A Greek brain drain?

Dimitris M. Perdikoulis

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This paper was prepared by our intern, Dimitris M. Perdikoulis, as part of his studies at the Amsterdam University College.

 Introduction

By now, the economic crisis in Greece is nearly over, but it has left behind a lot of challenges which will continue to trouble the country in the coming years. Apart from issues concerning unemployment, economic growth, tax evasion and austerity measures, it has been documented that a large number of Greek citizens have left the country from 2009 onwards. This is not necessarily problematic as it depends on the level of education of those who have left and for those who will be leaving in the near future. The aim of this paper is to analyse whether the crisis has increased the emigration of tertiary educated Greeks.

 To what extent therefore has the economic crisis in Europe produced a brain drain in the most affected countries? In order to make the scope of this paper feasible, Greece has been chosen as the primary case study mainly because of two reasons. Firstly, Greece was affected the most in comparison to all other European countries and secondly, there has not been much academic focus on this country in terms of the topic at hand. The hypothesis of this paper is that the economic crisis in Greece has led to high unemployment rates which have in turn forced many Greek citizens, who have obtained a tertiary education, to leave the country. This brings us to an important clarification which needs to be made. A brain drain is not calculated by the total emigration of citizens of a country but by the level of education of these citizens. This means that people with tertiary education are of interest because of their potential to improve the situation in their specialized field (in their home country). When these people leave, a gap is created which reduces the likelihood of progress in those sectors of society.

It is important to study the question at hand because of the potential repercussions of a possible brain drain. Although one might think that a severe economic crisis is the worst possible scenario, a brain drain exacerbates the situation because it negatively influences that country’s capacity to improve the damaged sectors during its recovery. Therefore, it is in the interest of the Greek government, to be aware of emigration rates, especially the level of education of those who leave, because it indicates the sector(s) that has been the most affected and disrupted. If a lot of scientists leave, the government might have to improve working conditions, salaries, etc. to keep hold of that particular workforce.

In order to study this question, I will mainly look at ‘The mutually reinforcing relation between international migration of highly educated labour force and economic crisis: the case of Greece’ by Lois Labrianids and Nikos Vogiatzis because it is the first attempt to depict the situation in Greece. I will then also look at ‘Highly skilled migration: What differentiates the ‘drains’ who are drained from those who return in the case of Greece?’ by the same two authors who further elaborate on their first study, ‘Austerity-led brain drain is killing Greek science’ by Varvara Trachana, and several news articles from BBC, BusinessWeek, Euronews and Spiegel as they have accurately documented the emigration of skilled Greeks. In addition to these sources, I will also use the OECD and World Bank databases for statistics which could help answer the question. It is important to keep in mind that there has not been much research on the emigration of Greeks who have obtained a tertiary education and therefore little has been published about a possible brain drain. This could be because the crisis is a pretty recent phenomenon but also because more people left during 2011-2012 and continue to leave which means that not all these statistics are available to scholars yet.

Why emigrate?

There are many reasons why people choose to emigrate but when it comes to people who have a tertiary education, the main reasons usually have to do with the government funding of their sector which affects the quality of their work and work environment, their future prospects and of course their salaries. In Greece for example, there have been tremendous cuts in scientific research which has and continues to drive away many of the well-educated scientists. Varvara Trachana, an assistant professor in cell biology at the University of Thessaly, has pinpointed several of these issues, “budgets for research institutes have been reduced by 30%. The 2013 education budget will cut funds by a further 14% and condemns Greece to scientific and educational dormancy” (2013, pg.1).

 First of all, the budget cuts in scientific research have resulted in complications concerning the access to scientific journals, “researchers lost access to the journal Bioinformatics… Many more publications are likely to disappear from Greek libraries. The Ministry of Education has not paid the bills for its subscription bundles” (ibid). Secondly, there have been significant wage cuts, “wages of researchers and faculty members have been reduced by 20%” (ibid). Therefore, scientists are facing issues which affect not only their work and their future but also their livelihood. According to the same source, 120.000 Greek scholars were living abroad in 2010, while the number is said to have increased by 30.000 people in 2013. Although this number might seem insignificant, it is important to be aware that this amounts to over 8-10% of the total number of Greek scholars.

 While the above is only an example of one specific sector, it is fair to say that similar problems have arisen in most of the other sectors in Greece, especially in education and in research. In short, these budget cuts make it increasingly difficult for scientists, students and researchers to do their job. Their salaries have also gone down dramatically, and the quality of their work environment has also worsened (no heating, no electricity etc.). It therefore makes sense that many of them have either left, or are contemplating whether to leave. As mentioned earlier, this is a serious issue because Greece cannot afford to continue to lose its scientists, students or researchers. The question though is whether the crisis has led to the increase in the emigration of Greeks with a tertiary education?

Evidence

According to Labrianids and Vogiatzis, brain drain is defined as “the migration, usually from less developed countries to developed ones, of people endowed with a high level of human capital” (2013a, pg. 538). Although a lot of attention is being given to the possibility of a brain drain in Greece, it is important to be aware that a similar exodus of highly educated people has taken place in several periods of Modern Greek history. According to Labrianidis and Vogiatzis, World War II, the Greek civil war, and the period under the military junta between 1967 and 1974 are recent examples. Today, though, the implications might be of higher importance due to the severity of the situation in the country which has come about because of the economic crisis. Labrianidis and Vogiatzis begin by pointing out that there has been a huge increase in ‘completed CVs’ since 2010, “while approximately 1,000,000 Europass CVs were completed … during the period 2005-2010, this number reached 60,000 in 2011 and 95,000 in 2012” (2013a, pg.539). Moreover, they noticed that there has been an increase in the % of Europass CVs completed in Greece. In 2008-2009 there was a 44.6% increase, while in 2011-2012 there was a 70.2% increase.

Although this does not mean that 155.000 Greeks have left in those two years, it does mean that they are seriously considering going abroad. As mentioned above, there has been little research and little data on emigration rates of people with tertiary education and so Labrianidis and Vogiatzis conducted a study which would help disclose more information on the possibility of a brain drain in the country. Their study contained responses from 2,700 graduates (completed tertiary education) who had already left Greece by the time the study was being conducted (2009-2010). This indicates that people were already leaving Greece at the initial stages of the crisis. The majority of these graduates were contacted randomly by e-mail, while the e-mails were then forwarded to other graduates (snowball effect). Those who took part in the survey had to fill in a questionnaire which was formulated by the two authors. Although there are numerous findings, not all of them contribute to the scope of this paper and so these details have been omitted.

According to this study, around 54% of the total sample size had a PhD while approximately 37% had a master’s Degree. Moreover, 42% left the country once they obtained their bachelor degree, while the majority of those who took part in the study (65.7%) emigrated from Greece between the ages of 24-29. The rest (34.3%), left when they were between the ages of 18 and 23. This is interesting to see and will be discussed later on. The most valuable contribution of their study though has to do with table 3, ‘motives to work abroad’. Graduates “were asked to evaluate 12 predefined reasons in terms of their importance, while the opportunity to report any additional reasons that might be of crucial importance was also possible”(2013a, pg.541). The most cited reason was ‘better career prospects’ (74.8%), while the second and third most important motives were ‘interesting job in the field of my expertise’ (70.5%) and the ‘effort to upgrade/update my knowledge in the field of my expertise’ (60.8%).

Although the findings mentioned so far do not disclose much in relation to the crisis in Greece, the following numbers do. About 52% went abroad to ‘obtain a satisfactory income’ whereas the same percentage indicated that they were ‘unable to find a job in Greece relevant to the level of their studies’. Moreover, 40.3% were ‘unable to find a job in their field of expertise in Greece’ while 33.9% left because of the ‘lack of meritocracy and high corruption rates in Greece’. Even though some of these numbers might be surprising, especially concerning the motivation to move abroad for a higher income (only 52%), Labrianidis and Vogiatzis argue that the timing of their study could be affecting these results, “it should be clearly mentioned here again that the survey was carried out in 2009-2010, during a period that the financial crisis’ impacts were not that severe compared to the current situation” (2013a, pg.542). It is also important to keep in mind that we cannot generalize these findings to all those who have left the country because the authors have explained that their methods of gathering respondents (snowball effect), does not permit them to generalize their findings (pg.540). Rather, these findings are being presented in order to shed light on the mind-set of those who have already left the country.

In addition to the findings presented so far, Labrianids and Vogiatzis have provided a comparison of the annual earnings in Greece and abroad. About half of the Greeks who hold a master’s degree and live abroad earn between €25,000 and €60,000 while about 42.2% earn over €60,000. In Greece, half of those who hold a master’s degree earn below €25,000 while only 25% earn over €60,000. For PhD’s, the numbers show a similar pattern. Only 5% of those who remain abroad earn less than €25,000 while over 36% earn below €25,000 in Greece. In the upper scale of earnings, 52% of those who live abroad earn over €60,000 while only 11% of Greeks earn over €60,000 in Greece.

At this point we will look at table 5, which contains ‘motives that could lead these graduates to return’. I believe that it is important to also look at the terms on which these graduates will return because although their departure damages the rate of recovery in the short term, their permanent departure has even greater ramifications. The same 2,700 respondents “were asked to evaluate seven different factors, while they were encouraged to report any additional factors that might lead them to return” (2013a, pg. 543). 63.8% of the total sample felt that the most important thing was to ‘find a job in Greece relevant to their qualifications’. 58.6% believed that only ‘if their annual earnings in Greece were equally satisfactory’ would they return. 38.6% would return ‘if they recognized crucial ongoing change in Greece’ while 36.8% would return if there was ‘meritocracy, if corruption was being fought and if there were changes regarding bureaucracy and the Greek mentality’. Finally, 29.6% ‘would not return’.

Seeing that unemployment is a major issue in this discourse, it is necessary to look at the rates of unemployment in Greece. In 2009, there was only 9.5% unemployment in Greece according to the World Bank database. By 2010, this number had risen by 3%. This number then sharply rose to 17.7% in 2011 while in 2012 it had reached 24%. Nearly a quarter of the total labour force was unemployed at that point. For youth (15-24), the numbers are even more staggering. In 2009, nearly 26% of youth were unemployed. By 2010 it had reached 32.5% while in 2011 it was up at 43.9%. In 2012 it had touched record levels of 54.8%. In 2013, the number rose by nearly 10% according to, ‘Greece’s young: Dreams on hold as fight for job looms’ a BBC news article. With these statistics, it is fair to say that unemployment has been the main cause which has propelled many Greek professionals away from Greece. Although the total number of Greek emigrants has been estimated at over 100.000, the number could actually be higher. Nevertheless, even if it is 100.000, it is significant enough to constitute a brain drain because this number refers to professionals. According to a Euronews article titled ‘The Greek Brain Drain’, over one million people have left the country since 2010-2011. Although this number does not include only Greeks with tertiary education, the number is staggering and indicates the seriousness of the problem at hand.

Two clarifications are due at this stage. First of all, I define professionals as people who have obtained a tertiary education and who have worked and therefore gained experience in their field for at least one year. The second clarification has more to do with the unemployment rates presented above. What were unemployment rates before the crisis? Did Greece struggle to keep unemployment rates down even before the crisis? According to the World Bank database, the rate of unemployment in Greece in 2004 was 10.5%, in 2005 it was 9.8%. In 2006, 8.9% of the total labour force was unemployed. In 2007, the number was at 8.3% and in 2009 it began increasing again. Could we say that Greece had issues with unemployment since 2004, but the crisis exacerbated the problem which led to the number doubling in eight years? Well, we could make that claim but 10% unemployment is acceptable as opposed to the 24% in 2009. In fact Greece has maintained an average of 10% unemployment since 1994. So Greece did not have high unemployment rates before the start of the crisis. If we look at the numbers for youth unemployment we see a similar pattern. Since 1994 to 2009, approximately 25-30% of youth were unemployed while the number doubled during 2010-2013. Although the rate from 1994 to 2009 is still considered high, it is nowhere near the current rate which means that we can in fact argue that unemployment rates became a serious issue which threatened to drive Greeks out only after the start of the crisis (2008-2009).

 Unfortunately, although the World Bank has a database on the emigration rate of tertiary educated citizens, it has no data for Greece except for the year 2000, in which 12.2% of all Greeks with a tertiary education had left the country. According to DataMarket[[1]](#footnote-1), this number is reaffirmed although this database also has no other data for Greece other than a % for 1990. According to them, 15.6% of all Greeks with a tertiary education had left the country in 1990. When looking at the World Bank database for ‘unemployment with tertiary education’ (% of total unemployment), we only find statistics for 2004 to 2008. In 2004, 18.8% of people unemployed had a tertiary education. We notice that the number rises slowly each year and in 2008 it had reached 22.4%. This is not a significant increase but it could be an indicator. There are no statistics however for 2009 to 2013 in terms of the percentage of people with a tertiary education who were unemployed, so we cannot prove the increase.

Lastly, it is interesting to look at the total emigration rate of highly educated Greeks according to OECD data. In 2000[[2]](#footnote-2), 713.000 Greeks were living abroad. 15.2% of this number was tertiary educated. In 2010-2011[[3]](#footnote-3), the emigrant population was 655.000, of which 143.000 were highly educated (21.8% of the emigrant population). This does indicate an increase in the number of highly educated Greeks who have emigrated but there is no data between 2000 and 2011 and no data for 2012-2013, so again, we cannot draw solid conclusions.

The following section will discuss the implications of all the findings presented so far. Certain important points can be deduced from the ‘motives to move abroad’, from the ‘comparison in annual earnings in Greece and abroad’ and from the ‘motives that would enable these graduates to return’.

Implications

As mentioned earlier in the paper, a brain drain has short term but also long term implications. When people with a tertiary education leave, they reduce the capacity of their sector to recover because they take away with them their human capital. This capital cannot be replaced quickly enough which means that the sector will continue to suffer for some time. In the case of the scientists discussed at the beginning, Greek science has fallen behind tremendously which has repercussions on the medical sector as well. A spiral then forms because the crisis forces professionals to leave which makes it hard for a country to recover from that crisis, which then forces more professionals to leave, “an important share of these individuals is likely to seek employment through migration in the near future…the country will suffer from a vicious cycle of underdevelopment, since it loses the most dynamic elements that could assists its developmental prospects” (Labrianidis and Vogiatzis, 2013a, pg.544).

Having said this, the situation will probably not worsen seeing that the country is slowly moving out of recession but certain aspects mentioned above are unlikely to change which means that the likelihood that Greek emigrants will return is improbable. Corruption, lack of meritocracy and the problematic Greek mentality needs to be improved if Greek professionals are to return. The good thing is that the problem is clear. By improving the above, many Greeks will not even leave. So, although unemployment was and continues to be high, there are other issues which are forcing Greeks to leave. These issues are not new, but became exacerbated by the crisis.

In short, the government must learn to appreciate and to use the human capital it has. Most of the graduates who hold degrees, and have done well in their studies often end up doing below par jobs in Greece just so that they can earn some money. If nothing changes, students will continue to leave, and will probably not return. Many of those who were interviewed by the study conducted by Labrianidis and Vogiatzis mentioned that they would return if their job, salary and working conditions were as satisfactory as they are abroad. This means that Greece must not only work hard to improve everything it offers to its professionals, but must match the organization, infrastructure and funding of fully developed countries. This is obviously not going to be an easy task but many Greek professionals are willing to return even if they notice smaller changes. Finally, it is interesting to look back at one piece of data mentioned earlier which has thought-provoking implications. 35% of the 2,700 graduates who were interviewed, left the country even before their undergraduate studies, which means that Greece might also suffer from high emigration of citizens with secondary education. This is a big problem because many of those who leave are unlikely to return according to a second more in depth study conducted by Labrianidis and Vogiatzis that looks at the likelihood that Greek emigrants will return, “it is not reasonable to expect that significant proportion of the Greek expatriates are likely to return, especially nowadays when the current economic crisis has revealed and magnified the structural deficiencies of the Greek economy and society” (2013b, pg.483)

Limitations

Although there are a lot of news articles which discuss the existence and severity of a brain drain in Greece, there are several limitations. These limitations also apply to the study analysed in this paper. First of all, the total number of Greeks with tertiary education who have emigrated is uncertain. Although there is a lot of speculation, there is no concrete number for the period 2008 - 2013. Second of all, the sample size and the methods to obtain the sample in the main study discussed in this paper do not permit the generalization of the findings. In addition to these points, the survey targeted students who had already left. It would be interesting to see what students in Greece have to say. Furthermore, the survey was conducted in 2009-2010. As we saw above, unemployment rates were not as high in 2009 as they were in 2012, so, as Labrianidis and Vogiatzis suggest “it would be extremely interesting to repeat the survey after 2012, in order to compare the results” (2013, pg.542). This is not to say that the two studies presented in this paper are not of value. Quite on the contrary, these two studies made the first attempts to look at the impact of the economic crisis on Greek graduate emigration rates.

Furthermore, several gaps in the databases of numerous institutions such as the World Bank and the OECD have been uncovered. Often times, there is no data for certain years which means that accurate conclusions cannot be drawn. Nevertheless, this paper has shed light on the importance of more research on the issue at hand. This is vital if there are to be substantial policy changes in the near future.

Conclusion

In conclusion, this paper has brought to the forefront some important findings. It is clear that a large number of Greek professionals have left the country between 2008 and 2012. This is mainly because of the economic crisis which resulted in, very high unemployment rates and budget cuts in various sectors of research and education. Having said this, there are other factors which have been around for a long time and have worsened over the years. These include high rates of corruption, lack of meritocracy, under appreciation of human capital and the problematic Greek mentality when it comes to reforming areas which need to be drastically improved.

Although the crisis worsened the situation in Greece, many graduates struggled to find work even before the crisis. Those who managed to find work were underpaid which means that Greece needed reform even before the crisis hit although it is fair to say that the crisis has heightened the sense of urgency in the country and this will hopefully force it to reform. Moreover, it was found that a significant number of people left even before their undergraduate studies. Since the majority of people are unlikely to return once they go abroad, youth emigration is another problem which needs to be addressed. In conclusion, we can say that according to the data available there is a brain drain in Greece, although it is hard to accurately assess the severity of this and whether it will worsen in the coming years. What is certain though is that the Greek government and Greek society must work hard to abolish corruption and improve meritocracy. Furthermore, the government must learn to use and appreciate the human capital it has in order to prevent further crises. Last but certainly not least, scholars must make an effort to conduct studies like the ones presented in this paper in order to help the policy making process. Before policy can be made, the severity of the brain drain must be completely and accurately assessed. This will then allow more research on the kinds of policies that would need to be implemented in order to bring about the necessary change.

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