrusted power for private gain”. Perceptions
are used because corruption is to a great extend a hidden activity that is difficult to measure.

CPI is an aggregate indicator that combines different sources of information about corruption, making it possible to compare countries. The surveys and assessments used to compile the index include questions relating to bribery of public officials, kickbacks in public procurement, embezzlement of public funds and questions that probe the strength of public’s sector anti-corruption effort.

Especially for Greece sources were given from WEF (Global Competitiveness Report by the World Economic Forum), IMD (World Competitiveness Report by the Institute for Management Development), GI (Global Insight) and EIU (country risk service and country forecast by the Economist Intelligence Unit).

In detail it is measured the misuse of public office for private or political party gain including corruption in public procurement, misuse of public funds, corruption in public service and prosecution of public officials. Also it is examined the undocumented extra payments or bribes connected with imports and exports, public utilities, tax collection, public contracts and the occurrence of judicial decisions.

Table 5.2.8.1. Corruption Perceptions Index 2010.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country/Territory</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Denmark</td>
<td>9.3</td>
</tr>
<tr>
<td>1</td>
<td>New Zealand</td>
<td>9.3</td>
</tr>
<tr>
<td>1</td>
<td>Singapore</td>
<td>9.3</td>
</tr>
<tr>
<td>1</td>
<td>Finland</td>
<td>9.2</td>
</tr>
<tr>
<td>1</td>
<td>Sweden</td>
<td>9.2</td>
</tr>
<tr>
<td>1</td>
<td>Canada</td>
<td>8.9</td>
</tr>
<tr>
<td>1</td>
<td>Netherlands</td>
<td>8.8</td>
</tr>
<tr>
<td>1</td>
<td>Australia</td>
<td>8.7</td>
</tr>
<tr>
<td>1</td>
<td>Switzerland</td>
<td>8.7</td>
</tr>
<tr>
<td>1</td>
<td>Norway</td>
<td>8.6</td>
</tr>
<tr>
<td>1</td>
<td>Iceland</td>
<td>8.5</td>
</tr>
<tr>
<td>1</td>
<td>Luxembourg</td>
<td>8.5</td>
</tr>
<tr>
<td>1</td>
<td>Hong Kong</td>
<td>8.4</td>
</tr>
<tr>
<td>1</td>
<td>Ireland</td>
<td>8.0</td>
</tr>
<tr>
<td>1</td>
<td>Austria</td>
<td>7.9</td>
</tr>
<tr>
<td>1</td>
<td>Germany</td>
<td>7.9</td>
</tr>
<tr>
<td>1</td>
<td>Barbados</td>
<td>7.8</td>
</tr>
<tr>
<td>1</td>
<td>Japan</td>
<td>7.8</td>
</tr>
<tr>
<td>1</td>
<td>Qatar</td>
<td>7.7</td>
</tr>
<tr>
<td>1</td>
<td>United Kingdom</td>
<td>7.6</td>
</tr>
<tr>
<td>1</td>
<td>Chile</td>
<td>7.2</td>
</tr>
<tr>
<td>1</td>
<td>Belgium</td>
<td>7.1</td>
</tr>
<tr>
<td>1</td>
<td>United States</td>
<td>7.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country/Territory</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Macau</td>
<td>5.0</td>
</tr>
<tr>
<td>49</td>
<td>Bahrain</td>
<td>4.9</td>
</tr>
<tr>
<td>48</td>
<td>Seychelles</td>
<td>4.8</td>
</tr>
<tr>
<td>47</td>
<td>Jordan</td>
<td>4.7</td>
</tr>
<tr>
<td>46</td>
<td>Saudi Arabia</td>
<td>4.7</td>
</tr>
<tr>
<td>45</td>
<td>Czech Republic</td>
<td>4.6</td>
</tr>
<tr>
<td>44</td>
<td>Kuwait</td>
<td>4.5</td>
</tr>
<tr>
<td>43</td>
<td>Malaysia</td>
<td>4.5</td>
</tr>
<tr>
<td>42</td>
<td>Namibia</td>
<td>4.4</td>
</tr>
<tr>
<td>41</td>
<td>Turkey</td>
<td>4.4</td>
</tr>
<tr>
<td>40</td>
<td>Latvia</td>
<td>4.4</td>
</tr>
<tr>
<td>39</td>
<td>Slovakia</td>
<td>4.3</td>
</tr>
<tr>
<td>38</td>
<td>Tunisia</td>
<td>4.3</td>
</tr>
<tr>
<td>37</td>
<td>Croatia</td>
<td>4.3</td>
</tr>
<tr>
<td>36</td>
<td>FYR Macedonia</td>
<td>4.3</td>
</tr>
<tr>
<td>35</td>
<td>Costa Rica</td>
<td>4.3</td>
</tr>
<tr>
<td>34</td>
<td>Samoa</td>
<td>4.3</td>
</tr>
<tr>
<td>33</td>
<td>Rwanda</td>
<td>4.3</td>
</tr>
<tr>
<td>32</td>
<td>Italy</td>
<td>4.3</td>
</tr>
<tr>
<td>31</td>
<td>Georgia</td>
<td>4.3</td>
</tr>
<tr>
<td>30</td>
<td>Brazil</td>
<td>4.3</td>
</tr>
</tbody>
</table>


Greece is ranked in the 78 position (table 5.2.8.1) for 2010 among 178 countries. It showed deterioration from 2009 to 2010 and from 2008 to 2009. In 2009 was ranked in the 71 position and in 2008 had the 57 position of the global index.

5.2.9. Geographical position, natural resources and climate.

Greece has land borders with Albania, Skopje, Bulgaria to the north and Turkey to the east. The Aegean Sea lies to the east of the mainland, the Ionian Sea to west and the Mediterranean Sea to the south. Has one of the largest coastlines and a number of islands approximately reaching 1400. The mainland of the country consisted by 80% of mountains.

Its climate is primarily a Mediterranean climate which characterized by warm to hot, dry summers and mild to cool, wet winters.
This geographical position is giving Greece an access and consists as gateway to the region of South-East Europe and the Eastern Mediterranean. An area with more than 140 million inhabitants and a combined GDP of almost 1 trillion Euros (Eurostat 2011) with attractive labour costs, flexibility in labour legislation and a continuous effort to development from the countries that consist this specific place.

Also this position makes Greece a player to the regional area of Middle East, North Africa and Caspian Sea in the transportation of energy sources between East and West. It plays a significant role to specific projects like the South Stream gas pipeline, the Interconnector Turkey-Greece-Italy gas pipeline and the Burgas-Alexandroupolis oil pipeline, some of these projects are under preliminary stage or under environmental consideration but they still suggest the role of the country to the specific economic area.

The economic sectors that are close related to the geographical position and the climate are the tourist industry, the transportation and logistics industry, the maritime and shipping industry, the manufacturing industry and services especially in the financial area. All these sectors have a significant role to the Greek labour force, economy and balance of payments, as were explained in previous parts of the thesis.

The natural resources that are related to the country’s climate are located to renewable energy sources like wind, solar, biomass and geothermal. Country’s energy policy promotes the development of alternative energy sources and the independence from fossil fuels sources.

In latest years there has been a major effort from the state to explore the alternative existence of fossil fuels reserves in the mainland and sea area for the development, exploitation, production and refining of petrochemicals. In particular the Ministry of
Energy and Climate Change invited for the exploration and exploitation of hydrocarbons reserves in three blocks, two of which are offshore and one onshore.

The major mineral commodities that are mined and produced in Greece are: bauxite and alumina, gold, silver, zinc, lead, cement, perlite, bentonite and coal (Institute of Geology and Mining Exploration 2011).

The economic sectors that are related to natural resources are the energy, manufacturing and mining areas.

5.3. Social analysis.

5.3.1. Human Development Index.

The Human Development Report 2011 is an annual global report published by the Human Development Report Office of the United Nations Development Program (UNDP). It is published since 1990 as an annual milestone publication by introducing a way of measuring development with the combination of dimensions like long and healthy life, knowledge and decent standard of living (table 5.3.1.1). These dimensions use specific indicators like life expectancy at birth, mean years of schooling, expected years of schooling and GNI per capita that create a single statistic. The index sets a minimum and maximum for each dimension, called goalpost, and shows where each country stands in relation to this goalpost, expressed as a value between 0 and 1.

Table 5.3.1.1. Human Development Index calculation.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>Long and healthy life</th>
<th>Knowledge</th>
<th>A decent standard of living</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDICATORS</td>
<td>Life expectancy at birth</td>
<td>Mean years of schooling</td>
<td>Expected years of schooling</td>
</tr>
<tr>
<td>INDEX</td>
<td>Life expectancy index</td>
<td>Education index</td>
<td>GNI index</td>
</tr>
</tbody>
</table>


According to the Human Development Report 2011 Greece stands in the 29th position among 179 countries and is characterized as a country of a very high human development (table 5.3.1.2).

Table 5.3.1.2. Human Development Index and its components.

<table>
<thead>
<tr>
<th>HDI rank</th>
<th>Human Development Index (HDI) Value</th>
<th>Life expectancy at birth (years)</th>
<th>Mean years of schooling (years)</th>
<th>Expected years of schooling (years)</th>
<th>Gross national income (GNI) per capita (constant 2005 PPP $)</th>
<th>GNI per capita rank minus HDI rank</th>
<th>Nonincome HDI Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 Greece</td>
<td>0.861</td>
<td>79.9</td>
<td>10.1</td>
<td>16.5</td>
<td>23,747</td>
<td>5</td>
<td>0.802</td>
</tr>
</tbody>
</table>

Greece shows a significant growth in the Index since 1980 (table 5.3.1.3) with a trend of decline between 2006 and 2011.

Table 5.3.1.3. Human Development Index trends 1980 – 2011.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>0.720</td>
<td>0.765</td>
<td>0.802</td>
<td>0.856</td>
<td>0.863</td>
<td>0.861</td>
<td>-5</td>
<td>0</td>
<td>0.58</td>
</tr>
</tbody>
</table>


Greece follows the trend of growth since 1980 (figure 5.3.1.1) compared with the very high human development countries, the OECD countries and the total of world countries.

Figure 5.3.1.1. Human Development Index: trends 1980 – present.


5.3.2. Eurobarometer.

Eurobarometer is a series of surveys performed on behalf of the European Commission since 1973 by the Public Opinion Analysis sector. Its main principle is to monitor the evolution of public opinion in EU member states regarding to major topics concerning social situation, the Euro, enlargement, culture, etc.

The Standard Eurobarometer (EB) of autumn 2011 was consisted in approximately 1000 face-to-face interviews per member state. The main topic of the survey which has enabled the measurement of significant movements in European public opinion since the start of the economic and financial crisis in 2008 was the growing gap between countries. Some countries confirmed an upward trend inspired by the improved economic morale and others continue to face severe economic difficulties. The Northern countries expressed a recovery in growth and employment indicators
and the countries of the South expressed a situation that continuous to deteriorate severely.

The main concerns of the European citizens are the economic issues, the increase in price and inflation, the unemployment, pensions, healthcare, immigration, taxes and energy.

Especially for the Greek public opinion the majority see their personal situation negatively and there is a decline in satisfaction with there current personal conditions.

Also the majority expressed a negative opinion about their household financial situation, the job situation and the confidence in institutions like government and parliament. It is quite clear that Greece is the champion in pessimism among EU countries and the majority believes that things are going to the wrong direction.

Figure 5.3.2.1 shows vividly the concern of the Greek public opinion about their perception in employment with a negative opinion reaching the 78% which thinks that the situation will be getting worst in the near future.

**Figure 5.3.2.1.** Perception on job market.

![Chart showing job market perception](image)

Source: Eurobarometer 2011.
Figure 5.3.2.2 shows the opinion of Greeks about the situation of their national economy with the 99% expressed their negative believe.

Figure 5.3.2.2. The situation of national economy.

![Graph showing opinion of Greeks about national economy]

Source: Eurobarometer 2011.

5.3.3. Consumer lifestyles.

The facts and figures that are presented are formed as part of the reports series of Euromonitor International Countries and Consumer Database. Euromonitor International Ltd is a privately owned market intelligence firm, providing market research and business intelligence reports to industry. It source market information in 80 countries, producing consumer industry market reports, company profiles, market forecasts, current market data and reference books. Information are compiled from a variety of sources including national statistical offices, trade associations, private industry and own primary research.

The Greek population is ageing (table 5.3.3.1) and this demographic trend has and impact on country’s consumer behaviour. This fact is based on large life expectancy combined to low birth rates. The middle aged adults are the biggest part of the hall population followed by the older population in contrast to teenagers, teens and people in their twenties.
Table 5.3.3.1. Consumer segmentation 2005 – 2009.

<table>
<thead>
<tr>
<th>Category</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babies/infants (0-2 years)</td>
<td>313</td>
<td>318</td>
<td>322</td>
<td>326</td>
<td>328</td>
<td>4.5</td>
</tr>
<tr>
<td>Kids (3-8 years)</td>
<td>615</td>
<td>615</td>
<td>618</td>
<td>625</td>
<td>634</td>
<td>3.2</td>
</tr>
<tr>
<td>Teenagers (9-12 years)</td>
<td>430</td>
<td>434</td>
<td>432</td>
<td>425</td>
<td>418</td>
<td>-4.7</td>
</tr>
<tr>
<td>Teens (13-19 years)</td>
<td>841</td>
<td>825</td>
<td>812</td>
<td>806</td>
<td>798</td>
<td>-5.1</td>
</tr>
<tr>
<td>People in their twenties</td>
<td>1,612</td>
<td>1,577</td>
<td>1,539</td>
<td>1,492</td>
<td>1,452</td>
<td>-0.9</td>
</tr>
<tr>
<td>People in their thirties</td>
<td>1,736</td>
<td>1,756</td>
<td>1,754</td>
<td>1,753</td>
<td>1,750</td>
<td>0.7</td>
</tr>
<tr>
<td>Middle-aged Adults (40-64 years)</td>
<td>3,518</td>
<td>3,947</td>
<td>3,625</td>
<td>3,701</td>
<td>3,780</td>
<td>7.4</td>
</tr>
<tr>
<td>Older Population (65+)</td>
<td>2,007</td>
<td>2,050</td>
<td>2,069</td>
<td>2,084</td>
<td>2,093</td>
<td>4.3</td>
</tr>
</tbody>
</table>


The number of immigrants was led to a sharp rise after the end of Cold War and new waves of illegal immigrants hit Greece the latest years due to the long coastline and the easily crossed borders. There is a potential growth of non Greek citizens (table 5.3.3.2) in latest years reaching the more than 21 percent.

Table 5.3.3.2. Population by ethnic groups 2005 – 2009.

<table>
<thead>
<tr>
<th>'000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek</td>
<td>10,069</td>
<td>10,054</td>
<td>10,041</td>
<td>10,033</td>
<td>10,022</td>
<td>-0.5</td>
</tr>
<tr>
<td>Other</td>
<td>1,014</td>
<td>1,071</td>
<td>1,128</td>
<td>1,178</td>
<td>1,230</td>
<td>21.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,083</td>
<td>11,125</td>
<td>11,169</td>
<td>11,211</td>
<td>11,252</td>
<td>1.5</td>
</tr>
</tbody>
</table>


It is noticed a slight growth in married people with a major growth in divorced couples (table 5.3.3.3). This growth reached an 11 percent followed by an increase in widowed and single people.

Table 5.3.3.3. Population by marital status 2005 – 2009.

<table>
<thead>
<tr>
<th>'000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>5,596</td>
<td>5,596</td>
<td>5,610</td>
<td>5,622</td>
<td>5,624</td>
<td>0.9</td>
</tr>
<tr>
<td>Divorced</td>
<td>307</td>
<td>316</td>
<td>325</td>
<td>333</td>
<td>341</td>
<td>11.1</td>
</tr>
<tr>
<td>Widowed</td>
<td>906</td>
<td>913</td>
<td>921</td>
<td>929</td>
<td>935</td>
<td>3.6</td>
</tr>
<tr>
<td>Single</td>
<td>4,384</td>
<td>4,400</td>
<td>4,414</td>
<td>4,429</td>
<td>4,442</td>
<td>1.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,033</td>
<td>11,125</td>
<td>11,169</td>
<td>11,211</td>
<td>11,252</td>
<td>1.5</td>
</tr>
</tbody>
</table>


The majority of the population (table 5.3.3.4) choose urban areas as place of living, fact that showed a growth of 3.6 percent, attracted by the employment opportunities and social conditions.

Table 5.3.3.4. Population by urban/rural location and density 2005 – 2009.

<table>
<thead>
<tr>
<th>As stated</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban ('000)</td>
<td>5,612</td>
<td>6,075</td>
<td>6,937</td>
<td>7,994</td>
<td>7,059</td>
<td>3.6</td>
</tr>
<tr>
<td>Rural ('000)</td>
<td>4,271</td>
<td>4,250</td>
<td>4,232</td>
<td>4,217</td>
<td>4,193</td>
<td>-1.6</td>
</tr>
<tr>
<td>Population density (people per sq km)</td>
<td>86</td>
<td>86</td>
<td>87</td>
<td>87</td>
<td>87</td>
<td>1.5</td>
</tr>
</tbody>
</table>

The analysis of annual disposable income per household has a key year point. This year which is the beginning of the economic and financial crisis, is 2008. Until that period the high income households had shown a significant growth but after that period there is a major decline with a growth trend for small disposable income households (table 5.3.3.5).

Table 5.3.3.5. Annual disposable income per household (current value) 2005 – 2009.

<table>
<thead>
<tr>
<th>'000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above US$500</td>
<td>3,327</td>
<td>3,870</td>
<td>3,914</td>
<td>3,958</td>
<td>4,001</td>
</tr>
<tr>
<td>Above US$1,000</td>
<td>3,326</td>
<td>3,869</td>
<td>3,913</td>
<td>3,957</td>
<td>4,000</td>
</tr>
<tr>
<td>Above US$5,000</td>
<td>3,785</td>
<td>3,834</td>
<td>3,887</td>
<td>3,937</td>
<td>3,972</td>
</tr>
<tr>
<td>Above US$10,000</td>
<td>3,535</td>
<td>3,707</td>
<td>3,791</td>
<td>3,861</td>
<td>3,870</td>
</tr>
<tr>
<td>Above US$25,000</td>
<td>2,581</td>
<td>2,860</td>
<td>3,112</td>
<td>3,304</td>
<td>3,171</td>
</tr>
<tr>
<td>Above US$45,000</td>
<td>1,364</td>
<td>1,571</td>
<td>1,914</td>
<td>2,214</td>
<td>1,958</td>
</tr>
<tr>
<td>Above US$75,000</td>
<td>479</td>
<td>588</td>
<td>796</td>
<td>1,014</td>
<td>824</td>
</tr>
<tr>
<td>Above US$150,000</td>
<td>107</td>
<td>122</td>
<td>147</td>
<td>178</td>
<td>151</td>
</tr>
</tbody>
</table>


The single-person households and the couples without children are showing the biggest growth (table 5.3.3.6) in addition to single-type families that are showing a major decline. Totally the number of households showed a growth of 4.5 percent during the examined period.

Table 5.3.3.6. Households by type 2005 – 2009.

<table>
<thead>
<tr>
<th>'000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-person</td>
<td>810</td>
<td>631</td>
<td>853</td>
<td>874</td>
<td>896</td>
<td>10.7</td>
</tr>
<tr>
<td>Couples without children</td>
<td>1,082</td>
<td>1,118</td>
<td>1,164</td>
<td>1,212</td>
<td>1,250</td>
<td>15.6</td>
</tr>
<tr>
<td>Couples with children</td>
<td>837</td>
<td>636</td>
<td>845</td>
<td>852</td>
<td>861</td>
<td>2.9</td>
</tr>
<tr>
<td>Single-parent family</td>
<td>695</td>
<td>671</td>
<td>666</td>
<td>655</td>
<td>546</td>
<td>-5.7</td>
</tr>
<tr>
<td>Other</td>
<td>414</td>
<td>414</td>
<td>385</td>
<td>364</td>
<td>348</td>
<td>-16.0</td>
</tr>
<tr>
<td>Total households</td>
<td>3,827</td>
<td>3,870</td>
<td>3,914</td>
<td>3,958</td>
<td>4,001</td>
<td>4.5</td>
</tr>
</tbody>
</table>


Greece has one of the highest percentages of home owners in the EU and for many years the construction sector was the “steamer” of private consumption. The number of home owners showed a growth of 4.5 percent (table 5.3.3.7) with major growth in home owners with a mortgage and a decline to owners without mortgages.
Table 5.3.3.7. Households by tenure 2005 – 2009.

<table>
<thead>
<tr>
<th>'000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home owner</td>
<td>2,834</td>
<td>2,864</td>
<td>2,896</td>
<td>2,929</td>
<td>2,963</td>
<td>4.5</td>
</tr>
<tr>
<td>Home owner, without</td>
<td>2,439</td>
<td>2,420</td>
<td>2,404</td>
<td>2,391</td>
<td>2,379</td>
<td>-2.5</td>
</tr>
<tr>
<td>mortgage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home owner, with mortgage</td>
<td>395</td>
<td>444</td>
<td>492</td>
<td>538</td>
<td>584</td>
<td>47.8</td>
</tr>
<tr>
<td>Rented</td>
<td>763</td>
<td>772</td>
<td>779</td>
<td>785</td>
<td>789</td>
<td>3.3</td>
</tr>
<tr>
<td>Other</td>
<td>230</td>
<td>235</td>
<td>240</td>
<td>244</td>
<td>249</td>
<td>8.3</td>
</tr>
<tr>
<td>Total households</td>
<td>3,827</td>
<td>3,870</td>
<td>3,914</td>
<td>3,958</td>
<td>4,001</td>
<td>4.5</td>
</tr>
</tbody>
</table>


The household possession of broadband internet-enabled computer showed a significant growth in the review period (table 5.3.3.8). This increase reached in 2009 almost 30% of households which is remarkable compared with the year of 2005 and since.


<table>
<thead>
<tr>
<th>% of households</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband internet-enabled computer</td>
<td>0.6</td>
<td>3.8</td>
<td>7.5</td>
<td>22.0</td>
<td>29.8</td>
</tr>
<tr>
<td>CD player</td>
<td>19.6</td>
<td>19.6</td>
<td>19.1</td>
<td>18.9</td>
<td>18.6</td>
</tr>
<tr>
<td>DVD player/recorder</td>
<td>33.0</td>
<td>38.8</td>
<td>45.5</td>
<td>51.3</td>
<td>56.8</td>
</tr>
<tr>
<td>Video game console</td>
<td>10.5</td>
<td>10.4</td>
<td>10.3</td>
<td>10.2</td>
<td>10.2</td>
</tr>
</tbody>
</table>


In 2005 – 2009 real consumer expenditure in Greece grew by 8.5 % reaching approximately the 180 billion Euros (table 5.3.3.9). The categories that experienced the most rapid growth in real expenditure during the review period are communications (21.9%), education (16.8%), hotel and catering (14.3%), leisure and recreation (14.1%) and health goods and medical services (13.4%). In addition the categories with slow growth are food and non-alcoholic (2.1%), clothing and footwear (2.5%), transport (3.4%), housing (3.9%) and household goods and services (8.6%).
Table 5.3.3.9. Consumer expenditure by broad category (constant 2009 value) 2005 – 2009.

<table>
<thead>
<tr>
<th>EUR million</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and non-alcoholic beverages</td>
<td>24,580</td>
<td>25,761</td>
<td>26,070</td>
<td>25,061</td>
<td>25,089</td>
<td>2.1</td>
</tr>
<tr>
<td>Alcoholic beverages and tobacco</td>
<td>7,696</td>
<td>8,299</td>
<td>8,520</td>
<td>8,822</td>
<td>8,679</td>
<td>9.9</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>16,173</td>
<td>16,932</td>
<td>17,198</td>
<td>17,216</td>
<td>16,572</td>
<td>2.5</td>
</tr>
<tr>
<td>Housing</td>
<td>25,710</td>
<td>27,020</td>
<td>27,441</td>
<td>27,490</td>
<td>25,724</td>
<td>3.9</td>
</tr>
<tr>
<td>Household goods and services</td>
<td>10,420</td>
<td>11,017</td>
<td>11,360</td>
<td>11,569</td>
<td>11,324</td>
<td>9.6</td>
</tr>
<tr>
<td>Health goods and medical services</td>
<td>10,111</td>
<td>10,697</td>
<td>11,160</td>
<td>11,516</td>
<td>11,461</td>
<td>13.4</td>
</tr>
<tr>
<td>Transport</td>
<td>12,862</td>
<td>13,613</td>
<td>13,849</td>
<td>13,899</td>
<td>13,336</td>
<td>3.4</td>
</tr>
<tr>
<td>Communications</td>
<td>4,375</td>
<td>4,598</td>
<td>4,994</td>
<td>5,377</td>
<td>5,333</td>
<td>21.9</td>
</tr>
<tr>
<td>Leisure and recreation</td>
<td>9,919</td>
<td>10,534</td>
<td>11,028</td>
<td>11,414</td>
<td>11,315</td>
<td>14.1</td>
</tr>
<tr>
<td>Education</td>
<td>3,086</td>
<td>3,319</td>
<td>3,446</td>
<td>3,559</td>
<td>3,604</td>
<td>15.8</td>
</tr>
<tr>
<td>Hotels and catering</td>
<td>30,252</td>
<td>32,004</td>
<td>33,448</td>
<td>34,547</td>
<td>34,566</td>
<td>14.3</td>
</tr>
<tr>
<td>Misc goods and services</td>
<td>9,862</td>
<td>10,407</td>
<td>10,996</td>
<td>11,435</td>
<td>11,349</td>
<td>15.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>165,291</td>
<td>174,191</td>
<td>179,517</td>
<td>182,904</td>
<td>179,371</td>
<td>3.5</td>
</tr>
</tbody>
</table>


There is a significant growth in consumer lending (29.3%) reaching more than 100 billion euros in 2009 (table 5.3.3.10), this growth also showed in mortgages (31.8%) reaching 68 billion Euros and in consumer credit (24.3%) reaching 33 billion Euros. It is quite clear that a decline trend in lending was appointed after the start of the economic crisis.

Table 5.3.3.10. Consumer loans, mortgages and credit (constant 2009 value) 2005 – 2009.

<table>
<thead>
<tr>
<th>EUR million</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Lending</td>
<td>73,136</td>
<td>94,382</td>
<td>111,202</td>
<td>103,272</td>
<td>101,010</td>
<td>29.3</td>
</tr>
<tr>
<td>Mortgages/Housing</td>
<td>51,514</td>
<td>62,805</td>
<td>74,083</td>
<td>72,510</td>
<td>57,921</td>
<td>31.8</td>
</tr>
<tr>
<td>Consumer Credit</td>
<td>25,624</td>
<td>31,577</td>
<td>37,113</td>
<td>35,753</td>
<td>33,069</td>
<td>24.3</td>
</tr>
</tbody>
</table>


5.4. Technological analysis.

5.4.1. Technological facts and figures.

The gross domestic expenditure on R&D (figure 5.4.1.1) was always less than 1% of Greek GDP from 2003-2007, for 2008 and 2009 there are no values (OECD 2011). For the year 2007 the expenditure was 0.58% when in EU27 countries was 1.77% and in OECD countries was 2.28%.
The percentage of government researchers as value of national total is reaching almost the 11% (figure 5.4.1.2) for the years that there are statistical elements (OECD 2011). This value is higher compared to OECD countries which are reaching the 7% approximately.

The number of patent applications to the EPO (European Patent Office) is showing a growth trend in the period 1999-2008 (figure 5.4.1.3). This value reached almost the 10 applications per million of Greek inhabitants in 2008 compared to 144 EU16 countries (Eurostat 2011).
Greece has almost 12000 enterprises (figure 5.4.1.4) in high-tech industries in the period 2003-2007 (Eurostat 2011). In comparison for 2007 Portugal has 16000, Bulgaria 6000 and Ireland 7000.

The access of Greek households to internet shows a significant growth (figure 5.4.1.5), in 2002 was estimated in 12% reaching in 2010 the 46%. This percentage is still far away from the average of the EU countries which are reaching almost 70% for 2010 (Eurostat 2011).
5.4.2. The Innovation Union Scorecard (IUS).

The *Innovation Union Scorecard 2010* is a tool to help monitor the implementation of the Europe 2020 Innovation Union flagship by providing a comparative assessment of the innovation performance of the EU27 member states and the relative strengths and weaknesses of the research and innovation system. It uses 25 indicators which better capture the performance of national research and innovation systems as a whole. The analysis is provided by recent statistics from Eurostat and other recognized organisations. The indicators examine human resources, research systems, finance and support, firm investments, linkages & entrepreneurship, intellectual assets, innovators and economic effects.

Figure 5.4.2.1. Innovation performance of EU member states.
Greece is characterised as a moderate innovator (figure 5.4.2.1) as Portugal, Spain, Italy, Hungary and Poland.

Figure 5.4.2.2. Profile of Greece to Innovation Union Scorecard (EU27=100).

Greece shows a relative strength (figure 5.4.2.2) in human resources, innovators and output. It shows relative weakness in financial support, firm investments and intellectual assets. Also high growth, compared to previous surveys, is observed to venture capital, community designs and sales of new products (The Innovation Union Scorecard 2010).

5.5. Major facts and figures.

Greece or officially The Hellenic Republic is a country of the southern portion of Europe. It is a member of the European Union since 1981 and the Eurozone since 2001, a founding member of the United Nations, member of North Atlantic Treaty Organisation, the Organisation for Economic Co-operation and Development, the International Monetary Fund and other international institutions. Greece is a parliamentary republic and characterised as a developed country with an advanced high-income economy and very high standards of living.
Table 5.5.1. shows the major figures of the country in summary for 2005-2010.

Table 5.5.1. Major figures of Greece.

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation (% change)</td>
<td>3.6</td>
<td>3.2</td>
<td>2.9</td>
<td>4.2</td>
<td>1.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Exchange rate (per US$)</td>
<td>0.80</td>
<td>0.80</td>
<td>0.73</td>
<td>0.68</td>
<td>0.72</td>
<td>0.75</td>
</tr>
<tr>
<td>Lending rate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GDP (% real growth)</td>
<td>2.2</td>
<td>4.5</td>
<td>4.5</td>
<td>2.0</td>
<td>-1.9</td>
<td>-4.0</td>
</tr>
<tr>
<td>GDP (national currency millions)</td>
<td>194,618.8</td>
<td>209,919.5</td>
<td>225,539.5</td>
<td>235,678.9</td>
<td>233,046.0</td>
<td>231,679.1</td>
</tr>
<tr>
<td>GDP (US$ millions)</td>
<td>242,127.6</td>
<td>263,353.8</td>
<td>308,690.0</td>
<td>344,910.0</td>
<td>323,841.0</td>
<td>310,849.8</td>
</tr>
<tr>
<td>Population, mid-year (’000)</td>
<td>11,104.0</td>
<td>11,147.1</td>
<td>11,190.3</td>
<td>11,231.7</td>
<td>11,271.0</td>
<td>11,307.5</td>
</tr>
<tr>
<td>Birth rate (per ’000)</td>
<td>8.8</td>
<td>8.7</td>
<td>8.6</td>
<td>8.5</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Death rate (per ’000)</td>
<td>8.7</td>
<td>8.6</td>
<td>8.6</td>
<td>8.5</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td>No. of households (’000)</td>
<td>3,827.4</td>
<td>3,870.4</td>
<td>3,914.2</td>
<td>3,957.8</td>
<td>4,003.9</td>
<td>4,043.5</td>
</tr>
<tr>
<td>Total exports (US$ millions)</td>
<td>17,271.4</td>
<td>20,810.1</td>
<td>23,476.3</td>
<td>25,526.1</td>
<td>20,122.7</td>
<td>20,466.7</td>
</tr>
<tr>
<td>Total imports (US$ millions)</td>
<td>54,551.9</td>
<td>63,799.2</td>
<td>75,929.0</td>
<td>89,407.6</td>
<td>59,635.6</td>
<td>49,070.9</td>
</tr>
<tr>
<td>Tourism receipts (US$ millions)</td>
<td>13,334.0</td>
<td>14,402.0</td>
<td>15,550.0</td>
<td>17,416.0</td>
<td>18,216.4</td>
<td>19,275.9</td>
</tr>
<tr>
<td>Tourism spending (US$ millions)</td>
<td>3,039.0</td>
<td>2,997.0</td>
<td>3,423.0</td>
<td>3,930.0</td>
<td>4,177.5</td>
<td>4,396.1</td>
</tr>
<tr>
<td>Urban population (’000)</td>
<td>6,811.8</td>
<td>6,874.7</td>
<td>6,937.2</td>
<td>6,994.4</td>
<td>7,059.2</td>
<td>7,131.0</td>
</tr>
<tr>
<td>Urban population (%)</td>
<td>61.5</td>
<td>61.8</td>
<td>62.1</td>
<td>62.4</td>
<td>62.7</td>
<td>63.2</td>
</tr>
<tr>
<td>Population aged 0-14 (%)</td>
<td>14.4</td>
<td>14.3</td>
<td>14.3</td>
<td>14.2</td>
<td>14.2</td>
<td>14.2</td>
</tr>
<tr>
<td>Population aged 15-64 (%)</td>
<td>67.5</td>
<td>67.2</td>
<td>67.2</td>
<td>67.2</td>
<td>67.2</td>
<td>67.0</td>
</tr>
<tr>
<td>Population aged 65+ (%)</td>
<td>18.1</td>
<td>18.5</td>
<td>18.5</td>
<td>18.6</td>
<td>18.6</td>
<td>18.8</td>
</tr>
<tr>
<td>Male population (%)</td>
<td>49.5</td>
<td>49.5</td>
<td>49.5</td>
<td>49.5</td>
<td>49.5</td>
<td>49.5</td>
</tr>
<tr>
<td>Female population (%)</td>
<td>50.5</td>
<td>50.5</td>
<td>50.5</td>
<td>50.5</td>
<td>50.5</td>
<td>50.5</td>
</tr>
<tr>
<td>Life expectancy male (years)</td>
<td>76.8</td>
<td>77.2</td>
<td>77.1</td>
<td>77.7</td>
<td>77.9</td>
<td>78.0</td>
</tr>
<tr>
<td>Life expectancy female (years)</td>
<td>81.6</td>
<td>81.9</td>
<td>81.8</td>
<td>82.4</td>
<td>82.5</td>
<td>82.8</td>
</tr>
<tr>
<td>Infant mortality (deaths per 1000 live births)</td>
<td>4.4</td>
<td>4.1</td>
<td>4.0</td>
<td>3.8</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Adult literacy (%)</td>
<td>96.8</td>
<td>97.0</td>
<td>97.1</td>
<td>97.2</td>
<td>97.3</td>
<td>97.4</td>
</tr>
</tbody>
</table>

Chapter 6. Conclusion.

Figure 6.1. The structural framework of investments in Greece.

The structural framework of investments in Greece is represented by:

- The National Strategic Reference Framework which is a reference document for the development under the provision of European Union funds for the period 2007 – 2013. It focuses on the implementation of policies in national and regional level with priority to provide growth rate and improve productivity. The objectives of the strategy are the investment in human capital and sustainable infrastructure, the promotion of innovation and the step up of institutional environment. The contribution of the programme estimated to approximately 20 billion Euros.

- The Investment Law which provides state aid to investment categories like general entrepreneurship, technological development, regional cohesion, youth entrepreneurship, partnerships, large investment plans and multi-annual business plans. The type of aid is tax relief, subsidy, leasing subsidy and soft loans from ETEAN. Responsible for the evaluation processes are the Ministry of Economy and the Ministry of Competitiveness.

- The Fast Track Law which accelerates the licensing procedures of investments. It is applicable to strategic investments, those with important and positive impact to national economy, and related to energy sector, tourism, industry, advanced technologies and innovation. It includes investments which come under the Investment Law and implemented by the Greek State, private sector or public private partnerships. The process is responsibility of the “Invest in Greece” Agency.

- The Public Private Partnership Law which establishes the legal framework of the implementation of PPP. These partnerships focus in infrastructure, education, environment, health and public sector real estate. It defines issues such as financing, payment mechanisms, sustainable development and protection of national heritage. It is a responsibility of the Ministry of Finance.
The state organisations that implement the structural framework are:

- The “Invest in Greece” Agency which is the official Agency of Greece that promotes and facilitates private investments. It is under the supervision of Ministry of Development, Competitiveness and Shipping. It identifies opportunities and provides investors with necessary information. It has units such as Investment Promotion Unit, Investors Service Unit, Policy and Planning Unit, Finance and Administration Unit, Communication and Public Relations Unit. It promotes investments in sectors like tourism, energy, information technology, life science and environmental management. The Agency is responsible for the implementation of “Fast Track” Law.
- The National Wealth Fund which is the official Privatisation Agency of Greece. The fund is responsible for the privatisation programme of the period 2011 – 2015. It includes shareholdings in listed and non-listed state operations and banks, shareholdings in public infrastructure, monopoly rights and public real estate. The assets under the programme have an estimated value of 50 billion Euros. It is under the supervision of Ministry of Finance.

Also the Greek State promotes a digital information, networking and collaboration space, the “StartUp Greece”. This service is a space for communication of ideas, search for best practices, share of valuable ideas and any other necessary information relating to investments in Greece. The service is addressed to organisations, citizens, research institutes and economic entities. It is an online community between investors and financial organisations, government and public bodies, and entrepreneurs.

The main tool of investing is the NSRF which have specific priorities and targets in sectors which if implemented can create an attractive environment for business. Until now only the 33% of the total budget has been implemented in the 5th year of existence reaching the 8 billion Euros.

The Investment Law follows the priorities and policies of the NSRF programme with main types of aid tax relief and minimum subsidy.

The Fast Track process is implemented complementally with the Investment Law and accelerates the investment procedures, recognising the existence of problems in the speed of processes.

The Public Private Partnership, which is the oldest chronologically part of the structural framework, gives the potentially for investments is sector were only the state had access in the past.

These structural parts are under the supervision of the Ministry of Finance except of the Fast Track which is under the authority of Ministry of Development.

In advance the official agency promotes priorities and sectors of investments which are major economic activities in Greece. This agency is under the authority of the Ministry of Development.

The National Wealth Fund, which is under the control of Ministry of Finance, was created under the enormous need for revenues from the Greek State and its lenders. All these mechanisms are target directly to foreign investments and direct control of the management and as can been valuated from the data have not succeeded. This point in parallel with the observation that as state authorities and tools are working under conditions of bureaucracy, corruption, absence of clear vision, lack of change and not under a unique authority which is going to be responsible for investments create an internal environment which does not play the crucial role.
The analysis of investment environment has showed:

- In political field the Greek Government has signed the Memorandum of Economic and Financial Policies with the European Union, the European Central Bank and the International Monetary Fund. It includes the economic, fiscal, financial and structural policies of the Greek State for the period 2010 – 2013 with priority to strengthen the market confidence and fiscal position of the country. The total amount of the support is 110 billion Euros. After this agreement followed the Medium Term Fiscal Strategy with Troika for the period 2012 – 2015. This strategy focuses in fiscal consolidation efforts with priority of achieving its fiscal targets. Also the strategy includes a privatisation programme with estimated value of 50 billion Euros and responsibility of the National Wealth Fund as an official privatisation agency. In parallel with the implementation of the above agreements another important decision is taking place. This decision is the Private Sector Involvement which agreed in 26th October 2011 with aim to decline the Greek debt to GDP ratio reaching 120% by 2020 after the development of a voluntary bond exchange between the Greek State and private investors with nominal discount of 50%. The implementation of the decision will be followed by a second financial assistance by troika focusing in structural reforms and fiscal consolidation. These bilateral agreements are decided and implemented in a domestic political system and public administration which characterised by the absence of clear strategy vision, corruption and inappropriate behaviours, client relationship, little co-ordination between public entities, decisions with no reflected results and slow speed to changes especially to fiscal policy.

- In economic field the growth of Greek economy is negative for third year after 2009. The GDP per capita is just below the EU countries average with tendency of further decline. The budget deficit and the current account deficit have a two-digit number for the period 2009-2011. The public debt reached more then 140% in 2010 with a growth tendency. These factors exposed the weak fiscal position of Greece and the unsustainable condition to repay its debt and resulted to continuous downgrades from rating agencies and enormous growth to interest rate spreads in a prohibitive level. This economic recession resulted to a major increase of unemployed rate with projections for 1 million unemployed in 2012. Another important issue is the size of shadow economy which is reaching more then 25% of GDP. In labour market the majority is employed in the tertiary and secondary sector, with major activities in public administration, trade, manufacturing, education, tourism, shipping and construction. Greece shows the biggest size of self-employed reaching over 40% and has a small average of size of enterprises. The labour productivity is lesser then the EU15 countries with growth tendency and the average hours worked per person are much more then EU15 countries. The unit labour cost has a growth tendency and the strictness to employ protection in more then the OECD countries. FDI reached in 2010 bellow 2 billion Euros with tendency of decline since 2008. The main sources of FDI are Germany, France and United Kingdom. In service sector main areas of FDI are post-telecom and financial intermediation. In manufacturing sector main areas of FDI are chemical products and food industry. The major import origins are Germany and Italy with focus on machine-transport equipment and mining-fuels. The major export origins are also Germany and Italy with focus on industrial products and food-animals. There is a major imbalance between the value of imports
and exports reflected in the current account deficit. In doing business Greece shows a difficulty in starting a new business, in protection of investors, in registering property and trading across borders. In taxes the total tax rate is more then the OECD countries average with attention to labour tax and contributions. In competitiveness Greece is characterized as an innovation-driven economy with high rates in market size, infrastructure, health and primary education. In contrary shows low rates in macroeconomic environment, labour market efficiency, financial market development and innovation. The banking system is characterised by downgrades of the credit rating of the banks, liquidity and market risk which forcing to the Eurosystem as an exclusively funding source and increase on non-performing loans as a result of difficulty for households and enterprises to service their debt. These economic conditions are reflected to the decrease of market capitalisation in Athens Exchange and an increase in bond market capitalisation. The ATHEX composite market price index shows a major decline tendency since 2008 in parallel with the number of listed companies. In corruption the country shows a large perception in public sector and every stage of business process. It is reported corruption in public procurement, misuse of public funds, undocumented extra payments and bribes. Greece’s natural resources are related to its climate and geographical position. It has the potential of developing sustainable energy sources and makes its first steps in exploitation of fossil fuels reserves. Also have major mining commodities.

- In social field Greece shows a significant step-up in human development and is among the first countries in the world compared to dimension such as knowledge, long and healthy life and decent standard of living. Of course the severe economic crisis has an impact in public opinion related to perceptions on job market and the feeling about the situation of national economy. In both aspects Greeks have a very negative opinion which characterizes them as the most pessimistic in EU regarding to their future standards of living. In consumer lifestyles facts show that the population is ageing with an impact on consumer behaviour. There is a potential growth of non-Greek ethnic groups and the majority of the population is living in urban areas. There is a growth trend for small disposable income households. Also the country has one of the highest percentages of home owners in the EU. The categories that experienced the most rapid growth in real expenditure were communications, education, hotels and catering, leisure and recreation. In contrary categories with slow growth were food and non-alcoholic, clothing and footwear and transport. This consumer behaviour was followed by a significant growth in consumer lending, mortgages and consumer credit.

- In technological field Greece’s expenditure on R&D was always less then 1% of GDP and much lesser then the EU countries. The number of patent applications showed a growth trend but still fall short and the number of high-tech industries showed the same trend. The access of Greeks to the internet has a significant growth with a gap compared to the EU average. In national research and innovation process Greece is characterised as a moderate innovator. Its relative strengths are human resources, innovators and output. Its relative weaknesses reflected in financial support, firm investments and intellectual aspects. It also shows a major growth, compared to previous years, in venture capital and sales of new products.
Table 6.1. Greece’s ranking in international reports.

<table>
<thead>
<tr>
<th>Report title</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Doing Business Report 2012</td>
<td>100 – 183 countries</td>
</tr>
<tr>
<td>Global Competitiveness Report 2011-2012</td>
<td>90 – 142 countries</td>
</tr>
<tr>
<td>Corruption Perceptions Index 2010</td>
<td>78 – 178 countries</td>
</tr>
<tr>
<td>Human Development Index Report 2011</td>
<td>29 – 179 countries</td>
</tr>
<tr>
<td>Innovation Union Scorecard 2010</td>
<td>19 – 27 countries</td>
</tr>
</tbody>
</table>

Greece is characterized as an innovation driven economy in the stage of national development. It can successfully compete internationally and create technology and not only implement the existing one. This characteristic does not reflect all the aspects of the economy where in specific areas shows a behaviour of investment driven economy or even more a factor driven economy. This observation can be clearly pointed be the rank of Greece in international reports (table 6.1.) where in specific categories has similarities with developed economies an in other with developing economies. This fact addresses that the Greek economy and State has major imbalances and contrasts.

As an innovation driven economy its domestic demand is sophisticated and begins internationalizing through nation’s multinational enterprises. New mechanisms emerge to create advanced and specialized factors which are been upgraded in specific industries. Firms compete not only in cost but also on productivity due to high skills and advanced technology. Related and supporting industries are well developed and firms create global strategies.

In this environment a sudden change occurred. After the world financial crisis a severe domestic economic and financial crisis in 2009 showed. This year can be pointed as landmark in Modern Greek history. As can been observed by the most figures of the thesis there is a change in the direction and tendency of major macroeconomic, economic, social and political facts. Greece entered to a period similar to “Great Depression”, which explained above, with major uncertainty in all aspects of living.

This condition has a specific victimizer and a lot of victims. It is the Greek State and the political system which for many years create an unproductive, corrupted, uncompetitive and non attracted environment. This state has three “demons” which drove to the specific condition, the sovereign debt, the budget deficit and the deficit in current account. Of course even the foreign strategies and programmes that implemented from Troika had not satisfied results but in contrary pushed the country to a greater recession or even more close to bankruptcy.

Especially in the field of investments factors that have negative impact and must be changed are the macroeconomic environment related to country’s fiscal stability or even more it’s monetary policy if necessary, inefficient public administration bureaucracy, access to financing relates to the domestic banking system and the characteristics of it, corruption, tax regulations, policy instability, tax rates and restrictive labour regulations.
All these economic, social and political facts must be analysed having in mind that:

- Greece is a country between South East Europe and Eastern Mediterranean and the most developed in the region.
- Is in a position of 140 million inhabitants and approximately 1 trillion Euros of combined GDP.
- Is in a position between transport routes and energy sources of Middle East, Caspian Sea and North Africa.
- Is a state with a strong currency and a member of one of the most important economic unions of the world.
- Is a state and nation which historically showed its willingness for development and growth with citizens that work very hard.
- A state that is in the middle of international attention and has been given financial rescue packages from foreign countries and institutions.
- A state that is under radically reforms in most economic sectors, sometimes violent and severe, with inhabitants that showed proverbial acceptance in the austerity measures.
- Has a political system that has failed and lost its power to control the domestic environment.

This analysis defined the major forces that contribute in the creation of the investment environment in Greece by examining different internal and external factors. This analysis is the foundation for further research in the major issue of national attractiveness of investment and investigation of national competitive advantage in specific sectors of the economy which are going to be the vaulting horse of development in the future.
Chapter 7. Bibliography.


Internet sources.


