The ‘brain drain’ phenomenon: measuring the intention of young Greek scientists to migrate abroad

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Abstract: - The deep and extended recession of the Greek economy during the last six years had a serious effect on the employment rates of the country. More specifically, in 2013 the unemployment rate approached the extremely high level of 30% (official data), while the same percentage reached almost 65% among young citizens. This unpleasant phenomenon often drives young scientists (university graduates) to seek employment abroad. In the present paper the ‘brain drain’ phenomenon in the case of Greece is being analyzed, focusing on the empirical investigation of the intention of young Greek scientists to migrate abroad. In this context, an empirical research was conducted in a sample of 322 young scientists between 22 and 30 years of age (all members of the sample have completed their studies in an Institute of Higher Education). The statistical analysis was conducted with the use of the statistical package SPSS 20. Results reveal interesting dimensions of the ‘brain drain’ agenda and can be used in order to help understanding the ‘brain drain’ phenomenon and, at the same time, contribute to developing measures for reducing the escapism of young people.

Key-Words: - Brain drain, migration, economic crisis, employment, Greece, empirical study.

1 Introduction
The deep recession that the Greek economy faces during the last years (2008-2013) has led to a rapid decrease in its GDP and, consequently, to increased unemployment. More specifically, during the last years the Greek GDP has fallen by 20.1%, while the GDP per capita at the end of 2012 was equivalent to the year 2000 standards [1].

The economic / fiscal / debt crisis had significant effects on the Greek labor market. Some of the factors that have significantly altered the Greek labor market landscape are the following: (a) the limited available income and the consequent reduction in consumer spending, (b) the constant closures of numerous organizations nationwide, (c) the reduction of the productive activity, (d) the negative investment climate, (e) the problems in the fields of competitiveness and innovativeness. Without any doubt, the Greek labor market underwent enormous changes that lead to the explosion of the unemployment and the formation a situation that has no precedent in the modern history of the country.

According to the Hellenic Statistical Authority (ELSTAT) [2], the unemployment rate in the first quarter of 2013 was 27.4%. Particularly intense is the problem of unemployment for young people (between 15 and 24 years), since the unemployment rate is almost 60.0%, while the corresponding percentage for the category 25-29 years is 41.2% [2].

Additionally, regarding certain qualitative aspects of the unemployment rate, it must be noted that unemployment among women is higher than the unemployment among men, long-term unemployment expands more and more, there are significant regional variations (e.g. unemployment rates in Macedonia and Thrace are higher than any other region of the country), and the problem of unemployment is comparatively stronger in urban areas than in suburban and/or rural areas [5].

The intensity and duration of the economic crisis and, especially, its impact on the labor market, gave room for the development of a grim phenomenon, that of ‘brain drain’. ‘Brain drain’ is defined as the exodus of young scientists from the domestic labor market and their migration to other countries that can provide employment under decent conditions (for the case of Greece countries like Germany, UK, France, Netherlands, USA, Canada, Australia etc).

‘Brain drain’ has been investigated in the international literature both from the side of the countries of ‘brain drainers’ and from the side of the host countries [6, 7, 8, 9, 10, 11, 12]. Despite its significant international empirical investigation,
‘brain drain’ in Greece has not been extensively examined and the relevant scientific publications are limited [3]. Consequently, the examination of the phenomenon is crucial, since it can contribute to the ongoing debate considering the impact of ‘brain drain’ and the necessary measures to prevent it.

The current research argues that the main reasons for ‘pushing’ young scientists abroad are the pursuit of a better quality of life, the seek of better working conditions and the pursuit of higher wages. Similar empirical research [3, 4] shows that an important cause of migration is the difficult labor market situation, the general corruption and the lack of meritocracy, the lack of new jobs and the hard access of young people in the labor market.

2 Research Methodology

2.1 Population of the study

The general population in Greece is approximately 10,815,197 people. Women are 5,484,000 (50.8%) and men 5,303,690 (49.2%). 7,423,889 people are between 16 and 64 years of age. The participation of the active working force (15-64 years old) in the total population is about 35.48% (3,837,950 people). According to official data [2], the unemployed between 15 and 64 years old are 2,941,733.

When it comes to the category of the employed population, 7.6% are self-employed with employees (employers), while 24% are self-employed (without employees). Additionally, the 63% are employees (the average in the European Union is 80%), and the 5.3% are assistants in a family businesses [20].

As far as the youth unemployment (below 25 years of age) is concerned, Greece has the negative track record between all the countries of the EU. Specifically, the percentage of youth unemployment has jumped to 57.6% in Greece (data from 2013), versus 56.5% in Spain (the second country with the higher youth unemployment rates in the EU). On the other hand, the lowest youth unemployment rates are observed in Germany (8.1%), Austria (9%) and the Netherlands (9.7%) [16].

The population of the present study is graduates of Greek Institutions of Higher Education (namely, Technological Educational Institutes and Universities) that are between 22 and 30 years of age. Regretfully, no official data were found so as to numerically determine the members of the above population.

2.2 Questionnaire

The questionnaire was based on an extensive review of the literature of the field [13, 14, 15]. In order to collect the appropriate data from the sample of the study, a structured questionnaire consisting of 30 items (questions) and 4 sections was constructed.

The first part of the questionnaire refers to the demographic characteristics of the respondents, such as genre, age and marital status. The second part measures the educational level of the respondents (graduate or postgraduate). The third part collects various information concerning the occupational status of the respondents and whether they are satisfied with their current occupation. Finally, the fourth part of the questionnaire measures the intention of the respondents (young scientists) to migrate abroad and, moreover, explores the reasons that have an impact on this decision.

2.3 Data collection

The final sample of the study consists of 322 young scientists (between 22 and 30 years of age), who have completed their studies in an Institute of Higher Education.

The appropriate data were collected using a questionnaire in two formats; paper and electronic. The study was conducted between September and December of 2012, while for the statistical analysis the statistical package IBM SPSS 20 was used.

The 64.3% (207 people) of the final sample are women and 35.7% (115 people) are men. Considering the age of the respondents, it should be noted that the aim of the sampling procedure was to achieve equal representation between all ages. That was, actually, achieved, with every age group having similar percentages.

Furthermore, regarding the family situation of the respondents, the majority is not married (77%). The 18.3% are married, while the 4.7% are divorced. Considering the occupation of the sample, the majority (43.5%) are unemployed.

3 Results

The main results of the statistical analysis are the following:

- The 39.1% of the respondents have graduated from a Technological Educational Institute, and the 41.6% are University graduates. Finally, the 19.3% have completed postgraduate studies (on a Master or PhD level).
- As far as the employment status of the sample is concerned, the 43.5% are unemployed, while the 42.5% are employed either in the public, or in...
the private sector. There is, also, a percentage of 11.2% consisting of business owners, and finally a 2.8% which is not occupied by choice, or due to various other obligations (military service).

- The majority of the unemployed (50%) stated that the main reason for leaving their previous occupation was employee layoffs, while the 25% stated that their contract of employment ended. 13.2% were laid off (personally, not as a group), while 11.8 declared their resignation.
- The 43% of the respondents argued that the main reason for their unemployment is the current economic crisis.
- The majority of the sample (60.9%) stated that they have got into the mental process of looking for a job abroad (intention to migrate). This observation is very interesting, since it clearly demonstrates that most young Greek scientists feel affected from the ongoing economic crisis and feel confident about seeking employment in other countries.
- Among those who replied that they actually intent to migrate abroad (60.9% of the sample), the 31.8% believes that there are more employment opportunities on the field of their studies in foreign countries. Moreover, the 23.4% thinks that their financial benefits will be higher in foreign countries in comparison with those in Greece. The 22.1% believes that their qualifications are better recognized abroad, while the 22.7% states that survival is the main reason that makes them consider working abroad.
- Among those who replied that they do not intent to migrate abroad (39.1% of the sample), the 41.4% have family issues that stop them from migrating, the 24.4% is satisfied with their current job, the 19.9% believes that the economy of Greece will recover, and the 14.4% hopes that an occupation in Greece will finally appear itself.
- Moreover, the analysis revealed that genre (male of female) has no statistical significant in the preference of the respondents to migrate abroad. Hence, young males and females show the same intention to migrate abroad.
- The same applies for the level of education: respondents of all three educational categories (Technological Educational Institute, University, Postgraduate degree) demonstrate the same intention to migrate abroad (no statistical difference exists).
- Additionally, it is found that the younger the respondent the more intense the intention to migrate abroad. The 64.8% of those between 22 and 24 years of age and the 67.1% of those between 25-27 stated that they intent to migrate abroad to seek occupation, while for the age group 28-30 the same percentage is 52.4%.
- The marital status has a significant impact on the intention to migrate, since those who are not married have though more about leaving the country. On the contrary, those who are married think twice about examining an occupation abroad.
- Furthermore, the majority of the respondents who are not satisfied with their current job (53.1%) wish to seek for employment abroad. Those that are satisfied demonstrate lower levels of intention (32.1%).
- An interesting observation arises when examining the relationship between intention to migrate and monthly salary. More specifically, the higher intention to migrate is observed between those that have a salary up to 500 Euros (54.5%) and those that have a high salary, more than 1,200 Euros (60%). The respondents that are paid between 500 and 1,200 Euros have lower intention to migrate.
- Moreover, the self-employed, those who are unemployed and those who are occupied in the private sector show higher intention to migrate abroad than those working in the public sector.
- Finally, the respondents select a country of the European Union as their first choice abroad (52.2%), then comes the USA (27.8%) followed by Australia (19.1%).

4 Discussion

The main reason that pushes young Greeks to search for employment abroad is the high level of unemployment combined with the low salaries. Yet, another important factor is the inaccessibility to the labor market, as well as the depressing economic environment, the bureaucracy, the disorganization of the public sector and a general climate that discredits the young scientists of the country [4, 15].

The examination of the inaccessibility of young scientists to the labor market after their graduation is of paramount importance, since for a graduate the period that he needs to access the labor market is about 12.2 months [17]. Hence, in Greece a serious gap between university education and the introduction to the labor market is being observed.

Until today, the discussion concerning the transition of young people from education to work was almost absent. As a result, the lack of reliable quantitative and qualitative data that would help discussing this issue and compare with the European standards. However, the increase of unemployment in graduates from all educational levels contributed
to enhancing the debate about this issue in Greece, and underlined the importance of collecting and studying such appropriate data [22].

Among the most significant problems of the Greek economy are the rates of unemployment, the competitiveness indices and the lack of appropriate (job based) Higher education. Big changes are needed in these areas and various innovations must be implemented. Despite that, the awful truth is that the Greek index of innovation is very low. The public expenditures on innovation are far below the average of OECD (Organization for European Economic Cooperation) countries. Moreover, the private investment in innovation in Greece is the second worst in all of the OECD countries [21].

As stated earlier, a connection and cooperation between universities and real economy almost does not exist. In Greece, there is no ‘market innovation’; the universities don’t produce innovations, while the companies do not ask universities to produce them. These circumstances decrease the job demand, since young people with innovative refreshing ideas are not considered important from companies and organizations. Therefore, the escapism of young scientists from the country continuously enhances.

However, there are other important reasons that make young graduates find difficulties in entering the national labor market: the macroeconomic instability; the rate of growth of the economy; its capacity to absorb new employees in the labor market workforce; the fact that there is a potential mismatch between labor supply and demand, due to the inability of the production system to absorb a good trainee workforce.

On the other hand, young graduates find that foreign countries offer better conditions: there are more opportunities for employment on the object of their studies; financial rewards are higher; their value will be recognized; it is easier to acquire the necessary means to survive.

Hence, the grim economic reality (continuing economic crisis) and the relatively favorable conditions in the labor market of foreign countries make Greece seem like a country with no real prospects for young scientists [16]. For this reason, the emotions of young people are those of distress and disappointment about the state and the prospects of the Greek economy, as the near future seems ominous. After all, even young scientists with good salaries in Greece are themselves seeking to migrate abroad, as the uncertainty in the domestic labor market greatly affects their every decision.

5 Proposals

The main solution to the aforementioned problem of ‘brain drain’ is the decrease of the unemployment rates by implementing the following measures:

- Increase in government spending (public projects, large investment projects) (in order to create more jobs and increase the level of the available income).
- Reduction in the rates of interest (in order to enhance private investment, production and, therefore, increase employment).
- Implement training programs to assist the unemployed in acquiring specific professional skills that are necessary (or useful) in order to fill the existing job vacancies (reduction of structural unemployment).
- Update and adapt the educational system to the needs and requirements of the labor market, particularly those of the private sector. This can be achieved through the encouragement of entrepreneurship and innovation. The increase in the levels of entrepreneurship will have obvious social benefits, as it creates growth, jobs and additional income. Innovation, on the other hand, creates more jobs for young people and helps increasing the competitiveness of the economy (competitiveness being among the first most important weaknesses of Greece) [19].
- The recording and the systematic analysis of basic labor market figures is very important. This analysis can help in the deeper comprehension concerning the progress and the conditions of the domestic labor market. Moreover, it can be a source of reliable and structured reporting about the business environment and the general market conditions. All these analyses could be provided via the internet to the public, so anyone who is interested can use them [23].
- Finally, the appropriate public services that are responsible for the connection between the employees and the labor market need to be enhanced.

6 Conclusions

- Based on the results of the empirical research the majority of the respondents (young scientists between 22 an 30 years of age) were unemployed. Besides all, this is due to the fact that Greece is almost absent from the discussion (at both national and European level) about the transition of young people from higher education to the labor market.
Consequently, Greece does not have the official necessary quantitative and qualitative data that would facilitate the analysis of the complex relationship between the educational system and the labor market. Such an analysis would have lead to greater absorption of graduates of higher education to the labor market.

One of the main reasons that drive young people in search of work abroad is the fact that, until recently, much of the country’s educational system was up and running in order to supply the public sector with public employees. However, the public sector is no longer an important field of absorption or young graduates. Hence, the educational system should be updated in order to satisfy the needs of the private sector.

There must be a switch in the Greek economy concerning its main products and services. Greece needs to acquire a better position in the international competition, so as to productively utilize its human resources. This switch will help to smooth the gap between supply and demand in the labor market, and reduce the brain drain of young graduates [24].

The main measures that are proposed in order to fight the ‘brain drain’ phenomenon are: public and private investments, reduction in the rates of interest, training programs for the unemployed, update of the educational system, focus on entrepreneurship, innovation & competitiveness. 

References:


[23] University of Thessaly, 2008, *A study about the connection of higher education to the labor market through the promotion of entrepreneurship*, available on line at: http://goo.gl/8cK5F (in Greek).