

“The Migration of Greek Scientists Abroad and the Phenomenon of Brain-Drain in the Current Crisis”

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Abstract

The aim of this essay is to investigate the impact of different financial crisis since 1950 till today especially on the labor market of Greece. Specifically the phenomenon of migration to other developed countries is examined in depth with emphasis on the phenomenon of brain drain. Expanding the causes and effects of each crisis, we concentrate on the recent crisis and its peculiarities. In particular, we consider the case of Brain-Drain, which regards scientific trained manpower in the country and mainly the newer generations. For this reason, in addition to economic impacts the social parameters are also examined together with the future implications that will bring the Greek economy and society especially for the period 2010-2013.

Key Words: Brain drain, migration, crisis, unemployment, education, Greece, current account

Introduction

Stephen Castles (2010) has pointed out that “Movements for purposes of study, professional advancement, marriage, retirement or lifestyle are assuming greater significance, so that older ideas on migration are thought to be no longer relevant. But this picture seems overdrawn: indeed, as Bauman (1998) had pointed out, the right to be mobile is more class-specific and selective than ever. National border controls and international cooperation on migration management have become highly restrictive. Most people have neither the economic resources nor the political rights needed for free movement. Only 3% of the world's populations are international migrants, (UNDESA 2005). The postmodern utopia of a borderless world of mobility has not yet dawned, so that it still seems appropriate to focus on migration as a process based on inequality and discrimination, and controlled and limited by states”.¹

According to International Law, the term "migration" is the geographical movement of individuals and groups, for temporary or permanent residency in another socio-cultural context². The causes may be financial, such as when the economy in the country of origin is under adverse conditions. Still, the reasons may be political or social³. Immigration is the worst incidence of unemployment in a country. This negative impact has appeared several times in Greece in the postwar years, mainly since the 1950s.

¹ See Stephen Castles (2010)

² <http://www.ecocrete.gr/index.php?option=content&task=view&id=7020&Itemid=70>

³ <http://el.wikipedia.org/wiki/%CE%9C%CE%B5%CF%84%CE%B1%CE%BD%CE%AC%CF%83%CF%84%CE%B5%CF%85%CF%83%CE%B7>

At that time, Greece the unemployment rate ranged at very high levels and as a result a big number of the workforce was driven to migration towards other more developed countries. The immigration of the Greek workforce abroad had the positive effect of reducing the level of unemployment within the borders, since the reduced population was more able to find a job while the coming growth in the postwar period created more new jobs. However, this positive outcome cannot legalize such policies against unemployment but on the contrary such practices may create the risk of an acute international crisis (Kiritsis, pp. 156-250).

However, except of their negative effects, the migration phenomenon provides also some positive results for the country of origin. Especially in the case of the migration from Greece to other more developed economies, we can identify some positive results as follows:

- (i) The Greek presence around the world can strengthen the foreign policy of Greece and simultaneously to contribute to the dissemination of its cultural heritage to the rest of the world. (ii) The Greek immigrants contribute to the improvement of the current account with the sending of migration remittances to the country. (iii) Well educated immigrants, may be in the future a "reservoir" of well-trained workforce, which will help the country to speed up the recovery when the economy switched to an upward phase.
- (ii) On the other hand the adverse effects of Greek immigration, mainly concern the following cases: (i) Migration causes serious demographic consequences for the country of origin since the composition of the domestic population is altered, mainly by gender, which in turn causes low birth rate, leading in the future the pension funds in major problems. (ii) Causes shortage of skilled labor force in the labor market, while in some areas the effects are more pronounced leading regional areas in decline. (iii) Migration causes problems also for the migrants themselves, especially for their children, who usually do not get the proper training, leading in some cases to the lost national consciousness. (iv) Last but not least, beyond the problems they face today which lead them to seek work in other countries, immigrants face also the problem of a possible repatriation as if the host countries enter in a slowdown phase of their economies, it is likely to fire foreign workers who will return to their origin country and rebuild again an oversupply of labor which will increase unemployment and lowering salaries.

The Phenomenon of Immigration in Greece Since 1955

After two World Wars, the first in 1919-1939 and the second in 1939-1945, Greece had to tackle with unfavorable economic and social situations. At the same time, some European countries, such as Germany, Belgium and Sweden were able to develop rapidly their economies after the catastrophes of the Second World War and at the same time to absorb both the domestic workforce and the workforce from abroad. Therefore, it was a good opportunity for Greeks to migrate to these countries, firstly because wages were too high and secondly because European countries were in a small geographical distance from Greece, allowing to them the opportunity to visit often their country at a lower cost than that required for a transatlantic journey⁴. So the wave of immigration from Greece to European countries ended with the creation of Greek communities in Sweden, Denmark, Norway, the Netherlands, Italy, France, and especially Germany (Kiritsis).

The main characteristic of the five years period from 1945 to 1950 was the immigration of Greeks mainly to the USA. Over half a million of the Greek population left the country to find a better life in the USA and Canada⁵. In the period 1950-1960 there is a movement of Greek immigrants because of the high unemployment in the country, directed mainly to the USA, Australia and Canada. Especially in 1955 though, there was a great migratory movement to the West-European countries, mainly to Belgium and West Germany⁶.

Examining the evolution of the Greek migration after the 50s we find that most migrants moved to transoceanic countries such as the USA, Canada and Australia, while after 1960 they began to increase commute to Western Europe, mainly in Germany and Belgium.

4 <http://www.ecocrete.gr/index.php?option=content&task=view&id=7020&Itemid=70>

5 <http://www.tovima.gr/opinions/article/?aid=117495>

6 <http://www.tovima.gr/opinions/article/?aid=117495>

On the evolution of migration of Greeks abroad in the 20th century, special reference should be made in the period 1955 to 1976 when emigrated permanently 1.22 million people. The most significant shift was observed in the years 1962-1966, with 500,000 people.

As far as the composition of immigrants is concerned, in terms of gender, the higher proportion was men, while their composition by age shows that most immigrants were ranging from 15 to 64 years. From this data it is easily understood that immigrants constituted the most active population, which shows how negative is the impact of immigration on the labor force of a country (Georgakopoulos, pp. 31).

From 1961 until 1974 the post-war Greece was once again under difficult economic and social conditions.

In late 1974, with the fall of the dictatorship and the Turkish invasion in Cyprus, the Greek economy was devastated and unemployment had reached at very high levels. At that time a big part of the population was living below poverty line facing increased insecurity (Kiritsis).

After its accession to the EU and later to the euro area, Greece created a modern infrastructure transforming Greece into a host country of immigration mainly from neighboring countries of the former Eastern Bloc. However, the continuous growth for the entire last decade did not ensure the future of the country while at the same time its economy hosted more immigrants than it could afford. The absence of controls both the tax authorities and social security principles created large deficits which led to continued lending and debt expansion. The parallel decline in its production activity with deindustrialization together with the shift of consumption to imported goods led to the fall of Greece's competitiveness and the emergence of large twin deficits, in its public budget and its balance of payments. So we arrived at today's recession that already lasts five years leading to soaring unemployment and the inability to create new jobs. The result is a large part of the workforce to migrate towards more developed countries especially in the new age groups, particularly in people with high qualifications regarding his education and professional experience.

Since the mid 1970s until the recent financial crisis in the USA in 2008, there is an increased repatriation of Greek immigrants. Most of those immigrants who fled to Western Europe were coming mainly from the North Greece, while most moved to America, Canada and Australia came from the southern Greece and the islands. The main characteristic of Greek immigrants at that time was that before migrating they were economically active.

Literature Review

According to Kazakos (2007), the postwar period in Greece includes several important economic events, which describe the tension between the state and the market. Amanatides (2010) considers that the problem of immigration in Greece during the last century involved unskilled labor force while today the phenomenon takes the form of "brain drain" with Greek immigrants ranked first between the EU Member States⁷. Voyiatzakis (2010) states that today, Greek scientists from different specializations are leaving their country, looking abroad employment rehabilitation and a better life, as Greek firms are reluctant to hire staff⁸. Malkoutzis (2011) argues that those who face the greatest challenge in the current economic crisis are young families with more and more couples remain childless, thus increasing the low birth rate while in many cases they live with their parents to avoid extra expenses⁹. Bourna (2012) describes the phenomenon brain drain abroad as a "bleeding" case for Greece because the country is losing its main cells and the nation will not be able to survive in the long term¹⁰. According to Katsika (2013), the decision of movement of young scientists from southern to northern Europe where economically the states are more developed is by necessity and not by choice. If Europe fails to create a strategy for the development of specific policies in order to reduce the brain-drain, then this will become one of the main factors for its dissolution¹¹. Finally, Trachana (2013) considers the imposed austerity measures and the high unemployment rates as the reasons forcing young scientists to go abroad while the Greek government does not seem to realize that long-term commitment for funding education and research should be part of the strategy for the enhancement of the economic development since as this is not the case the brain-drain phenomenon will swell for the country¹².

7 <http://neoskosmos.com/news/el/node/9910>

8 <http://www.ethnos.gr/article.asp?catid=22768&subid=2&pubid=11654981>

9 <http://library.fes.de/pdf-files/id/ipa/08465.pdf>

10 <http://exelixeis.gr/koinonia/brain-drain>

11 <http://www.euractiv.com/innovation-enterprise/brain-drain-new-challenge-eurozo-analysis-531938>

12 <http://www.nature.com/news/austerity-led-brain-drain-is-killing-greek-science-1.12813>

The Phenomenon of Immigration the Last Five Years

In recent years migration phenomenon in Greece has become very intense. In 2009 the Greek citizens started to immigrate, mainly to developed European countries such as Germany and the UK and also to Australia, Canada and the USA. The immigration goal of this period was to get a better standard of living, to find a good job because the great economic recession in Greece has increased unemployment, especially for the new ages.

During this period we can see immigration of different ages but also of entire families. The main characteristic of this migration though is the large number of scientists, especially young.

According to official data of the Australian Department of Immigration, the number of Greeks who migrated to Australia has increased significantly over the years. Also, a survey by the European Union, that the Greeks have a strong movement within Europe and indeed are in the first place in migration intention in relation to the rest of Europe¹³.

During the second phase, the crisis moved from the U.S. to the E.U. initially in Ireland and then to the southern Member States, especially in Greece, Portugal, Spain and Italy. All the member states decided to overcome the crisis through the EU (Christopoulos pp.388).

The reason that made Greece the weakest country was its already unproductive economy which was based mainly on the public sector. This was the result of the policy which was followed in Greece before the US crisis, mainly characterised by its continuing expansionary fiscal policy which created very high deficits, both in its budget and its balance of payments. At that time, Greeks were borrowing to buy houses since the interest rates were very low. In this way though, the high demand pushed the prices for real estate at high levels which later on found to be bubble (Petraakis pp.302-304).

Under these circumstances, in 2010 Greece was unable to finance its needs by borrowing from the markets and thus forced to seek the help of the EU to finance its extremely high deficit and reduce debt as a percentage of GDP. However, since the beginning of the plan things were very difficult because Greece was already in recession with its GDP falling by 2%.

The unfavorable financial situation of the country and the inability of the private sector to generate growth strained further the effort of the deficit reduction. Moreover, the banking sector was burdened and the real economy was challenged with negative effects on employment (Christopoulos, pp.388).

The Housing Bubble and the Greek Macroeconomic Situation After 2010

Apart from the effects of the USA crisis in Greece there was already a different crisis which was a matter of time to make visible its signs to the economy and the society. At that time there was fierce competition among banks, thus creating an enormous expansive credit policy. In fact this has contributed greatly and the euphoria that prevailed after the 2004 Olympic Games of Athens.

A huge number of mortgage loans were approved, without a detailed examination of the repayment conditions and the collaterals thereof. In this way the so-called Greek housing 'bubble' was created.

But when the bubble deflated, the result was more than 200,000 unsold homes, fast decrease of prices by 20% on average; more than 20% of the shops in the center of the Greek capital remained vacant; the rental of offices and shops fell by almost 25%. Unfortunately, the estimates of the situation in Greece for the recovery of its economy are negative because of the looming long-term downturn in the economy (Christopoulos, pp.388-390).

With the beginning of the crisis in Greece, the private construction activity collapsed which affected negatively the GDP and further increased the number of unemployed in the country. The public which was the largest and most important customer of the construction industry delayed its payments and ended up being the largest debtor of the industry, with debts over 1.8 billion for the year 2010. The crisis in the construction market has led many companies to close. The rest are trying to survive and many of them resort to bank loans to restore the liquidity which is absorbed by the public sector (Christopoulos, pp.390 -391) .

13 <http://www.tovima.gr/opinions/article/?aid=117495>

Table 1: Macroeconomic data for Greece

Main Economic Indices	2010	2011	2012
GDP (Real prices 2005)	222.318 mil. (-3,5%)	215.088 mil. (-6,9%)	206.319 mil. (-4,1%)
Inflation (Harmonized index)	4,7%	3,1%	-0,5%
Public deficit (General government)	23.859 εκ. (10,5% of GDP)	19.694 εκ. (9,2% of GDP)	13.732 εκ. (6,7% of GDP)
Primary public deficit	10.666 εκ. (4,7% of GDP)	4.664 εκ. (2,2% of GDP)	488 εκ. (0,2% of GDP)
Public debt	329.535 εκ. (145% of GDP)	355.616 εκ. (165,3% of GDP)	336.713 εκ. (163,2% of GDP)
Balance of Payments (% of GDP)	-10,1%	-9,8%	-7,5%
Unemployment	12,5%	17,7%	19,7%

Source: Greek Statistic Authority

Table 1 shows the change of some key economic indicators in Greece for the period 2010-2012. More specifically, it is observed that in three years period the GDP growth, inflation, fiscal deficit and the balance of payments of Greece have fallen. On the other hand, we can see also a significant percentage increase in public debt for 2011 and a slight decrease in 2012 while unemployment in the country shows a continuous increase.

The effects of the economic crisis have highlighted the peculiarities and the chronic weaknesses of the Greek economy. The economic crisis initially associated with the excessive debt and the budget deficit which resulted to an increase in interest rates, followed with the outflow of deposits to other countries. Therefore the economic crisis became also a financial crisis which resulted to significant liquidity problems for the real economy. The austerity measures with wage and pension cuts for the households increased tremendously the repayment of their loans which increased further the problems of the banking system in an effort to manage the crisis. From the banks side they started to cut lending, leading to further consequences for the liquidity of companies, many of which went bankrupt, creating more unemployment.

The published data of private and public companies were not systematically tested by the authorities, "allowing" the publishing virtual financial statements which create panic to the market when they are disclosed. The public suddenly changes its policy and requires immediate payments to the tax authorities and the pension funds. The inability of the tax authorities to fight the tax and insurance evasion increases illiquidity problems. Last but not least, both the private and public sector operates under extensive corruption.

The Greek state has created a very high public debt which is not able to fund both because of the unfavorable international conditions and because of the large and chronic budget deficit accompanied with a high deficit in the current account and the negative net national savings, which are the main structural weaknesses of the economy. This situation has been resulted mainly because of the systemic shortfalls in tax revenues and the high tax evasion (Christopoulos, pp. 396).

The phenomenon of Brain-Drain

The problem of high unemployment, which has worsened both qualitatively and quantitatively especially for young people, will bring long-term impact on the economic recovery effort in tackling the pension issue and the halting of families are forced below the poverty line. The phenomenon of brain drain which has emerged in the recent years in Greece and other E.U. states which are under a memorandum of understanding has led to the leakage of specialized scientific personnel abroad. The leak has become a blow for these countries which will become more obvious when these scientists will be needed for the economic development¹⁴.

Brain drain is the phenomenon of migration of people who have completed higher education. Usually concerns the case where these scientists leave a less developed country to find a most promising job in a more developed country. This phenomenon is not new but in the past only a few scientists were leaving the country.

¹⁴ <http://www.enet.gr/?i=news.el.article&id=393172>

Nowadays, a big number of people moving learners in more developed countries and in the future, this phenomenon is expected to expand even more (Labrianidis, pp. 27-28).

The brain drain from less to more developed countries has a negative effect on the country of origin, because society loses the most sophisticated part of its working force. In economic terms there is an even higher effect since the state has invested via tax payers to their education. Thus, the loss for the country of origin is twofold. Firstly, it loses the invested capitals (financial and human) and secondly the possibility the recovery of this economy must be achieved without these well educated people. In this way it is very probable for a widening of the gap between more and less developed countries.

The factors that cause the brain drain of the country are economic and non-economic. The pure economic factors are the (i) higher earnings' level in developed economies which attract young scientists and (ii) the globalization which strengthens the tendency of human capital to be concentrated where it already exists in abundance. The non-pure economic factors are (i) the inflexibility of the employment structure, the lack of research funding, the professional isolation, the nepotism, the lack of professional competence and the insufficient recognition of talent in young people. (ii) The lack of hope for the future and the social discrimination that may exist in a country such as distinctions based on race, national identity, religion and social class are also factors which exacerbate this phenomenon. (iii) the low quality of intellectual, professional, educational and cultural life in the country leads a significant number of new graduates to seek another country which will cover their needs. (iv) in some cases there are political factors that may prevail in the country forcing young scientists to leave their country (Labrianidis, pp. 44-48).

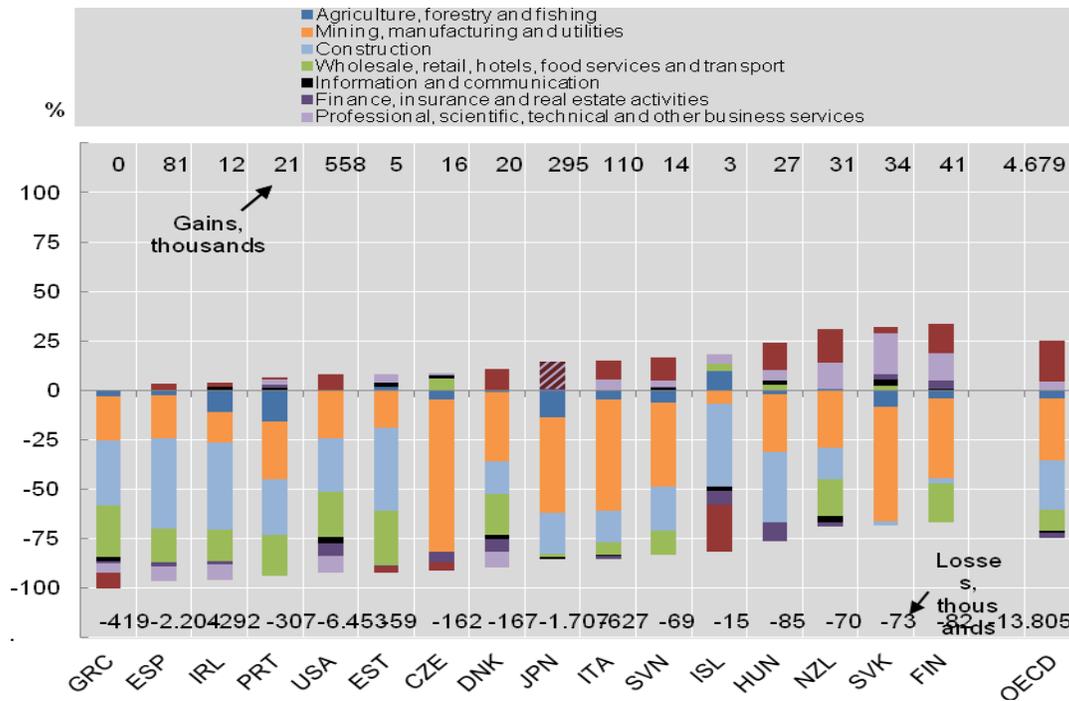
Research and innovation are the driving force of today's industry. Large industries have special research and development departments, not only to exploit their research results, but rather to exploit products and ideas produced by competitors and therefore, human capital contribution to the economic growth and the competitiveness of a country is very important¹⁵. For that reason, human capital is the most valuable resource, which the nation-states seek to support in various ways and strategies (Labrianidis, pp. 30-36). However, even though in some countries the human capital is very high, it cannot be reclaimed to contribute to the domestic development. Thus it migrates, as in the case of Greece, which despite the fact that huge amounts have been spent on their training, they migrate to other foreign countries. The economic crisis and the fiscal adjustment imposed on Greece, brings the most talented young scientists closer to immigration. The result is that countries hosting them achieve growth of production, economic growth and improved living standards for their citizens, while the country of origin lacks scientific potential which is expected to deteriorate the production structure and the quality of life of its citizens¹⁶.

Brain drain provides also some benefits for the country of origin such as in the case that immigrants will repatriate in the future acquiring a better specialization abroad. Furthermore, the well educated immigrants will gain higher salaries allowing them to send remittances to their country of origin in order to support their families or to invest and create wealth in their birth country. Therefore, for the countries of origin, monetary remittances can become an important source of income. On the other side though, especially in the first years of residency of immigration, money sent from the country of origin to the host country as an additional financial support. Finally, graduate immigrants can be a significant source of tourism, political influence, charity and cultural influence on their countries of origin (Labrianidis, pp. 53-58).

15 <http://www.newsbomb.gr/opinions/story/356983/diarroi-egkefalon-i-ellada-poy-matonei>

16 <http://www.newsbomb.gr/opinions/story/356983/diarroi-egkefalon-i-ellada-poy-matonei>

Table 2: The Effect of Crisis on the Employment of Different OECD Countries



Source: OECD scorecard 2013

Table 2 shows the cumulative change in employment for the period 2008-2011 where changes are shown by sector in total employment. Specifically, in the agricultural and in the forestry and fisheries sectors Greece displays for this period a small decline in employment (-2.8%), as Spain, Italy and most countries of OECD while marginal employment growth of these sectors can be seen in Iceland and Estonia.

In mining, manufacturing and utilities the country with the largest decline was the Czech Republic, followed by Slovakia, Italy and Japan. Greece (-22.5%) compared with the other countries showed a slight decline in the employment of these sectors. Employment in the construction sector experienced a decrease, with Spain coming first, followed by Ireland, Estonia, Iceland, Hungary, Greece (-32.6) and other countries. Few countries showed a slight increase in the employment of the construction sector, with the Czech Republic and Luxembourg to be the two of them.

In the wholesale, retail, hotels, transport and food services Greece (-26.2%) is among the countries with a significant reduction in contrast to countries such as Sweden and Israel which are among the countries with the largest increase.

In the field of information technology and communications, professional services, scientific research and public administration, education, health and other services, employment in Greece (-2.2%) shows also a reduction, as well as in financing, insurance and real estate industry (-1.2%).

The Brain-Drain in Greece for the period 2010-2013

Researches show that for many years Greece faces serious problems in the absorption of highly scientific expertise. Especially for the year 2011 data show that a large number of scientists, mainly from younger ages, left their home country to seek work abroad. Survey results of the European University of Florence (EUI) in collaboration with the Trinity College of Dublin, the Elcano Royal Institute in Madrid and the Technical University of Lisbon, show that in 2011 and 2012 brain drain has increased robustly. As far as the Greeks scientists is concerned, they seek employment mainly in the UK (25%) followed by Germany (in 2013 became the first destination), Holland, Belgium, Switzerland and the USA. This research though shows that brain drain in Portugal and Italy is even more extensive. On the other hand, in Ireland, where immigration began before 2009, the brain drain is already experiencing a downward trend.

Especially for Greece, 90% of the total immigrants hold a university degree out of which 24.5% are engineers, 22.3% are economists, 19% are IT specialists and 12% are mathematicians. Their ages are relatively low with 48% under 30 years old and 49% between 31-45 years old. It is worth noted that more than half of the brain drain immigrants were working before leaving Greece but were not satisfied with the prospects of their work and their earnings. This is the reason why 73% of the immigrant scientists find in a short time vocational rehabilitation while 67% find a managerial position. The most striking is that 46% of the immigrants leave abroad for the first time without having any relatives or friends in the country where they are looking for work¹⁷.

Conclusions and Suggestions

In this work the phenomenon of the Greek migration abroad has been analyzed, giving emphasis on the phenomenon of migration of young scientists to more developed countries, known as brain-drain. After describing the most essential issue to confront with, it is very important also to examine the way that brain drain will stop and the young scientists that already left the country will be attracted to return home. However, it is important to provide proposals for applied policies in order for the country of origin to gain from them even when they remain abroad. In previous years there have been political efforts in Greece in order to control brain drain. Such policies were either to offer tax relief and high salaries. However, the results were not satisfactory and the encouragement of the scientists to return failed in contrast to other industrialized countries where policies succeeded, such as in China, India and Korea (Labrianidis, pp. 79), Bhagwati (1976) and Rodriguez (1975) supported the idea taxation of brain drain can be a reliable way to reduce the incentives for migration and bring the young scientists to work in the country of origin. Wilson (2008) proposed that a tax brain drain can be voluntary. In recent years the loss of the highly-educated immigrants are considered permanent for the countries of origin and it is accepted that this cannot be reversed simply by offering incentives repatriation. Thus, the countries of origin began to cultivate ties with these immigrants in order to benefit from this human capital even when they stay and work in another country (Labrianidis, pp. 182).

Migration is a vast and complex phenomenon with several social dimensions. From the 20th century till today, there were few times that Greek immigrants fled to foreign countries for a better future. The difference of this phenomenon today lies in that people who migrated in the past were of higher ages, coming in their majority from poor social classes but today immigrants leaving Greece are mainly young coming even from the upper classes of the Greek society.

The recent crisis initiated in the USA where the competent authorities used the banking system as a means of social policy, giving individuals and firms a big number of loans with very low interest rates. This policy resulted in a decrease of liquidity of the banking system. The authorities sought to address the liquidity problem by raising interest rates on loans, thus creating a vicious cycle of economic consequences that led to the economic crisis in the USA, which then became a global economic crisis, affected to some extent the Greek economy which was already facing considerable problems because of its low competitiveness and high debt.

Apart from the migration of young scientists, the recent crisis had serious implications also in other areas of the Greek economy. More specifically there is a decreased by almost 30% to the GDP, increased unemployment by 30%, negative impact on the banking system which reflected on large enterprises with the increased difficulty in recovering and obtaining loans from banks.

There is a very small possibility to succeed in the future a stable development in Greece as there are various factors that hold back any attempt forward. What can Greece do is to regain its credibility with its creditors, compiling a credible budget public spending by applying a suitable strategy for the creation of a reasonable tax system, which is socially fair but also will tackle with the extensive tax evasion. At the same time the legal system has to be modernised to ensure the protection of investors.

¹⁷ http://www.kathimerini.gr/4dcgi/_w_articles_kathremote_1_30/11/2013_530118

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