The aim of this article is to identify whether Romania is facing the brain waste in the medical sector. Romania is producing the highest number of medical graduates compared to the main destination countries for Romanian physicians. However, it faces critical shortages in terms of health professionals. What happens with these medical graduates? Two options are possible: either they exit the medical system or they emigrate. Medical doctors accepting locum doctors positions in United Kingdom or general practitioner positions in the rural areas in France although they have a specialty in the origin country are examples of brain waste. In most of the cases, these positions are refused by natives. If the brain drain has negative consequences on the origin country, brain waste affects both the country and the individual.
1. Introduction
Brain drain was mainly associated with the negative impact in the origin country, while brain waste has a double negative effect: both on the origin and destination country.

This article aims to identify whether Romania is facing the brain waste in the medical sector. The article contains three sections. In the first one, a brief literature review on the two concepts (brain drain and brain waste) is presented. In section two, we discuss the situation in the medical sector in Romania. Section three concludes.

2. Brain drain versus brain waste
Brain drain is perceived as a negative phenomenon, involving the departure of the highly skilled workers. Use of word „brain pertains to any skill/competency or any quality that is considered as a possible asset. „Drain involves greater exit than normal or desired. Connecting the two entails the departure of talented people at an increasing rate” (Bushnell and Choy, 2001).

The terminology related to this concept developed during time. Some positive concepts include brain circulation, brain gain, brain return or brain networking.

Brain waste occurs when the highly-skilled migrants accept, in the host country, a form of employment which is not adequate to their level of education and experience (Salt, 1997:5). The massive migration of the highly-skilled workers from Eastern Europe and the former Soviet Union after the falling down of the Berlin wall, who accepted a job that doesn’t match their education level in the host countries exemplify the brain waste (Brandi, 2001:3).

Both brain drain and brain waste have negative consequences on the origin country. Brain drain involves an inverse technology transfer (Boussaid, 1998), leading to a human capital loss for the country of origin and to a human capital gain for the country of destination (Hunger, 2003). The leaving of skilled individuals is considered costly for the sending country due to loss of investments in education, high fiscal costs and labor market distortions (Commander et al., 2004). Sending country is not always synonym with poor or developing country, as the brain drain can also occur between two developed nations – (the migration flows of highly-skill from United Kingdom to USA or the brain exchange between West European countries).

The new economics of brain drain emphasized a new approach: sending countries can enjoy a brain gain, through brain return, brain networking, remittances or „beneficial brain drain” (Docquier and Rapoport, 2011, Brozozowsky, 2008). In the late 1990’s, a shift from a closed process, with a one-way flow of expertise to a circular process, involving a bilateral flow occurred (Hunger, 2003, Salt, 1997).

If brain drain is associated with a negative effect in the sending country, brain waste has a double negative effect, as neither receiving country nor the origin country do not benefit from the investments made in training these skill workforce. It is an example of market failure, for origin country, which is unable to offer to their highly-educated people a sufficient number of professionally satisfying posts (Gaillard and Gaillard, 1997), and/or the destination countries, incapable to absorb the skilled labor.

3. Romania’s medical sector
In Romania, the emigration of the medical doctors was observed after the fall of the communist regime. Emigration flows intensified after Romania’s accession to the European Union, Romania becoming one of the main exporters of medical doctors in Europe.

There are two important aspects that need to be taken into account. First of all, we stress the following statement: „Drain involves greater exit than normal or desired”. One can conclude that, to some point, the emigration of the highly skilled is a normal process, as they have the right to live and work in that country that offers them the best value for their skills and competences. The brain drain is a consequence of the globalization process and, in the particular case of European Union, of the free movement of people principle.

Medical brain drain became a growing concern at global level, due to the increased flows and to the negative consequences of this phenomenon, both at economic and social level.

However, the literature in this field does not offer a specific definition for this „normal or desired”. Some studies (Wismar et al., 2011) concluded that a country is confronting with the brain drain in the medical sector if the emigration rate is higher than 2% of the total number of practicing medical doctors. Other studies (Defoort, 2008, in Beine et al., 2011) identified an „optimal brain drain” rate of 9% in the case of several African countries. As it can be observed even from these two examples, there is no consensus regarding the “greater exit than normal or desired”.

The “WHO Global Code of Practice on the International Recruitment of Health Personal” stipulates that countries that are voluntary adopting this Code should not recruit health professionals from the countries affected by the brain drain phenomenon in the medical sector. However, the Code does not offer a clear approach of the emigration of the health professionals: when it should be considered brain drain and when a “normal exit”.

Secondly, the brain drain implies the permanent migration of the medical doctors. At the opposite
side, brain circulation can have as a positive consequence the brain return. In the absence of some accurate evidence regarding the return migration, one cannot conclude whether the emigration of the medical doctors should be included in the brain drain or brain return category. Statistics regarding the permanent migration of the Romanian medical doctors reveal an average number of 280 medical doctors who changed their permanent address, between 1997 and 2012 (INS). The absolute emigration rate is below 1% of the total number of practicing physicians. This situation seems to be a “normal” one. However, statistics regarding the intention to emigrate reveal a worrying situation: between 2008 and 2013, a number of 13872 medical doctors intended to leave the country. Intention is a predictor but does not equal the emigration. The statistics collected from the main destination countries, regarding the number of Romanian medical doctors registered confirm that Romania is confronting with a “greater exit than normal”. There is no evidence regarding the return migration or, at least, the return intention. The phenomenon is quite a new one, as well as the research in this area. In an optimistic scenario, some of the young medical doctors that left will return sometime and will constitute a brain gain for Romania. In a pessimistic scenario, the change of residence is just a matter of time.

Brain waste in the medical sector involves two situations: the medical graduates deciding to work for medical equipment or pharmaceutical corporations as sales agents and the medical doctors accepting an inferior position in the medical system. The case of medical graduates accepting jobs in pharma industry is not an isolate one. The motivation is simple: the salaries offered are by far higher than in the medical sector. The second situation includes the medical doctors working abroad as nurses - this situation is specific to Italy, although not so many medical doctors are included in this category – or on other inferior positions. Two examples are the cases of the Romanian medical doctors emigrating to France and Great Britain.

A significant number of Romanian medical doctors accept positions of general practitioners in the rural areas of France, even though in some cases they have a specialty obtained in Romania. French medical doctors avoid these positions.

The case of locum doctors or temporary health care positions in Great Britain is another example. The offer of the recruiting agencies for this destination consists mostly of these opportunities. Replacing another doctor who is on annual, medical or maternity leave is the easiest way for a Romanian medical doctor to enter the medical system in Great Britain. Another possibility is to start the medical training from the beginning, in this case to enter the medical system with the Foundation Programme (House Officer or Senior House Officer). After completing two years, the medical doctor can enter the Specialty Training. Some Romanian medical doctors gave up the specialty they started or finished in Romania and emigrate to Great Britain. Both in the case of France and Great Britain, Romanian medical doctors accept “second hand” positions, refused by the French or British doctors. The gap in terms of health care systems (infrastructure, working conditions, salaries, career and post-basic medical specialization, respect for the medical profession) instigates the Romanian medical doctors to emigrate. Between working as a specialist in Romania and accepting an inferior position abroad, the medical doctors will choose the latter. The reason behind this decision is exactly the gap between the health systems in Romania and destination countries.

Another interesting aspect is the number of medical graduates Romania is producing. An analysis of the indicator number of medical graduates per 100 000 population reveals that, among the main destination countries of Romanian physicians, Romania registers the highest values (WHO, Health for All Database). On the other hand, Romania is facing critical health professionals’ shortages, especially in the rural areas and in the North-East region. Some hospital are closing down due to the lack of medical doctors. What happens to the medical graduates or junior physicians? The answer is simple: either they emigrate or they get out of the medical system. Both situations are detrimental for Romania.

4. Conclusion and implications

Brain drain in the health sector is defined as the permanent migration of the health professionals. Statistics on permanent migration in Romania reveal rather a “normal exit”. However, data regarding the intention to emigrate and statistics on the number of Romanian medical doctors registered in the main destination countries emphasize a worrying situation. One cannot conclude whether these medical doctors can be included in the brain drain or brain circulation category. At this moment, only some scenarios could be drawn, due to the lack of evidence regarding the return migration. A first conclusion is that the change of residence is not a good indicator for the emigration of the medical doctors.

On the other hand, the critical physician shortages in Romania is facing confirms that the “exit is greater than normal or desired”.

Brain waste in Romania’s medical system is another phenomenon. In this case, the conclusions are not consistent with the literature: brain waste is detrimental for Romania, due to the lost in the education, but clearly beneficial for the destination countries, which are filling the gaps in their
systems with Romanian medical doctors. Moreover, the brain waste is also detrimental to the individual, accepting a position in the destination country refused by the natives. The situation of the medical doctors is an atypical one. It represents a scarce resource everywhere, mainly due to the long commitment (the education and training process takes between nine and twelve years). Medical doctors will always be “head hunted” by richer states. In some cases, these states are producing, on purpose, less medical graduates they need because they know they can fill the gaps in the health systems with medical workforce recruited from abroad.

The “WHO Global Code of Practice on the International Recruitment of Health Personal” is an initiative which was meant to deal with the medical brain drain. However, it seems it is not successful in solving the brain drain issue. First and foremost, it does not stipulate the criteria for including the emigration of medical doctors in the brain drain category. Secondly, it is a voluntary code.

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References