# Academic Mobility: Economic, Social, and Cultural Challenges

**Rarița MIHAIL**[1]

**Abstract**
The development of a knowledge-based society, the liberalization of trade, and the increase in foreign direct investment have led to the internationalization of research and development activities and the enhanced mobility of human resources in the fields of science and technology. Globally, there is unprecedented competition for talent, making it a vital strategy for advanced economies and a major aspect of globalization. On one hand, the specialized literature discusses academic mobility not as an end in itself but as a means to contribute to the training of students, intellectuals, (future) researchers, teachers, directors, and the global citizens of tomorrow. On the other hand, the emigration of researchers and higher education staff is seen as a complex phenomenon, part of the brain drain, which must consider global developments. The purpose of this article is to demonstrate that the significance of the brain drain concept must be understood through the complementarity of various aspects it encompasses, including: the emigration of individuals with higher education; a significant number of highly qualified emigrants; emigration from developing or underdeveloped countries to developed countries; the effects of the emigration of specialists on both the source and destination countries; the international mobility of students, researchers, experts, and other professionals; the positive effects generated by return migration (investments, trade, technology, human capital); the low level of remittances; the direct impact on the source country, especially in professions with a significant social impact, such as doctors, teachers, and researchers. Thus, the phenomenon of highly skilled personnel emigration must be addressed within the context of global talent competition and policies to encourage the international mobility of researchers.

**Keywords**: *Human capital; brain drain; brain circulation; brain return; talent attraction;*

## 1. Introduction

The emigration of highly skilled labor has become a subject of interest in the academic world, given that the development of a knowledge-based economy as a production factor has led countries to attract highly skilled labor (Lowell, 2006). The Royal Society of London first used the term brain drain in a 1963 report referring to the migration of British intellectuals to the United States and Canada (Gaillard & Gaillard, 1997). Subsequently, a new concept, brain circulation, was introduced (Johnson & Regets, 1998), which includes movements for education, working in the country of study completion, and later returning to the country of origin with at least the same social status as before. Recently, the general definition of brain drain has evolved. Today, the term brain drain indicates the mobility of students, academic

[1] Associate Professor, "Dunărea de Jos" University of Galati, Romania, rarita.mihail@ugal.ro.

***The Annals of Dunărea de Jos University of Galați*, Fasc. XX, Sociology, no. 19, 2024, pp. 23-32.**

researchers, and highly skilled workers, according to the common definition of the permanent emigration of qualified individuals from one country to another. Two conditions are necessary for us to discuss a brain drain. Firstly, there must be a significant loss of the population with higher education. Secondly, there must follow harmful economic consequences (Lowell, 2003).

Many reports highlight the benefits of brain drain for source countries, emphasizing the advantages of remittances and skills acquired abroad. At the same time, they argue that the negative effects are difficult to observe while lamenting the loss of local talent. Usually, the countries of origin are the ones losing out, as they lose human resources for which they have invested significantly in education (Wickramasekara). The brain drain process can also be analyzed from the perspective of the elements that contributed to the formation of high-quality human capital. The emigrating specialist has invested as an individual agent, while the state, as the provider of public funds for their training, aims to recover this investment. While the specialist has the opportunity to recoup their personal effort and investments through emigration, the originating state suffers a loss on its investment.

High-skilled migration is becoming the dominant model of international migration and a significant aspect of globalization. Differences and inequalities in both earnings and living standards generate and maintain the brain drain phenomenon at a high level (Lutz et al., 2019). The departure of highly skilled workers from the country of origin might bring certain benefits, such as remittances for the country of origin; however, the negative consequences, particularly on the economy of the country of origin, are undeniable.

## 2. Globalization and the Stakes of Brain Drain

The phenomenon of the "massive brain drain" (Rusu, 2002, p. 493) is on an upward curve. The new knowledge economy and its challenges will intensify this process. Globalization as an opportunity for the educated. Leif Edvinsson, a pioneer in theories revising the treatment of intellectual capital in market economy-based societies, emphasizes that the "war for talent" is imminent. The lack of highly skilled individuals at the necessary levels represents an extremely severe demographic problem, especially in Europe (Rusu, 2002). Socially, the brain drain "disrupts" society because, without innovation, technical, and scientific research, a society is doomed to extinction. In other words, a society that no longer knows how to create, invent, and innovate is one that risks disappearing in the near future.

The significance of the brain drain concept must be understood from the perspective of the complementarity of various aspects it entails, such as: the emigration of individuals with higher education; a large number of highly qualified emigrants; emigration from developing or underdeveloped countries to developed ones; the effects of this migration on both the country of origin and the destination country; the positive effects generated by return migration (investments, trade, technology, human capital); a low level of remittances; the direct impact on the country of origin, particularly in professions with a significant social impact (e.g., doctors, teachers, researchers). The concept of brain return (the return migration of

highly qualified individuals) is an inherent part of the debate on the brain drain phenomenon. In a significant study by Glaser (1978) analyzing the brain return phenomenon, it is shown that the commitment to returning to the country of origin is very strong among highly qualified individuals working and studying abroad. While many planned to stay abroad longer than initially intended, they eventually returned to their home country (Glaser, 1978).

In these circumstances, it is evident that the brain drain phenomenon affects both the country of origin and the destination country. Therefore, the brain drain concept should no longer be viewed in absolute terms—as a process where one country loses while another gains. On one hand, the migratory behavior of highly skilled individuals allows them to select their destination countries, while on the other, easy communication with professional networks facilitates the transfer of capital and information. Furthermore, communication with family and friends enables the transfer of habits, practices, and new information from the destination country to the country of origin, creating a learning and socialization process with the destination country (Prelipceanu, 2008).

While the consequences of healthcare worker migration have been widely discussed in the specialized literature, the consequences of education specialist migration have been less studied. In this regard, Kapur and McHale (2005) argue that, over time, emigration in this area could lead to a decline in the quality of human capital. Indeed, in the education sector, the long-term issues and consequences appear worrying. When a labor market is no longer confined within national borders, university professors from some developing countries are willing to work in secondary schools in developed countries or take up any other profession, as long as it allows them to emigrate. When developed countries select talent, a vicious circle emerges in which individuals from the upper end of the human capital distribution emigrate, leaving behind less qualified people. This prompts other top individuals to consider emigrating, while simultaneously discouraging those who had previously emigrated from returning, ensuring that mediocrity becomes entrenched in institutions (Kapur & McHale, 2005).

Recent studies introduce the idea that brain drain is counterbalanced by other types of gains for the country of origin. While traditional literature viewed brain drain as a curse for developing countries, postmodern literature considers it a benefit leading to gains (Stănică, 2011, p. 353). Analyzing the benefits for the country of origin involves several aspects, including: the mobility of citizens beyond national borders should not be seen as a threat to origin countries; migrants can be a source of social, financial, cultural, and political capital; migration can be viewed as a grassroots transformation process initiated by migrants for their families and friends; migration promotes convergence to a system of values supported by European countries, rather than something imposed by the origin state (Dufoix & Diminescu, 2006). Additionally, migration can have positive reverse effects, such as trade networks (Rauch & Trindade, 2002), professional networks created by specialists (e.g., doctors, researchers, IT professionals), and scientific networks (Boncea, 2013), also called

brain networks. These networks involve remote professional collaborations and represent another positive aspect of brain drain.

The benefits arise from the use, application, or transfer of the experience, educational, professional, and human capital, as well as the economic capital acquired by highly skilled workers in another country, back to their country of origin. However, for return migration to occur, returning migrants must have real opportunities to achieve better social status and career prospects. If such opportunities emerge in their home country, the tendency is to return; if not, they seek another destination (Prelipceanu, 2008). Simultaneously, research indicates that return migration is conditioned by technological progress in the country of origin, allowing the application of knowledge in an appropriate infrastructure. In the absence of suitable conditions for work, facilities, or desired living standards, professionals prefer remote collaborations and professional networks to physical return (Boncea, 2013).

Human capital migration is driven by various factors, including economic, political, social (conflicts), or environmental (degradation). Attraction factors include a welcoming economic environment ready to absorb highly skilled labor, especially in sectors experiencing shortages relative to demand. Mahroum (2005) identifies specific push factors favoring students' and highly skilled workers' decisions to emigrate: structural and technical issues. Structural issues are linked to a country's culture and are more challenging to change, while technical issues depend on the state and can be more easily adjusted, such as immigration rules, taxation, research policies, and the recognition of professional qualifications. It appears that young graduates' intentions to seek work abroad are mainly driven by their home countries' inability to adequately meet their professional and personal development needs and expectations.

Analyzing the primary reasons for emigration among students, educators, and scientists highlights the relevance of attraction factors such as: the desire to study at internationally renowned universities; greater opportunities in the labor market; the wish to achieve higher social status; dissatisfaction with governance in the country of origin; technical facilities in host universities; the quality of teachers; the applicability of acquired knowledge; the quality of courses; professional opportunities after completing studies; evaluation systems for knowledge; freedom; experiencing a new culture; social and cultural life.

The choice of destination country depends on several factors. One such factor is the geography of mobility, such as bilateral agreements between the countries of destination and origin. The selection of certain countries is also influenced by soft power, a concept relevant to student migration and other highly skilled individuals. Another influencing factor is the existence of informal networks of acquaintances and friends.

Students and highly skilled professionals from developing countries are often drawn by more attractive career opportunities abroad, where they can access advanced resources and more favorable working environments. This phenomenon

leads to a loss of qualified talent for the countries of origin, potentially negatively impacting their human capital, innovation capacity, and economic development potential.

## 3. The Mobility of Students and Academic Staff - Some Critical Reflections

In modern society, the mobility of young people and professionals with higher education is relatively high. Such mobility is seen as positive only if it is circular mobility—meaning that individuals with high professional capacities intend to return to their country of origin at some point. From this perspective, return migration represents the ideal for origin countries. This type of migration, known as brain circulation, involves acquiring education/knowledge abroad and subsequently securing employment in the country of origin (Mahroum, 2000). Brain circulation is considered a positive form of mobility, involving scientists, researchers, and other highly skilled professionals who move within or outside various geographical regions, thereby facilitating the dissemination of knowledge. Johnson and Regets (1998) believe that this type of migration will grow in significance in the future, particularly if economic disparities between countries continue to diminish.

Regarding study mobility programs (e.g., Erasmus+) or international cultural exchange programs (e.g., Work & Travel USA), these cannot be interpreted as a form of brain drain or loss of highly qualified individuals from certain countries. Specifically, the Erasmus+ program aims to stimulate student mobility by providing a study experience at foreign universities, while the Work & Travel USA program gives students the opportunity to work in the U.S. for a limited period. Compared to the Erasmus+ program, which focuses on study and cultural exchange opportunities, the Work & Travel USA program emphasizes work opportunities or intercultural experiences. Erasmus+ allows students to benefit from a study period at universities worldwide within this global community, while Work & Travel USA enables them to work for a short time, usually during the summer, for up to four months (Work & Travel USA).

The purpose of these programs is to raise awareness of academic opportunities and cultural differences in other parts of the world, providing students with new life experiences to broaden their minds and perspectives. These programs have clear benefits for students, regardless of their impact on the country of origin, while also committing to sending students back to their home countries. The European Commission's Education, Audiovisual and Culture Executive Agency (EACEA) refers to the Erasmus Mundus program, stating that all participating institutions commit not to engage in activities that could encourage brain drain, such as offering jobs or additional study opportunities at the host university (EACEA, 2007). This type of student study mobility also increases the prospects for relocation and workforce mobility after graduation. Additionally, participating in such mobility programs can play an important role in developing cultural characteristics such as tolerance and acceptance, traits that play a "causal role in social development processes" (Dan, 2017, p. 119). However, it cannot be definitively stated that there is

a correlation between acquiring specific competencies needed in the labor market and higher employment opportunities after graduation.

The situation is different regarding the race to attract talent since foreign graduate students are sometimes encouraged to remain in the countries where they studied, becoming an instrument in international competition. Two main channels allow foreign students to serve as a fertile ground for talent: permitting them to work during their studies and enabling status changes after graduation (Chaloff & Lemaitre, 2009).

The emigration of researchers and higher education staff can be considered a complex phenomenon that must account for global developments. The development of a knowledge-based society, the liberalization of trade, and the increase in foreign direct investment have led to the internationalization of research and development activities and enhanced mobility of human resources in science and technology. Globally, there is unprecedented competition for talent, making it a vital strategy for advanced economies. These economies have strengthened their innovation capacities and capitalized on the advantages of knowledge transfer through the scientific contributions of highly qualified international personnel in research and development. Specialized literature highlights that researcher emigration results in both a loss of added value for the countries of origin and benefits such as remittances or the added value they create if they maintain scientific connections with their country of origin or decide to return (OECD, 2008).

From a social perspective, studies have shown that family connections outside the country of origin do not have a significant influence on finding employment in a field for highly skilled workers. The importance of family ties is relatively low in the case of brain drain compared to economic migration, where migrants often follow family beaten paths to their destination countries (Stahl, 1993). Thus, in the migratory trajectory of any migrant, two types of ties/networks have been identified: strong ties and weak ties (Petroff, 2016). Strong ties include family and friends, while weak ties include associates, coworkers, and acquaintances in the field. For highly skilled workers, strong ties are rarely, if ever, used. In contrast, weak ties are often vital to the professional trajectory of highly skilled workers. In these circumstances, some transfer of scientific knowledge occurs in joint projects with specialists remaining in the country of origin due to informal connections, such as friendships or relationships with former colleagues. However, this transfer is typically modest. Generally, reverse technology transfer levels are among the lowest, occurring primarily in areas of decreasing interest to developed countries, such as polluting industries with high raw material and energy consumption but low labor costs.

In the specialized literature, it is noted that students often choose to emigrate to pursue higher education abroad, aspiring to an international career (Ferro, 2004). For many students studying abroad, higher education represents an opportunity to access the labor market in their destination country. Therefore, while pursuing studies abroad might appear to be the primary motive, the real reason is often the

pursuit of better living standards and satisfactory employment opportunities (Ferro, 2004), as well as acquiring foreign cultural capital that facilitates integration into various cultural economies. Studying abroad does not solely direct students toward academic or research-development-innovation sectors and research institutes. A significant portion of students are absorbed into the labor market, joining industries and local or national companies.

Through their studies, Meyer and Hernandez (2004) underline that two-thirds of expert personnel in research and development worldwide entered their destination country as students. Moreover, the experience of being a foreign student significantly increases the chances of becoming a highly skilled migrant later. Furthermore, the networks developed by students provide numerous opportunities for future students from their countries of origin. However, it should be noted that scientists have always maintained international contacts, which have been a standard part of scientific life and a long-standing norm among researchers (Mahroum, 2000).

The principle of free movement within the European Union and the prohibition of discrimination based on nationality imply the right of all European citizens to be treated in another member state as if they were not foreigners there (Chopin, 2008). These principles, combined with differentiated socio-economic situations among member states, facilitate significant emigration from Central and Eastern Europe to Western Europe. In this context, any mobility experience represents a challenge for students from these regions, offering an opportunity to "test" and prepare for life abroad. Preparing students for both mobility and returning to a sedentary lifestyle is essential. However, the promotion of academic mobility often focuses solely on the first phase: learning to adapt to change (leading to accumulated stays, internships, and qualifications) without support for the second phase of reintegration into a localized life project (Anquetil & Derivry, 2019). Students must become aware of their new status—not necessarily as Erasmus students considered part of an elite but rather as foreign workers sometimes viewed as economic migrants—as well as the socio-economic-political conditions in Europe.

Some education and skills experts argue that the term brain drain is not suitable to describe the international mobility of students, researchers, experts, and other professionals. According to them, such mobility is generally beneficial for both the country of origin and the host country. Indeed, this talent circulation facilitates scientific and technological exchanges, contributing to knowledge and innovation development. Moreover, individuals who go abroad may acquire new skills and knowledge, which they can later use in their country of origin upon returning. Therefore, instead of referring to it as brain drain, it might be more appropriate to consider this mobility as an opportunity for mutual enrichment and international collaboration in research and expertise.

Academic mobility is in full swing: more and more students participate in Erasmus programs, some are required to complete their final internships abroad, researchers and future professors must demonstrate international experience, and

teachers are regularly invited to travel to attend conferences, give lectures, or build networks. Without even mentioning international publications and virtual exchanges, university globalization is well underway. Regarding Europe, the success of the Erasmus programs is undeniable in terms of the number of ongoing trips and future projects. However, it is essential to remember that university mobility is not an end in itself; it must contribute to the formation of students, intellectuals, (future) researchers, teachers, directors, and global citizens of tomorrow.

## 4. Conclusions

The phenomenon of highly skilled personnel emigration must be addressed both in the context of global competition for talent and the policies promoting international researcher mobility. According to the specialized literature, there is an increasing tendency for international migration from poorer countries to richer countries to become predominantly of the brain drain type, raising concerns for developing countries and the scientific community. In the context of globalization, brain drain reduces human capital where it is already limited and amplifies it where it is already high, contributing to growing inequalities between countries, including among the wealthiest.

It is clear that no definitive conclusions can be drawn regarding the overall impact of brain drain on the country of origin, as there is a risk of overlooking other effects, many of which may be beneficial. These include remittances, positive effects on foreign trade, foreign investment, and the institutions of the country of origin, the economic benefit of education acquired abroad and brought back by returning migrants, and the contribution of such education to democracy—provided it is acquired in a democratic country.

Within the Organization for Economic Cooperation and Development (OECD), the focus is on the concept of brain circulation rather than brain drain. In wealthy countries, individuals who go abroad often return later, or new individuals settle in these countries.

Thus, the idea of brain drain is more relevant when mobility occurs from low-income countries to wealthy countries, as individuals tend to stay abroad for shorter periods due to difficulties finding resources and qualified collaborators to develop and use their expertise. Strengthening international collaborations and knowledge exchanges can help mitigate the negative effects of brain drain and promote a true circulation of talent on a global scale.

The migration of highly skilled workers should not deplete the human capital of the countries of origin if it generates network externalities with positive effects for these countries. Brain drain driven by globalization creates winners and losers, especially in developing countries. In this context, specific characteristics of the country of origin, such as governance, demographic size, technological distance, and how these interact, are associated with a country's ability to leverage incentives for

human capital development in the context of migration and to benefit from the global advantages provided by a skilled and educated diaspora.

The problems associated with the brain drain phenomenon can be addressed by promoting the concept of "education without borders" through corporate universities, distance learning programs, or electronic libraries. The concept of education without borders fosters human capital development, acceptance of democratic values and positive attitudes, and appreciation of cultural values and norms through the transnational exchange of information, experiences, and knowledge between migrants and their counterparts in the country of origin. In this context, establishing a relationship between the country of origin and its intellectual diaspora is crucial for improving the socio-economic issues of the sending country and understanding its cultural challenges. This relationship allows for the effective leveraging of the diaspora's skills and expertise for the benefit of the home country while fostering opportunities for collaboration and mutual growth.

**References**

Anquetil, M., & Derivry, M. 2019. Reconnaitre et valoriser les mobilités : évolution du management de la « dimension européenne », *Recherches en didactique des langues et des cultures : Les Cahiers de l'Acedle*, 16-2. https://journals.openedition.org/rdlc/6989.

Boncea, I. 2013. Medical Brain Drain - A Theoretical Approach, *Annals of Faculty of Economics,* 2013, vol. 1, issue 1: 64-71.

Chaloff, J., & Lemaitre, G. 2009. *Managing highly-skilled labour migration: a comparative analysis of migration policy challenges in OECD countries* - OECD Social, employment and migration working paper 79. http://www.oecd.org/els/mig/46656535.pdf

Chopin, T. 2008. Les relations complexes entre mobilité et identité européenne. In Bertoncini Yves. (dir.), *Encourager la mobilité des jeunes en Europe : orientations stratégiques pour la France et l'Union européenne*. Paris, Documentation Française (Rapports et documents/Centre d'Analyse Stratégique), pp. 118-127.

Dan, H. 2017. Is Social Progress Subject to Cultural Influences? Arguments for Considering Cultural Characteristics as Inputs for Social Policy Design and Implementation, *On-line Journal Modelling the New Europe*. No. 22: 104-122.

Dufoix S., & Diminescu D. 2006. Science de l'absence et science de la double présence. In *Actualité de la pensée d'Abdelmalek Sayad,* Symposium, Paris, 15-16 june.

Education, Audiovisual and Culture Executive Agency. 2007. *Erasmus Mundus "External Cooperation Window". Questions and Answers*. http://eacea.ec.europa.eu/extcoop/call/documents/faq.pdf.

Ferro, A. 2004. Romanians Abroad: A snapshot of highly skilled migration, *Higher Education in Europe*, Vol. XXIX, no. 3: 381-392, Routledge https://doi.org/10.1080/0379772042000331660.

Gaillard, J., & Gaillard, A. M. 1997. Introduction: The International Mobility of Brains: Exodus or Circulation?, *Science, Technology & Society*, v.2 n.2, July-December: 195-228.

Glaser, W.A. 1978. The brain drain: emigration and return. UNITAR Research Report 22, Oxford: Pergamon Press.

Johnson, M., & Regets, M. 1998. International Mobility of Scientists and Engineers To the US – Brain Drain or Brain Circulation?, *NSF,* Issue Brief : 98–316, 22 June.

Kapur, D., & Mchale, J. 2005. *Give Us Your Best and Brightest, The Global Hunt For Talent And Its Impact On The Developing World,* Washington, DC: Center For Global Development.

Lowell, L. B. 2003. Skilled Migration Abroad or Human Capital Flight? - *Migration Information Source*, June. http://www.migrationpolicy.org/article/skilled-migration-abroador-human-capital-flight.

Lowell L. B. 2006. High Skilled Mobility: Changes and Challenges, Presentation to the United Nations *International Symposium on International Migration and Development*, Turin, 28-30, June.

Lutz, W. (ed.), Amran G., Bélanger A., Conte A., Gailey N., Ghio D., Grapsa E., Jensen K., Loichinger E., Marois G., Muttarak R., Potančoková M., Sabourin P., & Stonawski M. 2019. *Demographic Scenarios for the EU. Migration, Population and Education*, Luxembourg: Publications Office of the European Union.

Mahroum, S. 2000. *Highly skilled globetrotters: the international migration of human capital*. Blackwell Publishers Ltd., 168-185. http://www.oecd.org/spain/2100652.pdf

Mahroum, S. 2005. The International Policies of Brain Gain: A Review, *Technology Analysis & Strategic Management*, 17, 2: 219-230, DOI:10.1080/09537320500088906.

Meyer J. B., & Hernandez V. 2004. Les diasporas scientifiques et techniques: état de lieu. In M. Nedelcu (dir.), *La mobilité internationale des compétences. Situations récentes, approches nouvelles*. Paris: L'Harmattan, pp. 19-58.

OECD.2008. *The global Competition for Talent Mobility of the Highly Skilled*, OECD Publishing. http://www.oecd-ilibrary.org/employment/the-global-competition-for-talent_9789264047754-en

Petroff, A. 2016. Turning points and transitions in the migratory trajectories of skilled Romanian immigrants in Spain, *European Societies*, 18, 5: 438-459, Routledge.

Prelipceanu, R. 2008. The new migration patterns of educated Romanians to the EU: what challenges for the individuals and for the nation-state? (November 11, 2008). *Romanian Journal of European Affairs*, Vol. 8, No. 4, December 2008, https://ssrn.com/abstract=1299634

Rauch, J. E. & Trindade, V. 2002. Ethnic Chinese Networks In International Trade, *The Review of Economics and Statistics*, MIT Press, vol. 84(1): 116-130, February.

Rusu, V. 2002. „Migraţia creierelor" – efecte economico-sociale, *Revista română de sociologie*, anul XIII, nr. 5-6: 489-514.

Stahl, D. 1993. Evolution of Smartn Players, *Games and Economic Behavior*, vol. 5, issue 4: 604-617.

Stănică S. 2011. Apariţia şi evoluţia fenomenului Brain Drain, *Revista Romana de Sociologie*, serie noua, anul XXII, nr. 3-4: 339-360. http://www.revistadesociologie.ro/pdf-uri/nr3-4-2011/09-SStanila.pdf.

Wickramasekara, P. Policy responses to skilled migration: Retention, return and circulation, International Labour Organisation.

Work and Travel USA website, https://www.workandtravelj1.com/.