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**ΠΑΝΤΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ**

**ΤΜΗΜΑ ΟΙΚΟΝΟΜΙΚΗΣ & ΠΕΡΙΦΕΡΕΙΑΚΗΣ ΑΝΑΠΤΥΞΗΣ**

**ΠΜΣ ΕΦΑΡΜΟΣΜΕΝΩΝ ΟΙΚΟΝΟΜΙΚΩΝ ΚΑΙ ΔΙΟΙΚΗΣΗΣ**

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**THESIS**

**FACTORS AFFECTING THE RECOVERY OF  
THE GREEK ECONOMY COMPARED TO  
SLOVENIA (2008-18)**

**ΟΝΟΜΑ : ΧΡΙΣΤΟΦΟΡΑΤΟΣ ΑΠΟΣΤΟΛΟΣ**

**ΕΠΙΒΛΕΠΩΝ ΚΑΘΗΓΗΤΗΣ : ΣΙΟΥΡΟΥΝΗΣ ΓΡΗΓΟΡΙΟΣ**

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## **ΕΥΧΑΡΙΣΤΙΕΣ**

Στο σημείο αυτό θα ήθελα να ευχαριστήσω όλους όσους με βοήθησαν στην επίτευξη της διπλωματικής μου εργασίας στα πλαίσια του μεταπτυχιακού προγράμματος του Παντείου Πανεπιστημίου. Ειδικότερα ευχαριστώ τον επιβλέποντα καθηγητή κ. Σιουρούνη Γρηγόριο όπως τα άλλα δύο μέλη της τριμελούς επιτροπής κύριο Σαράντη Λώλο και κύριο Θεοδόσιο Παλάσκα για τις συμβουλές και την καθοδήγηση τους καθ' όλη την διάρκεια του Προγράμματος Μεταπτυχιακών Σπουδών. Τέλος θα ήθελα να ευχαριστήσω όλους τους καθηγητές για την αμέριστη συμπαράστασή τους και διδασκαλίας τους καθόλη τη διάρκεια του προγράμματος.

## ABSTRACT

Undoubtedly, 2008 was the worst economic crisis in Europe, affecting all of the countries of the Union, some less and others more. This crisis can be said to have been fully overcome throughout Europe in 2018 and from now on its Member States are on the path to economic growth.

The purpose of this paper is to study the concept of economic growth and in particular to examine the factors that contribute to the economic growth of Greece and Slovenia.

The thesis consists of 4 chapters each of which deals with the subject under consideration and a different perspective. In particular, the first chapter introduces the concept of economic growth. In this context, Solow's model of achieving economic growth in a country is also being studied. Reference is also made to the concept of the economic crisis.

The second and third chapters then examine the economics of Greece and Slovenia in order to highlight the similarities and differences between them, as well as the comparative advantages and weaknesses of these countries' economies.

Finally, the fourth chapter of the paper studies the factors affecting the economies of the Member States and shows us how they evolve and grow from 2008 to 2018. Such economic indicators are: GDP, current account balance, domestic demand, trade balance, labor productivity, public debt, government deficit, CPI, debt and deficit levels.

Keywords: *Greece, Slovenia, economy, growth, crisis*

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# **CHAPTER 1: INTRODUCTION OF THE CONCEPT OF ECONOMIC GROWTH AND THE RECENT GLOBAL ECONOMIC CRISIS**

## **1.1 The concept of economic growth**

Growth is defined as the percentage annual change in the output of an economy. The term growth is often used in contrast to economic growth and vice versa. In general, growth is defined as the annual percentage change in a variable (in the particular case of income or output) and is therefore a quantitative indicator. The term economic growth is a (mainly) qualitative indicator, which relates the capability to meet individual and social needs. The content of the two terms is mainly complementary, as growth presupposes economic growth. However, the implementation of some growth policies may limit the potential for economic growth.

Economic growth is calculated by the annual percentage change in GDP. Economic growth, on the other hand, is calculated by a mixture of indicators. For example, the United Nations uses the United Nations' Human Development Index (HDI), which includes the rate of economic growth, life expectancy and the educational level of the population.

According to the OECD, economic growth is a concept that includes prosperity and therefore makes it a more holistic concept than economic growth. Therefore, free time, the environment, social cohesion, income distribution, etc. should be taken into account.

The last years the term of “Sustainable development” is used and defined as the development that meets the needs of the present, without compromising the ability of future generations to meet their own needs. In this context, the index of per capita wealth has been proposed, which includes assets, human, natural, environmental capital and institutions. Reducing this indicator means shrinkage of a country's resources and limiting the ability of future generations to meet their needs.

Growth is the increasing ability of a society to meet the financial needs of its members over time, as a result of the increase in productivity available. Buildings, machinery and other capital elements used in production are also increasing over time, while technological developments and scientific research usually allow for better utilization of certain raw materials, the discovery of new ore deposits or exploitation. Deposits that was previously impossible to use.

## **1.2 Solow's growth model**

Solow's growth model is essentially the origin of the neoclassical theory of growth. Based on article by Robert Solow published in 1956 in the Quarterly Journal of Economics the Harvard University financial magazine. That same year, a similar article by Trevor Swan was published in the journal Economic Record. For this reason, you will often come across the reference as the Solow-Swan model. The model we present here is complete in the sense that it incorporates both technical progress and depreciation.

Solow's growth model was designed in order to show how capital growth, labor force and technology changes interact with an economy and how affects the total production of one's products and services economy.

The assumptions regarding production that underlie in the Solow growth models are: <sup>1</sup>

- A single output is produced. Units of this output can be consumed or added to the capital stock.
- A single type of capital and a single type of labor are employed in the production process.
- The production function exhibits constant returns to scale. That is, changing the employment of both L and K by a proportional factor "z" would cause an equiproportional change in Y.

### **The Production Function**

The production function reflects the transformation of inputs (labor (L), capital (K), production technology) in products (final goods and services for a given period of time). Constant scale returns imply that the size of the economy expressed by the number of workers does not affect the relationship between the product per worker and capital per worker<sup>2</sup>.

$$zY = F(zK, zL)$$

Due to the key assumption of the constant scale returns we analyze all the parameters related to the size of the labor (L) setting  $z = 1/L$ .

$$Y/L = F(K/L, 1)$$

The production function shows that the amount of capital per worker (k) determines the quantity of the product per worker.

$$y = f(k), f(k) = F(K, 1)$$

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<sup>1</sup> Mixon, Wilson & Sockwell, William. (2007), The Solow Growth Model, Journal of Economic Education

<sup>2</sup> Nonneman W., (1996), A further augmentation of the Solow model and the empirics of economic growth for OECD countries, Jstor



The slope of the production function is the marginal product of capital, if (k) increase by one unit, then the product, y increases by MPK (marginal product of the capital) units.

$$MPK = f(k+1) - f(k)$$

### **Capital Growth & Steady State**

Capital stock is mainly affected by two factors:

- Investment
- Depreciation

Investment per worker is expressed by:

$$i = s y,$$

$$\text{replacing } y = f(k), i = sf(k)$$

This equation relates capital stock with the accumulation of new capital i. The saving rate (s) determines the distribution of the product between consumption and investment. For each level of (k), the product is f(k), an investment is sf(k), and consumption f(k) - sf(k).

An important notice is that depreciation is proportional to the capital stock, shown as:

$$\Delta k = i - \delta k,$$

$$\text{replacing } i \text{ with } sf(k), \Delta k = sf(k) - \delta k$$

Steady State capital is the invested capital whose returns equals depreciation levels. As a result, the capital stock remains the same covering the yearly depreciation fluctuation.

### **The Golden Rule Steady State**

The Golden Rule capital is the capital that maximizes the consumption. From the equation:

$$y = c + i, \text{ equals to}$$

$$c = y - i$$

The steady state consumption is what remains from the steady state product after taking into account depreciation. In addition to, shows that an increase in steady state capital has two opposing effects on consumption. On the one hand, more capital means more products. On the other hand, however, more capital also means that more product should be used to replace the existing capital equipment that is depreciated.

$$c^* = f(k^*) - \delta k^*$$

The product of economy is used for consumption or for investment. In the steady state, an investment equals depreciation. Therefore, the steady state consumption is the difference between product  $f(k^*)$  and depreciation  $\delta k^*$ . The Golden Rule capital is defined as  $k^*_{gold}$ , and the Golden Rule consumption as  $c^*_{gold}$ <sup>3</sup>.

### Main Theory

In the case that the amount of the new investments exceeds the annual depreciation of the existing equipment then the capital is increased. Simultaneously the capital that each worker has in its disposal is also increased. The new investments are depending from the savings (the share of GDP which was not consumed), either from the households that put money in the bank, either by the companies that do not distribute all their profits or by the public government who spends less than the taxes received. The most important criteria for the household is the decision of how much they will consume at the present compared to the future.

Generally drawing from the past two centuries knowledge the economic theory focuses on the significance of the capital accumulation, more  $k$  equals more capital per worker. Solow's model is emphasizing at the variability of the  $K/L$  ratio, in contrast to other models like Harrod – Domar who emphasize at the accumulation of capital as an investments results but with fixed the  $K/L$  ratio.

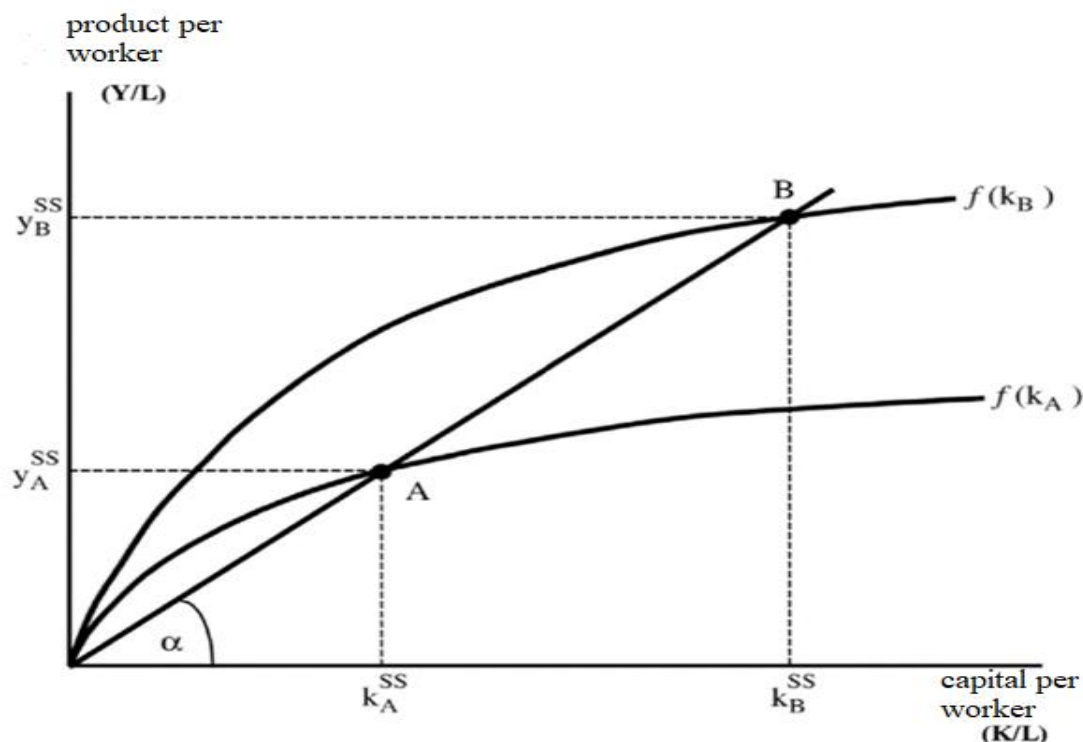


Chart 1-Solow's Model

<sup>3</sup> Nonneman W., (1996), A further augmentation of the Solow model and the empirics of economic growth for OECD countries, Jstor

The above chart summarizes the Solow model. The vertical axis shows the income per unit  $Y / L$  work, while the horizontal capital-labor ratio  $K / L$ . The top curve shows how much product per employee (so per capita GDP) corresponds to each  $K / L$ . We find that as the ratio increases  $K / L$  also increases  $Y / L$  per working production. However, while on the left, close to 0, the slope of the curve (so the increase in  $Y / L$  as a result of the increase in  $K / L$ ) is large, the further we go right, that is, as the  $K / L$  ratio increases, the slope of the curve decreases: the additional productivity per capital unit is not so important. This means that in a country with minimal capital per worker each addition takes up much more space than in a country with already plenty of accumulated capital.

The following curve is the  $sY$  product, where  $s$  is the non-consumable income share but it is saved and invested. Finally, the straight line represents the sum of the growth rate population and capital depreciation rate: as labor increases and as capital, investments are required to maintain the capital ratio per job. The point A, where this line intersects the lower reserve curve, is a point of equilibrium, on the left, the rate of savings ensures a greater increase in capital than necessary depreciation and population growth, and so the  $K / L$  ratio is pushed to the right. Instead, to the right of the point A, investments (the increase of  $K$ ) is lagging behind population growth and depreciation, resulting in  $K / L$  being pushed down. Point A represents the “state growth”, where the two ratios  $K / L$  and  $Y / L$  remain constant, the ratio working capital and production per employee (per capita income) remains the same.

For to increase, it is required, according to the model, to increase savings-investment, a shift of the corresponding curve upwards (with a limit, of course, the upper curve of production, as a country cannot stop consuming).

A correlation to Greece is that in 2015, we saw that investments that were required were around 33 billion euros to cover the depreciation of capital ( $K$ ), but investments were only 18 billion euros, this lag is equivalent to "disinvestment", shrinking of  $K$  of 15 billion only for 2015.

Globally there is no automation of an economy turning into the Golden Rule steady state, there has to be a specific rate of savings in order to achieve it.

Conclusively the importance of the savings rate is very high, affecting capital stock, product and their growth rate but only by its self is not adequate to create financial growth.

### 1.3 Definition of the economic crisis

In a financial crisis, the economy of the reference country is characterized by a continuous and noticeable decline in its economic activity. At the beginning of a crisis there is a lack of liquidity in transactions, rising unemployment, inability to pay

current financial liabilities, reduced output, price inflation, credit downturns, company bankruptcies etc. In particular, the common element of any financial crisis is the redistribution of income from the lower wage levels at the highest and the intensity of the poverty phenomenon. “A financial crisis is a disturbance to financial markets, associated typically with falling asset prices and insolvency among debtors and intermediaries, which spreads through the financial system, disrupting the market's capacity to allocate capital.”<sup>4</sup>

## 1.4 Characteristics of the economic crisis

The theory of our economic circles accurately presents the characteristics and evolution of each economic crisis<sup>5</sup>:

- The sale of business goods is difficult due to the reduction in the general level of wages and the prevailing uncertainty.
- The trader who did not sell his goods cannot buy the means of production.
- Entrepreneurs rush to banks to get loans.

As a result, demand for money grows and interest rates rise.

- Banks that do not have sufficient amounts of their own funds go bankrupt.
- Production in other businesses declines and in others it stops completely.
- The decline in production continues until the equilibrium between production and consumption is restored.

## 1.5 Factors causing a financial crisis

The factors that cause a financial crisis vary depending on the time period and the season. More generally, we could say that each financial crisis has its own causes, but economists argue that those reasons that drive economies into crisis can be categorized internally and externally.

- Internal reasons lie in structural, chronic problems within countries such as high fiscal debt, low productivity, public sector waste, etc.

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<sup>4</sup> Eichengreen B., Portes R., (1987), The Anatomy of Financial Crisis, National Bureau of Economic Research

<sup>5</sup> Hardouvelis G., (2018), Economic policy uncertainty, political uncertainty and the greek economic crisis, SSRN

- External reasons refer to elements of the broader, international economic environment such as developments in the international capital market, its international prices, the stability of the political system, etc.<sup>6</sup>.

## **1.6 The consequences of an economic crisis**

The financial crisis is a multifaceted problem for every economy. In addition to the major macroeconomic factors (unemployment, inflation, etc.) which it affects, it has broader implications. In the narrow financial sector, the financial crisis is having a negative impact:

- In international trade
- In personal income
- Causing significant financial problems such as rising unemployment
- Causing a decrease in agricultural and livestock production
- Creating a reduction in bank liquidity and a reduction in business profits
- Causes a decline in a country's tourism and shipping products while leading to capital outflow

## **1.7 The international financial crisis (2007-2008)**

Since the beginning of 2007 there has been a strong negative rumor about the US mortgage market. At the same time in Europe, the phenomenon of over-indulgence of citizens has begun to appear increasingly intense. In order to avoid the scarce liquidity of the banking system, market players recommended that must banks be more selective in lending and credit cards. In Greece, during the same period, a large stock of newly built houses came about as a result of the intensive construction activity of recent years<sup>7</sup>.

The housing market crisis erupted in the US in August 2007 and was expressed by the massive inability of large groups of the population to respond to the housing loans they had received. As a result, house auctions succeeded one another, depositors at

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<sup>6</sup> Hardouvelis G., (2018), Economic policy uncertainty, political uncertainty and the greek economic crisis, SSRN

<sup>7</sup> Luca D., (2016), The geography of the economic crisis in Europe: national macroeconomic conditions, regional structural factors and short-term economic performance, Elsevier

risk were rushing to the banks to withdraw their money, and banks were running out of cash.

This crisis quickly crossed the Atlantic and only within a month it infected the European economy. Two German banks, IKB and Sachsen Landesbank, said they suffered significant financial losses from owning homeowner's insurance premiums (RMDS). In the same pattern, British Northern Rock suffered losses and, in the face of the risk of bankruptcy and contamination of the entire British economy, it became nationalized at the end of 2007.

As everyone was expecting, the financial crisis was quickly over in Europe. The first state to be affected was Iceland. The formerly robust northern European state was in bankruptcy as the country's banking system was closely linked to its US counterpart and therefore Iceland's economy was immediately exposed to "toxic bonds". With the outbreak of the crisis, the major American funds in Iceland had to be repatriated, leaving foreign direct investment (FDI) out of the country. The huge debts of Icelandic banks almost led to the bankruptcy of the country which, under the burden of international pressure and the failure of its banks to borrow on the interbank market, ended up seeking IMF assistance.

## **CHAPTER 2: REVIEW OF THE GREEK ECONOMY AND THE IMPACT OF THE CRISIS**

### **2.1 Review of the Greek economy and current developments**

In the third quarter of 2019 according to the latest data the Economic Climate Index strengthened significantly compared to the immediately preceding. As for the post-election quarter, this development was on highly expected. But it is also due to the start of the implementation of the election campaign announcements, with the first budgetary measures (reduction of funds, extension of debt regulation to 120 tranches to businesses), which maintain confidence in government policy. The good developments in some short-term household indicators, such as unemployment and inflation, also have a positive impact on their expectations<sup>8</sup>.

These developments represent a significant strengthening of the Consumer Confidence Index and its formation over a maximum of 17.5 years. In relation to partners and creditors are not currently experiencing any difficulty, which it has greater emphasis on business. Beyond the particular circumstances in each sector, raising expectations for most of them during the July - September period it is related to waiting for the tax system to be reformed, key aspects of it which were presented in the 2020 Draft Budget, but have not yet evaluated by businesses and consumers.

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<sup>8</sup> Giannakis E., (2017), Economic crisis and regional resilience: Evidence from Greece, Jstor

On the other hand, there is a great deal of recent uncertainty about international environment, from Brexit negotiations, to border warfare Turkey - Syria and the escalation of migration flows. Analytically:

The Economic Climate Index in Greece for the quarter July-September 2019 was significantly improved compared to its second quarter, to 107.0 points it also fluctuated at a higher level than the average corresponding to last year (103.4 units). The recent level is the highest since the fourth quarter of 2007. At sector level, business expectations in Greece improved in the third quarter 2019 compared to the previous one in Industry, Services and more in Retail Trade, while it declined slightly in Construction. On the consumer side, Consumer confidence improved markedly. Compared to the same quarter last year, the average indicators strengthened in Retail, Services and mainly to consumers, while declining in Construction and Industry. Clearly higher was the performance in Consumer Confidence. In more detail:

Consumer Confidence Indicator in Greece in July-September was well above average, at -11.7 (from -29.4 in the second quarter of 2019), performance clearly better than last year's (-44.7 mt). Moreover, this level was higher than in the second quarter of 2002. At country level, Greeks now are ranked first in pessimism across Europe. The corresponding average index improved marginally in the EU to -6.4 (from -6.8), as well as in the Eurozone (-6.7 from -7.0). These levels are slightly higher than the corresponding last year (-4.5 and -5.1 mon. respectively)<sup>9</sup>.

The trends in the individual key elements of the overall index were mainly up in the third quarter of 2019 compared to the second quarter of the year. So, consumer forecasts in Greece on the financial situation of their households the next 12 months and those on the country's financial situation have improved significantly, as well as household estimates of their current situation, while restricting intent on major markets in the near future.

## **2.2 The economic crisis in Greece**

Regarding the onset of the economic crisis in Greece, financial crisis began in 2006, also in the real estate sector such as and in the US when it gradually led to significant number bankruptcies of floating rate mortgages. Generally speaking, in the first half of 2008, Greece recorded growth which was 3.5% higher than that of the euro area which was 1.8% (IMF, 2012). However a year later, in May 2009, the International Monetary Fund (IMF) following an assessment by the competent authority mission of Greece, put Greece on alert, because despite the resilience it had shown to the intensity of the world these financial crises showed that the country was entering recession period (IMF, 2013a). And that's because the crisis spread in the euro area it would eventually not leave the Greek economy intact. On the other hand, the Greek

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<sup>9</sup> [www.statistics.gr](http://www.statistics.gr)

economy alone has shown some weaknesses such as high public debt, limited reforms, structural rigidities, high prices and increased labor costs, which would not allow to avoid European influence crisis consequences.

The figures of the Greek economy showed that its country growth in 2008 was based on excessive lending by the European Union and increased domestic consumption due to it, incident which created significant fiscal and external imbalances<sup>10</sup>.

According to IMF task force estimates the budget deficit was projected to exceed 6% of GDP in 2009 and 7% of GDP in 2010. In addition, the debt / GDP ratio will it was growing steadily as a result of its future management difficult. This claim was confirmed by the widen spread of Greek and German bonds, which increased even more so because of liquidity constraints at financial markets. So the IMF drew their attention to the Greek authorities proposing the drafting of a financial plan with a view to restoring Greek debt to sustainable levels by giving emphasis on achieving a gradual adjustment of 1.5% of GDP annually with a starting point in 2010 for debt to go down course to 2012 (IMF, 2013b).

As is easily observable, 2012 was the fifth consecutive year that Greece saw a decline in economic activity, while overall GDP fell by 20.1% in 2008-2012, a trend unprecedented for European data, especially in a time of peace. The decline in GDP over the last five years seems to be mainly due to two main reasons. The first is the sharp decline in investment and the second is the equally vertical decline in consumption due to IMF requirements (IMF, 2013c). In terms of investment in Greece, investment spending in the second quarter of 2013 decreased to € 5.35 billion from € 9.39 billion in the second quarter of 2010 and € 12.86 billion in the second quarter. In the first quarter of 2012, there was a 43% decrease in investment compared to 2010 and 58.4% compared to 2008. At the same time, production in all sectors collapsed, with the most significant being in construction, which exceeded 70% fall. Consumer and retail trade in Greece subsequently declined, with value added falling by 39.9% compared to Q2 2008 and by 29.5% compared to Q2 2010. It amounted to EUR 7.89 billion, EUR 13.12 billion in the second quarter of 2008. Substantial reductions subsequently also occurred in the 'professional, scientific and technical activities, administrative and support' sector.

Where gross value added decreased by 28.3% compared to b ' in the first quarter of 2008 and by 28.1% compared to the corresponding quarter of 2010, while its size stood at 1.89 billion euros. In addition, the gross value added of mines and quarries suffered a relative loss of 9.4% compared to the second quarter of 2008 and 10.1% compared to the second quarter of 2010, while its size stood at 4.79% billion euros. Concerning the decline in consumption, it is noteworthy that in the period 2008-2012 there was a 32% decrease in household expenditure while simultaneously shifting to the most necessary, according to the "Family Budget Survey" conducted by ELSTAT.

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<sup>10</sup> Knight D., (2018), History, time, and economic crisis in Central Greece, Elsevier



Specifically, the average monthly household expenditure in 2012 amounted to only 1637,10 euros, down by 10.2% compared to 2011. The largest share of average household budget expenditure is on food (20.1%) followed by housing (13.9%) and transport (12.8%), with education services accounting for the smallest share of expenditure (3.5%).

The deterioration of the Greek corporations and businesses is widespread in all trading activities, with the main features being the decline in turnover, the breakdown of profitability and the reduction of the capital base of trade. In particular, the financial crisis had a direct impact not only on their sales, on the profits of their stocks and on their fixed capital investments, but also on their ability to retain most of their employees<sup>11</sup>.

In this difficult financial period for Greek companies it is necessary to formulate the right strategy. Unfortunately, there are no specific strategies or tactics that can be applied by businesses to get them out of the financial crisis. The financial environment is very difficult and requires immediate and decisive action by businesses. They need to be fully aware of the environment in order to be ready to understand and evaluate the changes that are occurring, so that they can manage the great uncertainty and be able to avoid threats and finally take advantage of opportunities that emerging.

Companies need to ensure sufficient liquidity, reduce unnecessary expenses, pursue more precise pricing policies, maximize and utilize their human resources, and adopt innovative ideas. The measures taken by businesses to handle the difficult situation relate to price reductions, cost reduction, changes in suppliers, staff reductions, overseas sales growth, activity restriction, etc.

Funding for businesses increased very rapidly after the country's accession to the euro area by the end of 2008 (average annual growth rate of about 15%). Specifically, from € 50.9 billion at the end of 2001, they almost doubled over the next five years to reach € 140.4 billion in June 2010 (including freelancers, farmers, and other businesses) and declined slightly afterwards (April 2011: € 137,300 million, of which € 16.2 billion are freelancers, sole proprietors and farmers).

According to the most recent data, net financing to businesses (excluding freelancers, farmers and individual entrepreneurs) was positive and equal to 212 million in April 2011 and the annual rate of credit expansion slowed down to 1.2% from 1.1% in the previous month and in December 2010. For the first quarter of 2011, the net flow of financing to own companies amounted to € 341,000,000, while the average annual credit growth rate increased by 1%.

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<sup>11</sup> Hardouvelis G., (2018), Economic policy uncertainty, political uncertainty and the greek economic crisis, SSRN

From the analysis of business financing by sector of economic activity, we can see that in the first quarter of 2011, the annual growth rate of credit flow in the sectors of tourism (0.4%), shipping (6.9%), etc. financial institutions (1.0%), electricity - gas - water (18.5%) and other companies (5.0%). On the other hand, credit growth slowed in all other sectors, namely agriculture (-0.4%), industry (-0.7%), trade (-3.2%), construction (-0.2%.) and non-shipping (-10.6%)<sup>12</sup>.

The future of Greek businesses after the crisis remains uncertain. The financial crisis makes businesses and organizations recognize their power and discover the limits of their endurance. Chronic weaknesses and problems reach the surface and require immediate business attention. Entrepreneurs need not panic, but rather deal with all this uncertainty.

Businesses that are insightful and well-prepared can see significant opportunities in the crisis. As each currency has two sides, the financial crisis is one of the trial periods and on the other it is a unique opportunity to become better and stronger. Businesses, in order to survive the crisis, must maintain a high comparative competitive advantage over their competitors, be flexible, adapt to the times, innovate and exploit technology and various modern means. In fact, businesses are under intense pressure to adapt to these conditions.

Finally, Greek citizens to have access to well-paid jobs and high incomes and for this to happen on a sustainable basis, the economy must be competitive. If the economy is not competitive and incomes are still high, this necessarily means that money flows from abroad in the form of transfers or external borrowing. In both cases, high incomes are not sustainable: EU transfers will not last forever and external borrowing will lead to low incomes in the future. Greece's performance over the past decade demonstrates the importance of competitiveness.

During the 2000-2008 period, Greece increased its GDP by double the average of the 27 EU countries and reduced the unemployment rate by twice as well. Rapid GDP growth was also reflected in incomes, which grew faster in Greece than in most European countries. However, as has become clear in the recent crisis, this growth rate was not sustainable because it was not due to improved competitiveness. Indeed, Greece's competitiveness, which was already low within the EU at the beginning of the last decade, declined even more<sup>13</sup>.

Growth and job creation in the 2000–2008 period were mainly due to the money borrowed by governments from overseas and fueling the economy. For example, some of this money was spent on public infrastructure, thereby increasing activity and creating jobs in the construction industry. Growth and job creation also shifted to other sectors of the economy, as those who enjoyed higher incomes spent more on

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<sup>12</sup> Hardouvelis G., (2018), Economic policy uncertainty, political uncertainty and the greek economic crisis, SSRN

<sup>13</sup> Hardouvelis G., (2018), Economic policy uncertainty, political uncertainty and the greek economic crisis, SSRN

other goods and services. For example, those working in the construction industry could spend more money on vacations, thereby increasing activity and creating jobs in the tourism industry, and so on. External lending is no longer an option for Greece. The country must repay its debt. This is of great concern, as the procedure described in the preceding paragraph can be reversed, namely, for a long period of time, jobs and incomes shrink. Negative growth has already begun: real GDP, for example, contracted in 2009.

The only solution to avoid a prolonged crisis in Greece and to raise incomes on a sustainable basis is to enhance the competitiveness of the economy. The only advantage of Greece's disappointingly low competitiveness is that there is much room for improvement and development.

An economy is competitive when it allows businesses and workers to be productive. When productivity is high, businesses can pay high salaries, and so incomes are high. In addition, the economy is able to attract investment from foreign businesses, which creates more jobs and further increases incomes. The key factor that determines competitiveness is the set of rules that govern the functioning of markets. These rules must promote competition, investment and entrepreneurship. Well-designed and rigorously enforced rules can make a country competitive and prosperous.

Greece's low competitiveness is not due to a lack of rules. Indeed, Greece ranks among the countries with the most restrictive regulatory framework in the OECD: the product market (goods and services) is the most tightly regulated among the 30 OECD countries while the labor market ranks fifth (OECD product market regulation indicators). in 2008, OECD Employment Protection Indicators in 2008). Many of the regulations create serious obstacles to competition, investment and entrepreneurship and must be abolished. At the same time, the few regulations that promote the proper functioning of markets are not strictly enforced. Given that the Greek economy is rigorously regulated and ineffective, reforming the regulatory framework will bring great benefits<sup>14</sup>.

According to the OECD, a thorough reform can in itself increase the competitiveness of the Greek economy, and ultimately the income of Greek citizens, by more than 15%. This can completely reverse the negative effects of the income crisis.

Since the reform of the regulatory framework can bring significant benefits, why has it not yet been substantially implemented? The reluctance to undertake reforms is partly due to political pressures from minorities who will be affected by specific reforms. For example, regulations that prohibit entry into an industry or occupation and thus impede competition benefit the businesses of that industry or members of the profession because they allow them to charge high prices.

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<sup>14</sup> Hardouvelis G., (2018), Economic policy uncertainty, political uncertainty and the greek economic crisis, SSRN

Therefore, representatives of the industry or profession are exercising political pressure to maintain the existing regulatory framework. An additional reason why reform of the regulatory framework is not a priority on the political agenda is that the general public has not fully understood its benefits. Indeed, there is a perception that markets must operate under a very restrictive regulatory framework because they produce undesirable results when they operate more freely. This perception is partly justified by the experience gained by the public: the liberalization of markets in Greece has often led to price increases. The notion, however, is incorrect because markets were not virtually liberal but merely virtual: the regulatory framework that impedes entry into new firms was maintained while only the ability of existing firms to raise prices was liberalized. As expected, the subsequent rise in prices reinforced public suspicion of free markets. If entry into new businesses had been liberalized just like prices, the result would have been lower prices and market liberalization would have been of real benefit to the public<sup>15</sup>.

Together with the establishment of proper rules of operation of the markets, it is necessary an ingredient for increasing competitiveness is a well-educated workforce: it increases the productivity of existing businesses and attracts new ones, especially those employed in the field of advanced technologies and high-growth activities.

In closing, it is worth mentioning some of the proposals that have been discussed at times in the context of improving the competitiveness of the Greek economy.

A crucial reform could, for example, be a drastic reduction in regulations that prevent new players from entering many business sectors and professions. The reduction of so-called "barriers to entry" enhances the competitiveness of the economy for two reasons. First, new start-ups can be more productive than existing ones because they have improved technology and better ideas. This increases productivity across the industry. Secondly, even if new businesses are as productive as existing ones, competition is intensified due to the increase in the total number of businesses. Prices are therefore falling and businesses in other sectors, which use the products of the sector in their production, benefit. Reducing the cost of these businesses leads to increased productivity.

The obstacles created by the regulatory framework can take many forms. Some of these arrangements have been abolished over the past decade in specific areas, partly due to pressure from the European Union. Those that still exist should also be abolished.

Some other barriers to entry are due to bureaucratic obstacles imposed by the government on businesses and citizens. For example, a new business wishing to build a plant must obtain a series of licenses from many different departments that require complex legal requirements. This provides a fertile ground for the development of corruption. Indeed, one company has an incentive to bribe corrupt government

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<sup>15</sup> Zavras D., (2016), Economic crisis, austerity and unmet healthcare needs: the case of Greece, BMC

officials to bypass bureaucratic hurdles and enter the industry. At the same time, existing companies in the industry have an incentive to bribe to prevent new businesses from entering.

Reducing the bureaucratic barriers to entry requires simplifying and clarifying the institutional framework governing the establishment and operation of businesses. For example, the absence of planning laws makes obtaining a planning permit a complex and ambiguous process that promotes corruption. In addition, investment will be stimulated far more effectively by reducing bureaucracy than by any government subsidies, which are usually characterized by favoritism and corruption<sup>16</sup>.

Finally, bureaucratic barriers to entry are particularly important for foreign businesses that are not familiar with Greek law and culture. Indeed, foreign direct investment in Greece is extremely limited: between 2003 and 2008 they accounted for only 1% of GDP. The average in the 30 OECD countries was 4.1%, and Greece ranks fourth from the bottom. Even without regulatory barriers to entry, some industries can only support a small number of companies because the size of the market is small in proportion to the scale at which businesses can operate at a profit. For example, there are fewer airlines than road haulers because the first ones have to operate on a large scale to make a profit. A business that can only support a small number of businesses is prone to monopoly practices, e.g. businesses create a cartel and charge high prices to consumers. Regulation in such disciplines should aim at identifying and prosecuting monopoly practices.

In Greece, the Competition Commission (CC) is responsible for this activity. Although Greece has made some strides over the last decade, it is lagging behind in terms of its counterparts in other OECD countries. Businesses that follow monopoly practices are often not prosecuted while businesses that are not involved in such practices are located sometimes targeted for political or other reasons. CC should seek to implement legislation in a transparent and consistent manner, while respecting EU best practices. The benefits of this strategy will be significant: prices will fall in many sectors while employment and productivity throughout the economy will increase. CC needs to be empowered through human resources, independent from government and accountable for its decisions<sup>17</sup>.

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<sup>16</sup> Zavras D., (2016), Economic crisis, austerity and unmet healthcare needs: the case of Greece, BMC

<sup>17</sup> Giannakis E., (2017), Economic crisis and regional resilience: Evidence from Greece, Jstor

## **CHAPTER 3: REVIEW OF THE SLOVENIAN ECONOMY AND THE IMPACT OF THE CRISIS**

Slovenia, considered one of the most developed EU economies with the best performances, has been dramatically affected by the European financial crisis in 2012.

Slovenia is the richest state in the former Eastern Europe, with 87% of the EU's average GDP of 28. Due to its geographical and cultural proximity to Western Europe and especially Austria, Slovenia's short convergence with the developed West is certain. Since 1 January 2007 Slovenia has been a member of the Eurozone.

Recent economic data suggests that the economy's rapid growth has slowed in the last months of 2018. Although industrial production expanded strongly in June, throughout the last quarter (May-July 2018) we saw a decline in industrial growth. In addition, the average net monthly earnings growth rate in June fell compared to May, and the trade surplus declined in the first half as imports increased beyond the expansion rate of exports. Consumer confidence remained stable in August, with forecasts for the economy staying largely unchanged and dominated by pessimistic outlooks<sup>18</sup>.

Note that the Slovenian Environment Agency has issued the green light for the Canadian auto parts maker Magna International to begin the construction of a paint factory that will be the first phase of a planned 1.2-billion-euro investment. The investment plan is expected to be one of the largest in the country's history.

In Slovenia, industrial production measures the production of companies integrated into the industrial economy. Manufacturing is the most important sector and accounts for 90% of total production. The major parts of the manufacturing industry are: Manufactured metal products, excluding machinery and equipment (12% of total production), electrical equipment (10%), cars, trailers and semi-trailers (7%), rubber and plastic products (7%), machinery and equipment (6%), food products (5%) and basic metals (5%). Electricity and gas production account for 9% of total production and mining and quarrying account for 1%.

Slovenia offers tourists a wide variety of small landscapes. Tourism is an important part of the country's economy. Geographically the country is divided into Alpine in the northwest, Mediterranean in the southwest, Pannonian in the northeast and Dinaric in the southeast. These correspond roughly to the traditional Slovenian regions, based on the former four countries of the Habsburg crown. Each has its own natural, geographical, architectural and cultural specificities.

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<sup>18</sup> Perkovic A., (2017), *Economic crisis and the crisis of national identity in Slovenia: toward a new notion of social order*, Taylor and Francis

In more detail, Slovenia is a member of the European Union and the Eurozone, with an outward-looking economy based mainly on its export performance, overcoming imports from its exports. About two thirds of its trade is with the EU. It focuses on neighboring markets (mainly the German, Austrian, Italian, Croatian and French markets) and the countries of the former Yugoslavia<sup>19</sup>.

The economy went into recession in 2009 with major problems balancing fiscal figures and recapitalizing the banking sector. GDP began to show positive growth in the last quarter of 2013, and has been steadily rising ever since. Specifically, it increased by 3% in 2014, 2.3% in 2015, 3.1% in 2016 and 4.7% in 2017, while the same trend is expected to continue in 2020 with an increase of 3.9%.

Domestic (private) consumption declined in 2012 and 2013 (-2.5% and -4.0%, respectively), but has since stabilized at 2.0% in 2014, and 0.5% in 2015. Consumption increased by 2.3% in 2016 and 2.8% in 2017, while growth is also expected of 2.8% in 2020.

Inflation (Harmonized Index) in 2014 moved on average at very low levels of 0.2%, mainly due to lower prices and weak domestic demand, while in 2015 it was negative -0.5% (deflation). Since then it has returned to a positive sign, up 0.5% in 2016. In 2017 it stood at 1.4%, signaling the resurgence of the Slovenian economy. In 2020 it is expected to reach 1.9%.

Unemployment has been relatively high, at 13.1% in 2013 and 2014. Since then, it has been declining, rising to 12.3% in 2015 and declining to 11.2% in 2016. In 2017 it further declined to 9.5% and forecasts further decline to 8.7% in 2020.

Slovenia is a member of the EU Slovenian legislation does not discriminate between foreign and domestic investors, but between residents and non-residents ("residents" are considered registered companies based in Slovenia, branches of foreign companies in Slovenia), as well as natural persons with permanent or temporary residence of at least 6 months).

The corporate tax rate dropped from 1.1% in 2013 by 3 percentage points, from 20% to 17%. The taxation of dividends is 15%. Slovenia and Greece have signed a "Double Taxation Avoidance Agreement" (Law 3084, Issue A, No. 218, Dec. 16, 2002) according to which taxation does not exceed 10% of the gross amount of the dividends<sup>20</sup>.

A Memorandum of Understanding and Investment Protection has been signed with our country and many issues, particularly business and profit taxation, are regulated by the above Agreements.

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<sup>19</sup> Feldman M., (2017), *Crisis and opportunity: Varieties of capitalism and varieties of crisis responses in Estonia and Slovenia*, SAGE Publications

<sup>20</sup> Perkovic A., (2017), *Economic crisis and the crisis of national identity in Slovenia: toward a new notion of social order*, Taylor and Francis

The services sector has the largest share of both Foreign Direct Investment (FDI) in Slovenia (64.7%) and Slovenian Foreign Investment (54.8%). Incoming FDI in Slovenia is mainly directed to financial services - excluding insurance and pension funds 13.2%, retail trade - out of cars, also 13.2%, wholesale trade - out of cars (8.1%) and the real estate market (7.2%), pharmaceutical manufacturing (6.8%), car manufacturing (4.9%) and telecommunications (3.6%). FDI Countries of origin: EU (85.0%), Austria (33.6%, EUR 3.404 million - mainly retail - financial), Switzerland (11.3%, 1.143 million - mainly pharmaceuticals), Germany (10, 4%, 1.048.8 million - retail), Italy (7.9%, 803.5 million - mainly financial), Croatia (7.7%, 777.1 million retail - energy). As of December 31, 2016 FDI, in Slovenia amounted to EUR 12.9 billion, up 11.5% compared to 2015.

Foreign Direct Investment of Slovenia abroad is mainly targeted by the countries of the former Yugoslavia at 66.7%: Croatia (28.3% = 1.506 million), Serbia (22.3% = 1.180 million), Bosnia and Herzegovina (Bosnia and Herzegovina) 8.6% = 458m), FYROM (7.5% = 399m), mainly retail and financial services. To the EU 44.0% (mainly Croatia 28.3%, Netherlands 3.8%, Austria 2.6%), Germany 2.2% and Russia 5.8%. The majority of outbound investments are in the retail sector (13.3%), followed by financial services (11.0%) and pharmaceutical and chemical production. As of December 31, 2015, Slovenia's foreign direct investment abroad amounted to EUR 5.7 billion, or 3.7% more than in 2015.

We observe that most of the value of Greek exports to Slovenia have been occupied over time (over the last 10 years) by Petroleum products and secondarily by Electricity and Aluminum Oxide. The course of Greek exports follows the trend of fluctuation of the above three products, mainly petroleum products and electricity.

Of the other species, food products (mainly some traditional foods and fresh fruits) occupy a significant share in their categories, with their growth prospects possible - depending on the category to which they belong (e.g. olive oil, olives, slice) - but quantitatively limited given the size of the market here.

Other types of opportunities are available on a case-by-case basis, however, given the export orientation of the domestic industry, Slovenian exports appear to maintain a competitive advantage. In the final assessment of Greek exports (in particular, but not only, recognizable foodstuffs), it should be borne in mind that many products enter the market here through channels from other, mainly neighboring European countries.

Therefore, we believe that a first step towards entry into the local market could be achieved through the participation of interested Greek companies in international fairs held in the country or alternatively in 1–2 international fairs, through a national stand (such as in the Slovenian General Report - Tourism & Leisure Exhibition)<sup>21</sup>.

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<sup>21</sup> Feldman M., (2017), *Crisis and opportunity: Varieties of capitalism and varieties of crisis responses in Estonia and Slovenia*, SAGE Publications



We also note that international fairs involve domestic companies (usually representing exporters of foreign countries) as well as businesses based in neighboring markets, with some countries participating in national fairs in fairs of particular interest to them.

The majority of Slovenians disagree with the view that the European Union is responsible for the economic crisis in Slovenia and blame the country's politicians, according to a survey conducted in the run-up to the European elections. Specifically, 57.9% of respondents said they agree with the claim that the country's "corrupt and incompetent politicians" are responsible for the crisis in Slovenia.

According to research data published in the Slovenian Statistical Service, 25.3% of Slovenians agree that the country would go faster than the crisis if it did not comply with the austerity and economic stabilization measures imposed on it by the EU. and 47% of respondents said the opposite<sup>22</sup>.

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<sup>22</sup> Perkovic A., (2017), Economic crisis and the crisis of national identity in Slovenia: toward a new notion of social order, Taylor and Francis

## CHAPTER 4: COMPARISON OF THE TWO COUNTRIES IN TERMS OF ECONOMIC INDICATORS

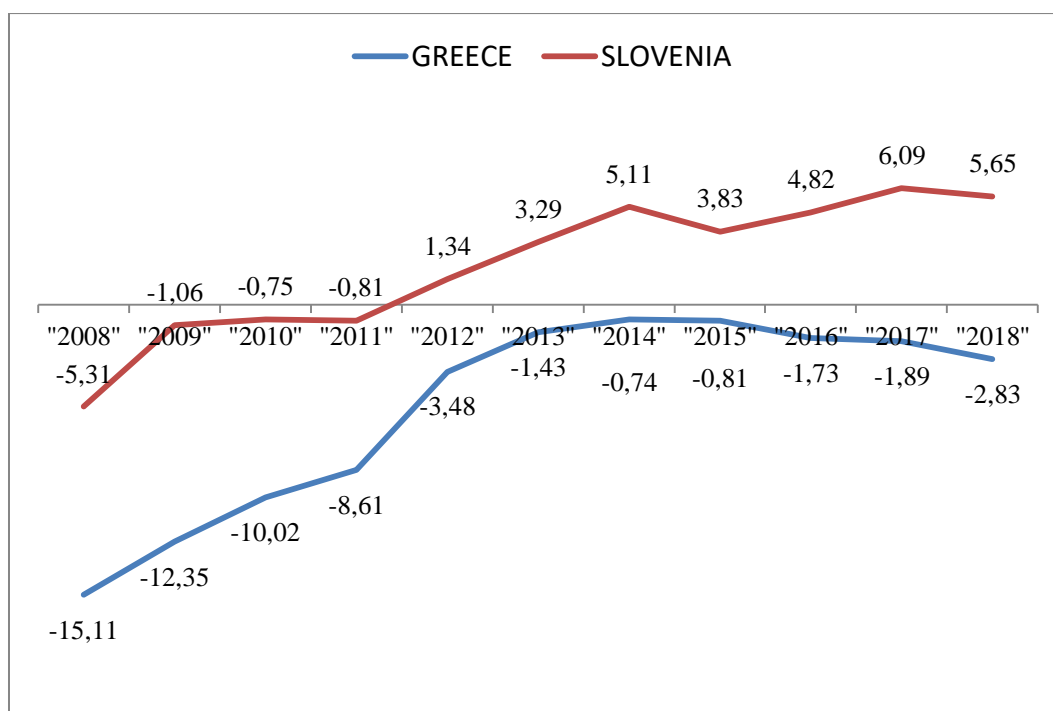
This section will compare the factors that influenced the economic growth of the two countries under study, Greece and Slovenia from 2008 to 2018. In particular, specific economic indicators will be compared among other things GDP, currency account balance, balance of trade, productivity rate etc. Note that all data comes from the OECD database except for CPI.

### 4.1 Current account balance (% GDP)

The current account balance of payments is a record of a country's international transactions with the rest of the world. The current account includes all the transactions (other than those in financial items) that involve economic values and occur between resident and non-resident entities. Also covered the offsets to current economic values provided or acquired without a quid pro quo. This indicator is measured in million USD and percentage of GDP.

	GREECE	SLOVENIA
"2008"	-15,11	-5,31
"2009"	-12,35	-1,06
"2010"	-10,02	-0,75
"2011"	-8,61	-0,81
"2012"	-3,48	1,34
"2013"	-1,43	3,29
"2014"	-0,74	5,11
"2015"	-0,81	3,83
"2016"	-1,73	4,82
"2017"	-1,89	6,09
"2018"	-2,83	5,65

Table 1 - Current Account Balance (% GDP)



**Chart 2 – Current Account Balance**

As we can see, Slovenia's current account balance over the whole period under consideration is larger than that of Greece. This fact informs us that, despite the great improvement in Greece's balance sheet, there is still much to be done in order to be consistently positive.

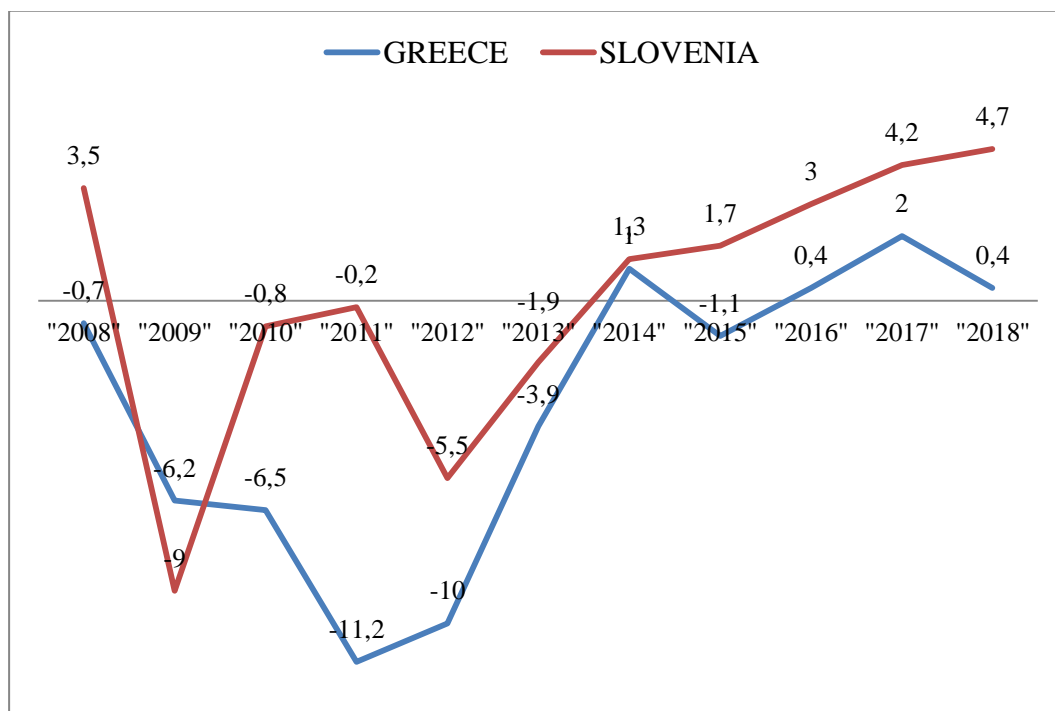
## 4.2 Domestic demand (Total annual rate %)

Final domestic demand is the sum of final consumption, investment and stock building expenditures by the private and general government sectors in real terms. Forecast is based on an assessment of the economic climate in individual countries and the world economy, using a combination of model-based analyses and expert judgement. This indicator is expressed in annual growth rates.

	GREECE	SLOVENIA
"2008"	-0,7	3,5
"2009"	-6,2	-9
"2010"	-6,5	-0,8

"2011"	-11,2	-0,2
"2012"	-10	-5,5
"2013"	-3,9	-1,9
"2014"	1	1,3
"2015"	-1,1	1,7
"2016"	0,4	3
"2017"	2	4,2
"2018"	0,4	4,7

**Table 2 – Domestic Demand**



**Chart 3 – Domestic Demand**

In Chart 2 we see large fluctuations in the domestic demand of both states. Prices have been positive since 2014 but in Slovenia domestic demand is constantly increasing, which is not the case in Greece.

#### 4.3 FDI flows (millions of \$)

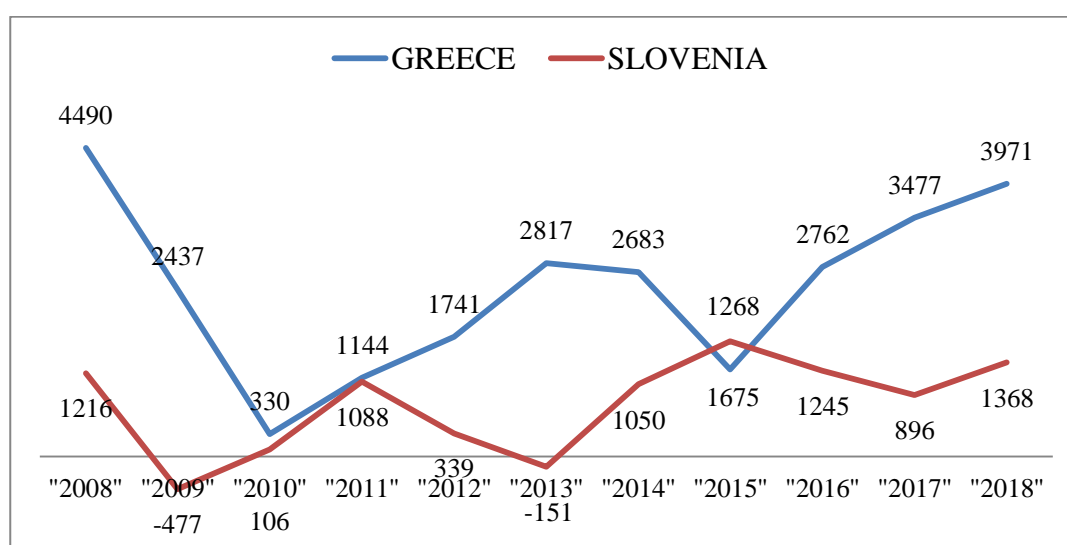
Foreign Direct Investment (FDI) flows record the value of cross-border transactions related to direct investment during a given period of time, usually a quarter or a year. Financial flows consist of equity transactions, reinvestment of earnings, and intercompany debt transactions. Outward flows represent transactions that increase

the investment that investors in the reporting economy have in enterprises in a foreign economy, such as through purchases of equity or reinvestment of earnings, less any transactions that decrease the investment that investors in the reporting economy have in enterprises in a foreign economy, such as sales of equity or borrowing by the resident investor from the foreign enterprise. Inward flows represent transactions that increase the investment that foreign investors have in enterprises resident in the reporting economy less transactions that decrease the investment of foreign investors in resident enterprises. FDI flows are measured in USD and as a share of GDP. FDI creates stable and long-lasting links between economies.

### 4.3.1 Inward FDI

	GREECE	SLOVENIA
"2008"	4490	1216
"2009"	2437	-477
"2010"	330	106
"2011"	1144	1088
"2012"	1741	339
"2013"	2817	-151
"2014"	2683	1050
"2015"	1268	1675
"2016"	2762	1245
"2017"	3477	896
"2018"	3971	1368

**Table 3 - Inward FDI**



**Chart 4 – Inward FDI**

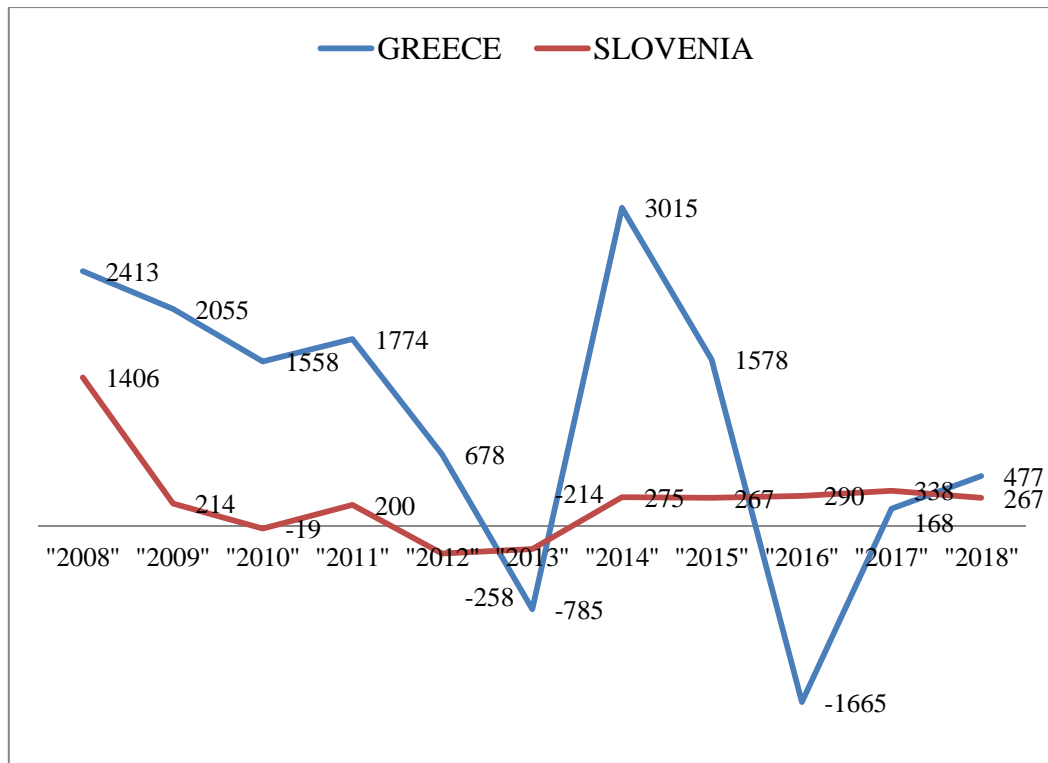
As we can see from 2008 to 2010, we are seeing a sharp decline in foreign direct investment in Greece because of the outbreak of the economic crisis. There has been a steady increase since then until 2014. There has been a significant decline in foreign direct investment due to political instability in the country since 2014 - 2015. Finally, from 2016 onwards there is an ever-increasing trend and an increase in foreign direct investment in Greece.

Slovenia, on the other hand, presents a much smoother picture of the evolution of foreign direct investment. Despite the various fluctuations and difficulties, Slovenia's incoming foreign direct investment in 2018 was at a fairly good level.

#### 4.3.2 Outward FDI

	<b>GREECE</b>	<b>SLOVENIA</b>
"2008"	2413	1406
"2009"	2055	214
"2010"	1558	-19
"2011"	1774	200
"2012"	678	-258
"2013"	-785	-214
"2014"	3015	275
"2015"	1578	267
"2016"	-1665	290
"2017"	168	338
"2018"	477	267

**Table 4 – Outward FDI**



**Chart 5 – Outward FDI**

Regarding outbound direct investment, we see that both Greece and Slovenia were significantly affected by the crisis. However, the fluctuations and changes are much greater in Greece compared to Slovenia, which has a smoother course.

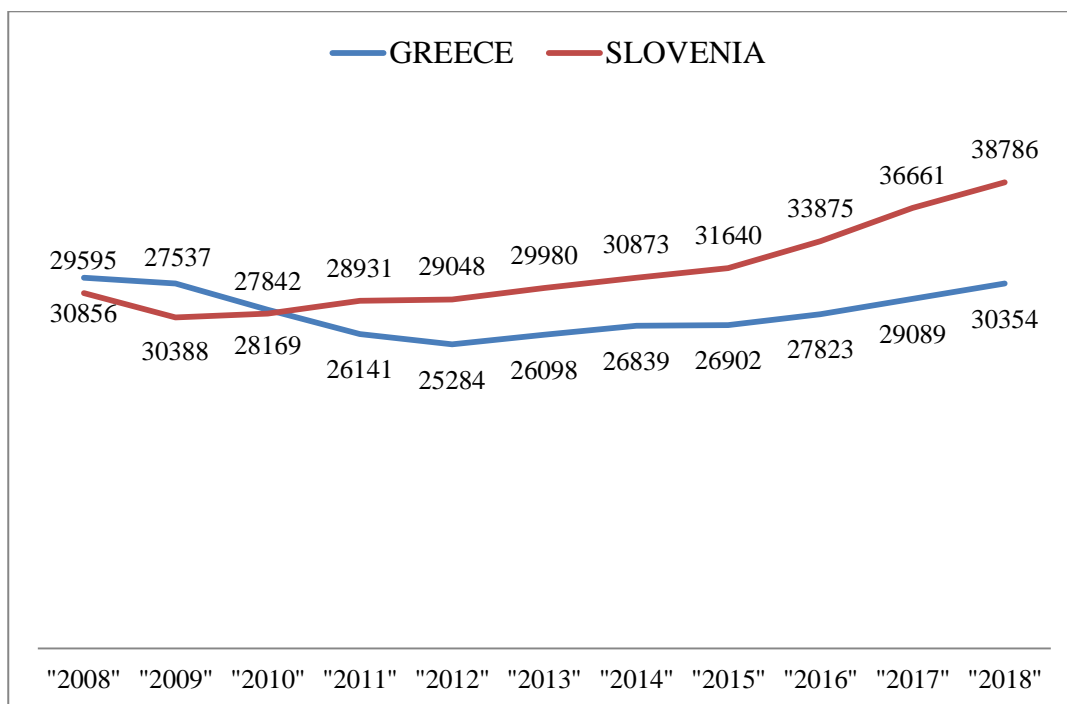
## 4.4 Gross domestic product (GDP)

Gross domestic product (GDP) is the standard measure of the value added created through the production of goods and services in a country during a certain period. As such, it also measures the income earned from that production, or the total amount spent on final goods and services (less imports). While GDP is the single most important indicator to capture economic activity, it falls short of providing a suitable measure of people's material well-being for which alternative indicators may be more appropriate. This indicator is based on nominal GDP (also called GDP at current prices or GDP in value) and is available in different measures: US dollars and US dollars per capita (current PPPs). All OECD countries compile their data according to the 2008 System of National Accounts (SNA). This indicator is less suited for comparisons over time, as developments are not only caused by real growth, but also by changes in prices and PPPs.

### 4.4.1 GDP per capita

	GREECE	SLOVENIA
"2008"	30856	29595
"2009"	30388	27537
"2010"	28169	27842
"2011"	26141	28931
"2012"	25284	29048
"2013"	26098	29980
"2014"	26839	30873
"2015"	26902	31640
"2016"	27823	33875
"2017"	29089	36661
"2018"	30354	38786

**Table 5 – GDP per capita**



**Chart 6 – GDP per capita**

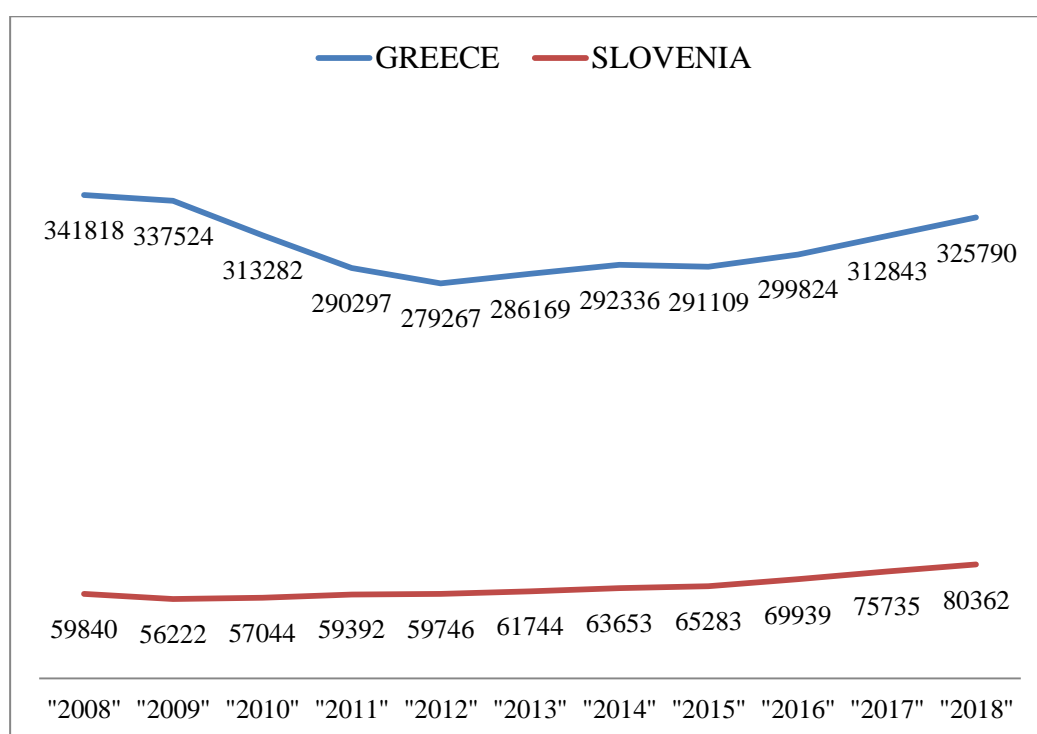
In Chart 5 we can see that for the first two years Greek GDP per capita is significantly higher than that of Slovenia. But then from 2010 onwards that changes. Greece's GDP declined sharply from 2008 to 2012 and there has been a steady increase since then. On the other hand, Slovenia's GDP has been growing steadily since 2010.

#### 4.4.2 GDP (\$)



	GREECE	SLOVENIA
"2008"	341818	59840
"2009"	337524	56222
"2010"	313282	57044
"2011"	290297	59392
"2012"	279267	59746
"2013"	286169	61744
"2014"	292336	63653
"2015"	291109	65283
"2016"	299824	69939
"2017"	312843	75735
"2018"	325790	80362

**Table 6 – GDP (\$)**



**Chart 7 – GDP (\$)**

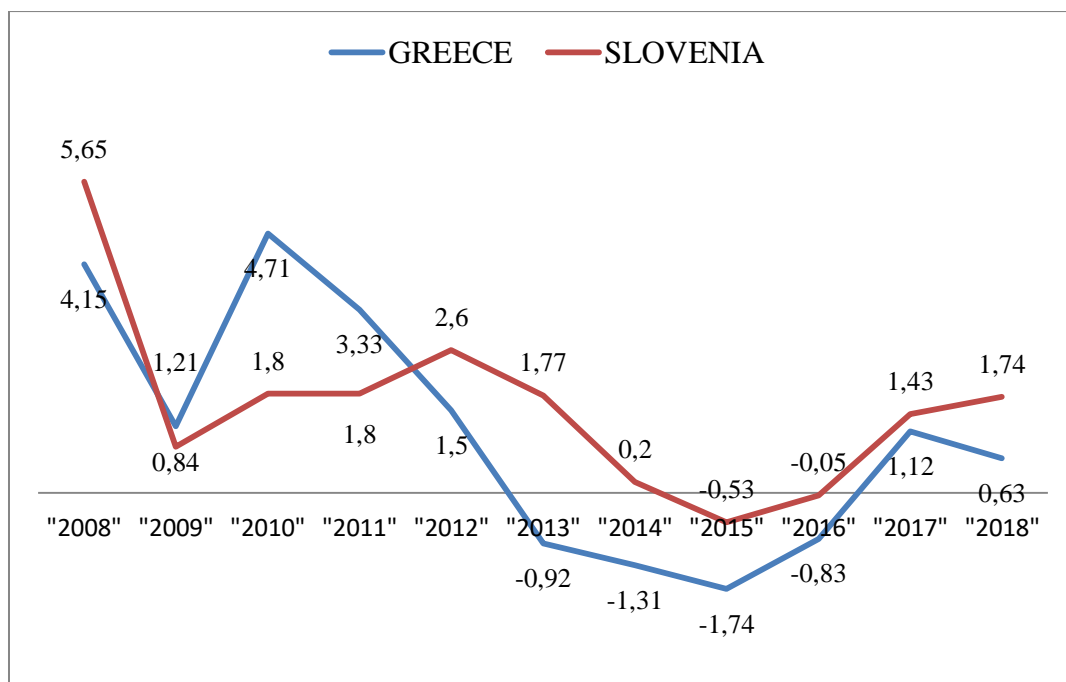
As we can see in the chart above, Greece's GDP, despite the economic crisis and its consequences, remains larger than Slovenia's over the whole period under consideration.

#### 4.5 Inflation (%)

Inflation measured by consumer price index (CPI) is defined as the change in the prices of a basket of goods and services that are typically purchased by specific groups of households. Inflation is measured in terms of the annual growth rate and in index, 2015 base year with a breakdown for food, energy and total excluding food and energy. Inflation measures the erosion of living standards. A consumer price index is estimated as a series of summary measures of the period-to-period proportional change in the prices of a fixed set of consumer goods and services of constant quantity and characteristics, acquired, used or paid for by the reference population. Each summary measure is constructed as a weighted average of a large number of elementary aggregate indices. Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a given set of outlets or other sources of consumption goods and services.

	<b>GREECE</b>	<b>SLOVENIA</b>
"2008"	4,15	5,65
"2009"	1,21	0,84
"2010"	4,71	1,8
"2011"	3,33	1,8
"2012"	1,5	2,6
"2013"	-0,92	1,77
"2014"	-1,31	0,2
"2015"	-1,74	-0,53
"2016"	-0,83	-0,05
"2017"	1,12	1,43
"2018"	0,63	1,74

**Table 7 – Inflation (%)**



**Chart 8 – Inflation (%)**

From the chart above we can see that the inflation rate in Slovenia was higher in 2008 than in Greece. From there and beyond in the years that followed until 2010, Greece had consistently higher inflation than Slovenia. But since 2012, as a result of the economic crisis, Greece has consistently had very low inflation with peak years in the years 2013 - 2017 where the inflation rate appeared.

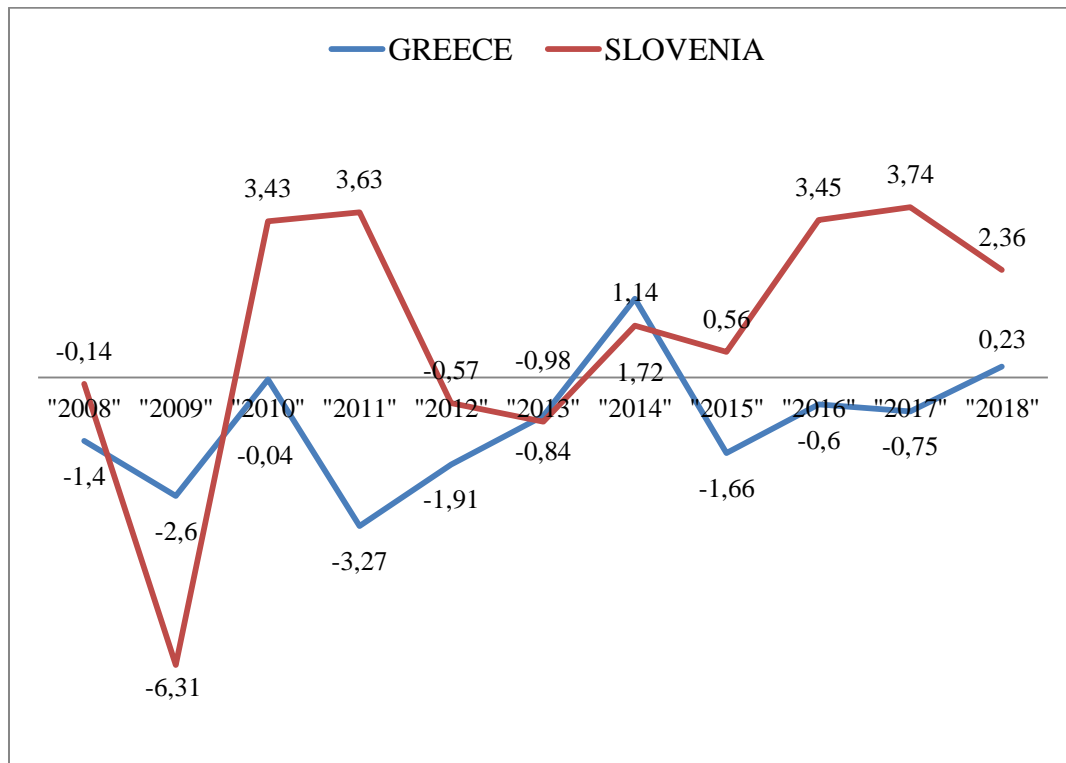
#### 4.6 Labor productivity and utilization (%)

Labor productivity growth is a key dimension of economic performance and an essential driver of changes in living standards. Growth in gross domestic product (GDP) per capita can be broken down into growth in labor productivity, measured as growth in GDP per hour worked, and changes in the extent of labor utilization, measured as changes in hours worked per capita. High labor productivity growth can reflect greater use of capital, and/or a decrease in the employment of low-productivity workers, or general efficiency gains and innovation.

	GREECE	SLOVENIA
"2008"	-1,4	-0,14
"2009"	-2,6	-6,31
"2010"	-0,04	3,43
"2011"	-3,27	3,63
"2012"	-1,91	-0,57
"2013"	-0,84	-0,98

"2014"	1,72	1,14
"2015"	-1,66	0,56
"2016"	-0,6	3,45
"2017"	-0,75	3,74
"2018"	0,23	2,36

**Table 8 – Labor Productivity (%)**



**Chart 9 – Labor Productivity (%)**

The labor productivity index in Greece is at negative levels throughout the period except 2014 and 2018. Low labor productivity is one of the major problems of the Greek economy. On the other hand, for Slovenia, the index values are negative for the first two years, but positive values and satisfactory labor productivity are observed thereafter.

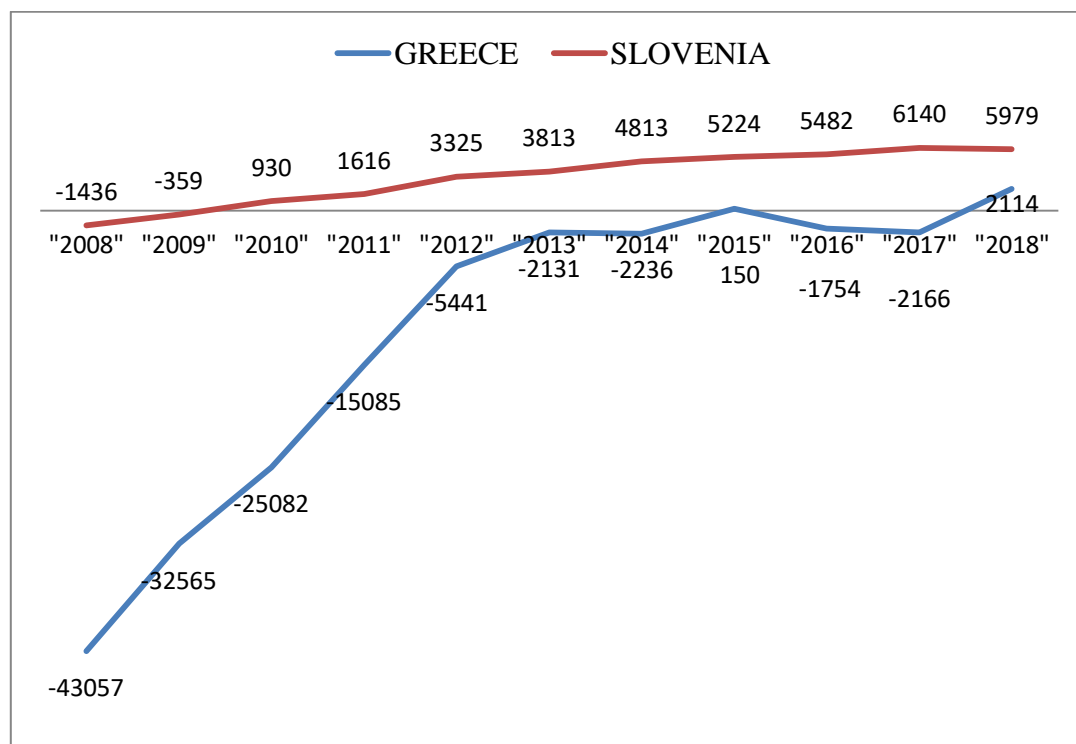
#### 4.7 Trade in goods and services (millions of \$)

Trade in goods and services are defined as the transactions in goods and services between residents and non-residents. It is measured in million USD, as percentage of GDP for net trade, and also in annual growth for exports and imports. All OECD

countries compile their data according to the 2008 System of National Accounts (SNA).

	GREECE	SLOVENIA
"2008"	-43057	-1436
"2009"	-32565	-359
"2010"	-25082	930
"2011"	-15085	1616
"2012"	-5441	3325
"2013"	-2131	3813
"2014"	-2236	4813
"2015"	150	5224
"2016"	-1754	5482
"2017"	-2166	6140
"2018"	2114	5979

**Table 9 – Trade in goods and services (\$ millions)**



**Chart 10 – Trade in goods and services (\$ millions)**

As we can see in 2008, Greece's trade balance was extremely negative. However, due to the economic crisis, the reckless imports of goods to Greece stopped, while at the same time emphasis was placed on exports of mainly agricultural products and

services such as tourism, which has been a comparative advantage of the Greek economy for many years.

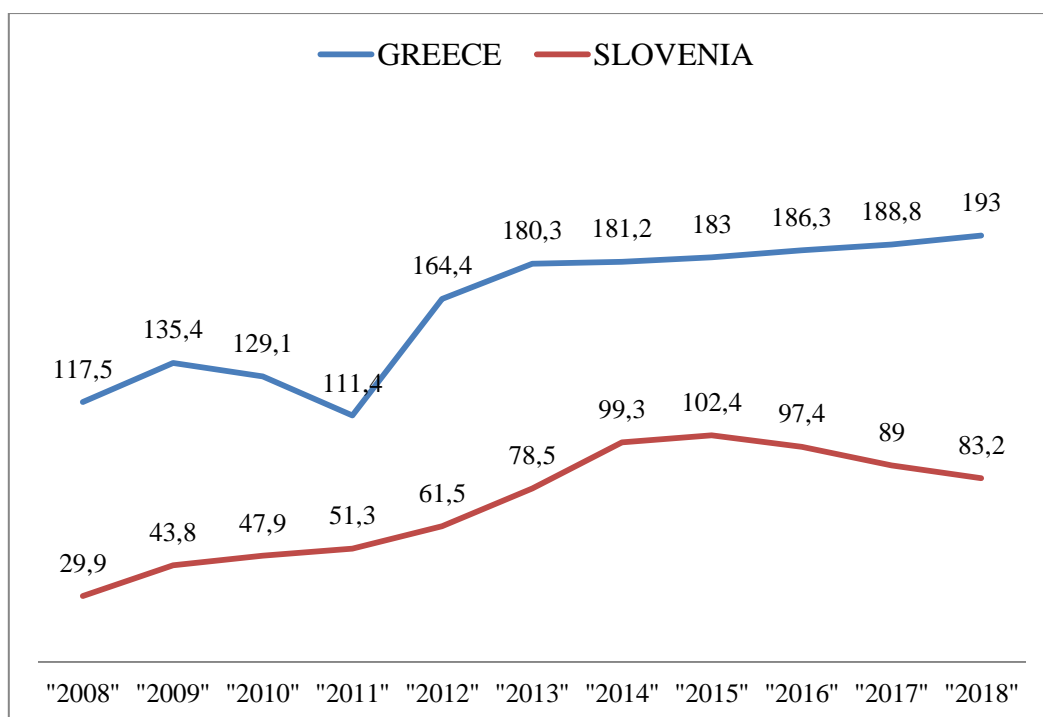
On the other hand, Slovenia has improved its trade balance since 2010, which has been consistently positive thereafter.

#### 4.8 General government debt (% GDP)

General government debt-to-GDP ratio measures the gross debt of the general government as a percentage of GDP. It is a key indicator for the sustainability of government finance. Debt is calculated as the sum of the following liability categories (as applicable): currency and deposits; debt securities, loans; insurance, pensions and standardized guarantee schemes, and other accounts payable. Changes in government debt over time primarily reflect the impact of past government deficits.

	<b>GREECE</b>	<b>SLOVENIA</b>
"2008"	117,5	29,9
"2009"	135,4	43,8
"2010"	129,1	47,9
"2011"	111,4	51,3
"2012"	164,4	61,5
"2013"	180,3	78,5
"2014"	181,2	99,3
"2015"	183	102,4
"2016"	186,3	97,4
"2017"	188,8	89
"2018"	193	83,2

**Table 10 – General Government Debt (%)**



**Chart 11 – General Government Debt (%)**

As we can see from the chart above, the public debt of Greece was and remains very large and is clearly larger than that of Slovenia.

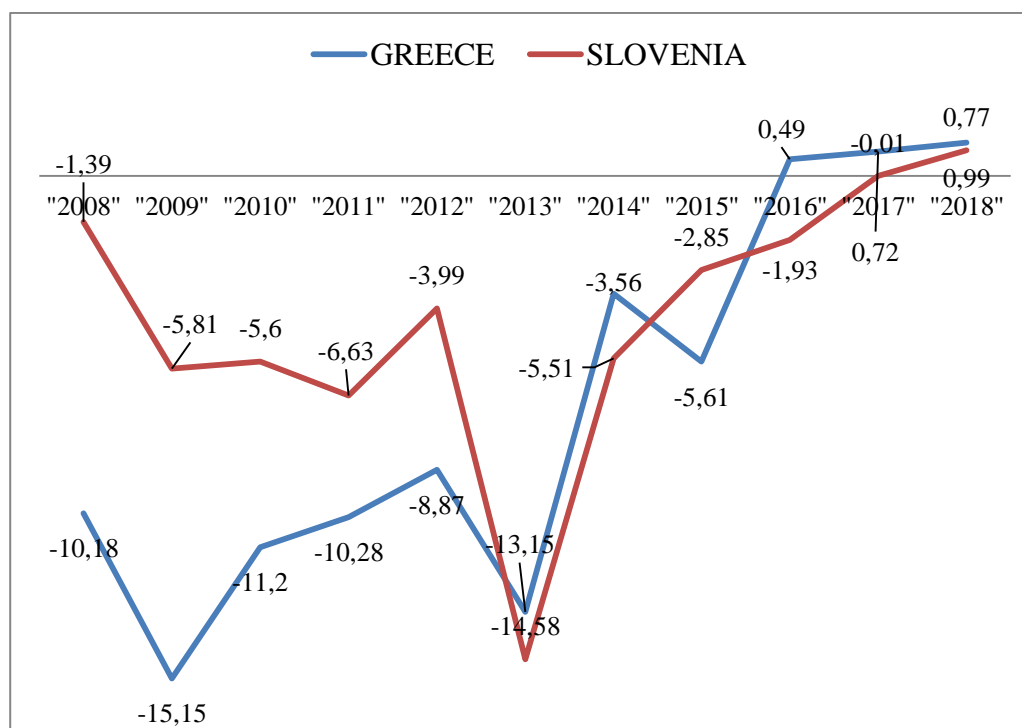
#### 4.9 General government deficit (% GDP)

General government deficit is defined as the balance of income and expenditure of government, including capital income and capital expenditures. "Net lending" means that government has a surplus, and is providing financial resources to other sectors, while "net borrowing" means that government has a deficit, and requires financial resources from other sectors. This indicator is measured as a percentage of GDP. All OECD countries compile their data according to the 2008 System of National Accounts.

	GREECE	SLOVENIA
"2008"	-10,18	-1,39
"2009"	-15,15	-5,81
"2010"	-11,2	-5,6
"2011"	-10,28	-6,63
"2012"	-8,87	-3,99
"2013"	-13,15	-14,58
"2014"	-3,56	-5,51
"2015"	-5,61	-2,85

"2016"	0,49	-1,93
"2017"	0,72	-0,01
"2018"	0,99	0,77

**Table 11 – General Government Deficit (%)**



**Chart 12 – General Government Deficit (%)**

We note that the fiscal deficit of these two countries is quite similar in their evolution and is turning into a surplus from 2016 onwards. It is worth noting, however, that Greece has made much more adjustment and improvement than Slovenia.

#### 4.10 Corruption Perception Index (CPI)

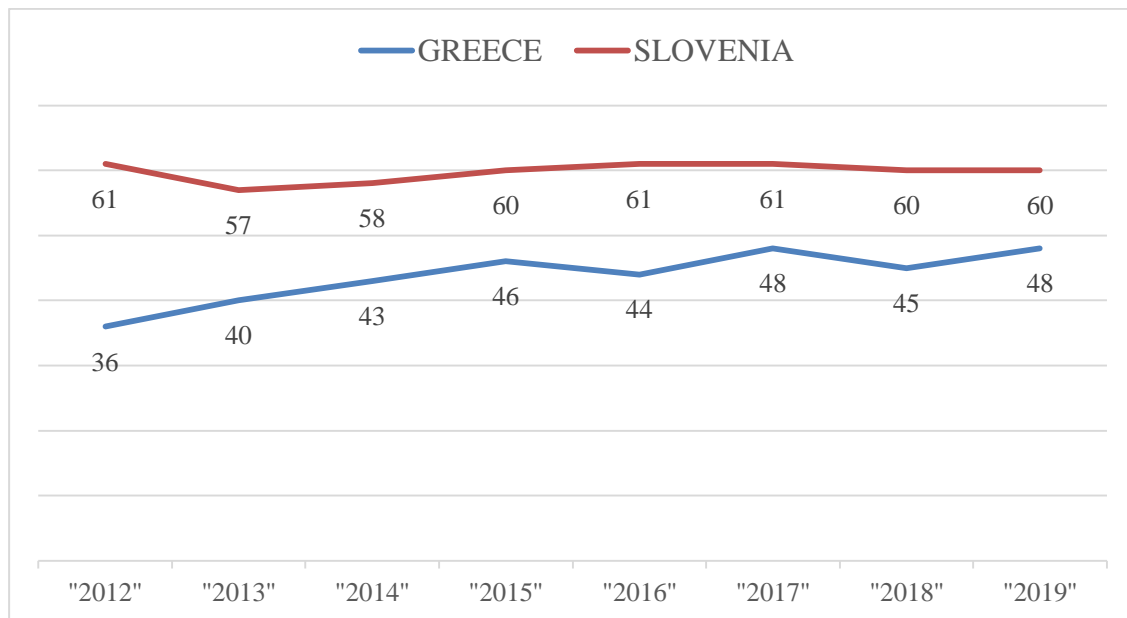
The CPI index is the most widely used indicator regarding to the corruption worldwide. In general corruption is described as the abuse of public sector for servicing private interests. CPI is defined by the perception to the level of corruption in the public sector in each country by experts and business executives. The methodology is composite because it combines 13 surveys and assessments of corruption which are collected by high reputable institutions.<sup>23</sup>

<sup>23</sup> <https://www.transparency.org/cpi2019>



	GREECE	SLOVENIA
"2012"	36	61
"2013"	40	57
"2014"	43	58
"2015"	46	60
"2016"	44	61
"2017"	48	61
"2018"	45	60
"2019"	48	60

**Table 12 - Corruption Perception Index (CPI)**



**Chart 13 - Corruption Perception Index (CPI)**

As it is shown by the Transparency International Organization data Greece's CPI is much less than the Slovenian. The same is concluded even from past data starting from 1999 but were not included due to different methodology applied. In 2019 the average CPI through EU countries is 63.85, Slovenia is ranked in the 15<sup>th</sup> place and Greece barely in 23<sup>th</sup>, 5<sup>th</sup> from the last. The correlation between GDP growth and CPI is not scientifically proven but it is certain the all large country economies achieve high CPI scores. In Greece there is still much work to be done starting from bureaucracy reduction which its maintenance favors corruption.

## CONCLUSIONS

The purpose of this thesis was to study the concept of economic growth and in particular to examine the factors that contribute to the economic growth of Greece and Slovenia. The thesis also explored the ways in which Slovenia managed to overcome the economic crisis relatively soon in Greece, as opposed to Greece.

Increasing productivity will be crucial for Slovenia's economic and social development and to achieve the objective, it is necessary to boost research and innovation, the IMAD ( Institute of Macroeconomic Analysis and Development ) Slovenian think tank stresses, while emphasizing, at the same time, that Emphasis should be placed on investments that will provide an encouraging business environment and training of human resources. At the same time, according to IMAD, digital transformation and the transition to the Fourth Industrial Revolution are areas where priority should be given to investments and the possibility of raising funds from the European Union.

According to figures presented by IMAD, productivity growth slowed to 1.5% in 2014-2018 and, despite coming out of the financial crisis, investment across the economy remains fairly modest. This, coupled with the need to redesign basic economic policies - stresses IMAD - gives both the public and the private sector the opportunity to work together for mutual benefit. One of the areas that need to be emphasized and motivated for investment is research and development, which has - in the long run - a positive impact on productivity. It is characteristic that by 2013, the growth rate of productivity had reached 2.6% of GDP, then decreased to 1.9% of GDP by 2017 and "climbed" again to 2% last year. This development, according to IMAD, demonstrates the dynamics of the sector.

As a result of this encouraging situation for the Slovenian economy in July 2019, Fitch Ratings upgraded the country's credit rating from A - to A with a stable outlook. To ensure economic prosperity in the coming years, the International Monetary Fund (IMF) urges Slovenia to pursue structural reforms. The aim is to boost economic growth and investment in the country, as well as to reduce the administrative burdens on the economy.

According to a report published yesterday, the IMF is encouraging Slovenia to make the labor market more flexible, restructure the tax system and speed up the privatization program. "The acceleration of the privatization program would attract capital and know-how, which would benefit the wider economy," the IMF said. The Slovenian government plans to sell Abanka, the country's third largest bank. In addition, it has already sold 65% of the largest NLB bank and will proceed with a further sale of 10% of the same bank in the first half of 2019. However, no further privatizations have been launched.

The IMF predicts that Slovenia will grow at 3.4% in 2019, while in 2018 it will grow at 4.5%. The better-than-expected growth rates are mainly due to investment, strong domestic consumption and net exports. Although growth outlook is projected to be good in the short term, growth is expected to decline in the coming years as the average age of Slovenians rises rapidly. Therefore, the IMF predicts that by 2020, Slovenia will register 2.8% growth. External factors that are expected to hurt Slovenia's economy is the protectionism that characterizes world trade, the uncertainty affecting Europe, and the lower than projected world demand.

On the other hand, the Greek economy seems to have gone out of its stagnant phase in recent years, with real GDP growth now consistently positive. The economy is currently experiencing a balancing trend in terms of fiscal and current account balances, and the growth rate continues to grow at 2%. But the overall growth potential is weak compared to the pace needed to be on a sustainable path in the medium term. At the same time, the slowdown in growth and consequently demand in the European and wider environment of the Greek economy raises additional concerns. In addition to the general pressures on exports of goods and services, the recovery in competing countries in the tourism market can lead to a weakening of the dynamics in a sector of the economy that has made a significant positive contribution to growth in recent years.

At the same time, however, there are still no endogenous mechanisms for generating income and liquidity flows that would make the positive dynamics visibly sustainable.

The absence of an endogenous mechanism for the transition of the economy to a solid, sustainable growth path is evident in the volatile behavior of mainly investments, the volume of which is still below both the volume of the pre-crisis period and that of the European Union countries. Meanwhile, the situation in the private sector remains fragile and still under uncertainty.

Households are still experiencing new negative savings, despite slight improvements in disposable income. And net fixed capital formation continues to be negative - even after depreciation. Following the increase in gross fixed capital formation (GDP) as a percentage of GDP in 2016 (11.47%) and 2017 (12.517%), 2018 saw a decrease of 11.07%. In the first half of 2019, according to the provisional figures of ELSTAT, the percentage stands at 11.3%.

In terms of economic policy choices, degrees of freedom have increased since the end of the third program in August 2018, but of course not unlimited. The individual choices and signaling of direction will be crucial.

The transition of the economy to a course of high and sustained growth rates requires the immediate reversal of any form of bleeding by austerity measures, as well as the

activation of endogenous mechanisms for generating income and liquidity through the increase in disposable income.

The reduction of the tax burden by the new government seems necessary, but not in itself capable of leading the economy on the path to stabilization and growth. Raising the minimum wage and activating sectoral contracts to diffuse growth throughout the economy are moving in this direction, as they will have a short-term positive effect on GDP, on the solvency of the economy and hence on the terms of refinancing debt from financial markets. Through this process it is obvious that stability conditions are likely to be created - a prerequisite for potential investment growth in the medium term.

In addition, the stability and solvency of the Greek banks is entirely dependent on the creation of income and liquidity flows in the economy, as such a development would cumulatively improve the quality of their assets and their deposit base, which were undermined by their fiscal policies and internal devaluation.

In conclusion, achieving sustainable GDP growth requires time and a combination of appropriate and effective interventions.

By comparing the economic indicators, we saw that Greece is lagging behind and sometimes with a big difference in terms of proportions from Slovenia in almost all sectors.

The causes of the weaknesses of the Greek economy are internal with pathogenic characteristics. The main chronic problems Greece faces are excessive public spending over a number of years, low productivity, low competitiveness, a huge trade deficit and high public debt. The point is that a small country of the former Yugoslav Socialist Federal Republic, which became independent only in 1991, has made such progress. It was noted that in 2008, as a starting point for the crisis, countries had similar values in the indicators under consideration.

The capability of a country's development is an issue of thousands of factors, but certainly Greece is not behind Slovenia at any level. Greece is among the OECD countries with the strictest institutional framework. The conclusion is that a country with strong development bases and a strong institutional framework like Greece should theoretically be more developed than a country at the level of Slovenia. This may be due to poor government management, which is indicated by the CPI score. Consequently, any economic situation of the Greek economy is mainly attributed to political discourse or expediencies.

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