

Forum:	Economic and Social Council (ECOSOC)
Issue:	Mitigating the Effect of Brain Drain in Less Economically Developed Countries (LEDCs)
Student Officer:	Vassiliki Batzoglou
Position:	Deputy President

PERSONAL INTRODUCTION

Dear delegates,

My name is Vassiliki Batzoglou, I am 16 years old and I am an IB1 student at Pierce-The American College of Greece. It is an immense pleasure and honour to be serving as a Deputy President of the Economic and Social Council in this year's PS-MUN.

From my experience, MUN is a perfect opportunity for everyone to engage in global issues, get out of their comfort zone and most importantly be involved in such a community. Since this is my first time chairing, I can reassure you that I fully understand how the idea of MUN seems intimidating and scary for a newcomer. However, I promise you that it is a new kind of journey for me as well, and that I will be there for you every step of the way.

The Economic and Social Council deals with issues that either derive from or affect the economy and society. Since both of those sectors have a direct impact on our everyday life, it is imperative to understand the nature of the problems and try to resolve them.

This study guide provides essential information on the topic of "Mitigating the Effect of Brain Drain in Less Economically Developed Countries (LEDCs)". Although you are advised to read it, it is only for introductory purposes and further personal research should be carried out to help you with your understanding of the topic.

If you have any questions about the topic or in general, you can contact me via email at V.Batzoglou@acg.edu.

Yours truly,

Vassiliki Batzoglou

INTRODUCTION

Brain drain may be defined as the exodus of skilled migrants from their home country to another one with the aim of finding better pay and living conditions. This phenomenon has been rising since the end of World War II and it reached its peak during the early 2010s due to economic crises and political conflicts. More Economically Developed Countries (MEDCs) have been key recipients of skilled immigrants. Just in the US, over 1/3 of immigrants aged 25 and older are college educated.¹ Seeing as there are limited job prospects and proportionally low wages vis-a-vis their level of education, many people become disappointed and leave their home country to seek a brighter future abroad. The countries that the migrants leave behind suffer from a loss of human capital which is vital for their sustainable development; unemployment rates may rise and vacuums in many economic sectors cannot be filled.

Brain Drain is usually linked with the source country only in a negative way. Loss of human capital stands as an impediment for economic growth and the country is unable to compete in the global market. Thus, economic stagnation is inevitable. However, there are still some positive effects on the source country. These include the circulation of new ideas that skilled migrants are able to bring back to their home country, if they choose to return, and potentially heavy remittances, which contribute significantly to the local economy. The host country is impacted by brain drain both economically and socially. The knowledge brought by foreigners can increase productivity while the country's social make up changes; migrants that are arriving from foreign countries do not only bring new cultures and traditions with them but also provide diversity to the workplace.

Today's globalised world leads to an interdependence between host and source countries through the exchange of workers. Therefore, a strong and beneficial partnership can be developed between them. It is important for the United Nations (UN) to get involved in the supervision and facilitation of such agreements to prevent corruption and equity. It is crucial to understand that countries cannot reach agreements without first achieving some level of equity in their economies.

Despite the numerous policies that have been drafted about the elimination of brain drain, the phenomenon remains unresolved. Ways of ameliorating the negative effects and boosting the positive ones can transform brain drain into brain circulation. This can happen through easily accessible education worldwide, networking between skilled migrants and their source country, price floors and the subsidisation of economic sectors by UN organs to reach sufficient standards of economic growth.

¹ Rosenberg, Stacy. "Majority of U.S. Public Supports High-Skilled Immigration." *Pew Research Center's Global Attitudes Project*, Pew Research Center, 14 Aug. 2020, <https://www.pewresearch.org/global/2019/01/22/majority-of-u-s-public-supports-high-skilled-immigration/>

DEFINITION OF KEY TERMS

Brain Drain

The legal emigration of skilled and professional workers from the source country, their origin country, to a host country, which is the country where they will settle permanently, in the scope of seeking better pay and living conditions.²

Brain Gain

“An increase in the number of highly-trained, foreign-born professionals entering a country to live and work, where greater opportunities are offered”³

Emigration

The process of exiting a country to go and live in another one.⁴

Externalities

Externalities occur in an economy when the production or consumption of a specific good or service impacts a third party that is not directly related to the production or consumption of that good or service.⁵ For example, the consumption of education not only benefits the individual that receives it, but also the society as a whole since it lowers unemployment and criminal rates and leads to economic development. Therefore, it exhibits significant positive consumption externalities.

Gross Domestic Product (GDP)

“The Gross Domestic Product is the total monetary or market value of all the finished goods and services produced within a country’s borders in a specific time period.” Thus, it is an indicator of a country’s economic wealth.⁶

Human Capital

The skills, abilities and knowledge acquired by people, as well as good levels of health, which are considered as economic assets.⁷

² “E3: Human Flight and Brain Drain.” *Fragile States Index*, <https://fragilestatesindex.org/indicators/e3/>

³ “Brain Gain Definition & Meaning.” *Dictionary.com*, Dictionary.com, <https://www.dictionary.com/browse/brain-gain>

⁴ “Emigration.” *Cambridge Dictionary*, <https://dictionary.cambridge.org/dictionary/english/emigration>

⁵ Kenton, Will. “Externality: What It Means in Economics, with Positive and Negative Examples.” *Investopedia*, Investopedia, 11 Sept. 2022, <https://www.investopedia.com/terms/e/externality.asp>

⁶ Fernando, Jason. “Gross Domestic Product (GDP): Formula and How to Use It.” *Investopedia*, Investopedia, 3 Nov. 2022, <https://www.investopedia.com/terms/g/gdp.asp>

⁷ “Human Capital Definition & Meaning.” *Merriam-Webster*, Merriam-Webster, <https://www.merriam-webster.com/dictionary/human%20capital>

Immigration

“The process of coming to a country in order to live in it permanently”.⁸ Safety, environmental, economic and social factors such as war, natural disasters, limited career opportunities and low life quality respectively can act as key reasons behind immigration.⁹

Less Economically Developed Countries (LEDCs)

Less Economically Developed Countries are countries with low levels of Gross Domestic Product and living standards making them highly vulnerable to economic and environmental shocks. They are confronting severe structural impediments to sustainable development and economic growth.¹⁰

Marginal product of labour

“Change in output as a result of one additional unit of input being added to production”. To put it in simple terms, if a car company produces 15 cars with 5 workers and with the addition of one more worker, it increases production to 20 cars, the marginal product is the difference 20 minus 15 which is equal to 5.¹¹

More Economically Developed Countries (MEDCs)

More Economically Developed Countries are countries with higher levels of Gross Domestic Products where living standards are quite high and there is evident economic growth especially in the secondary and tertiary levels of industry, meaning manufacturing and services production.¹²

Organisation for Economic and Development (OECD)

It is an intergovernmental organisation founded in 1961 consisting of 38 countries. Its predecessor was the Organisation for European Economic Co-Operation (OECC), founded in 1948 to administer American and Canadian aid for the reconstruction of Europe after the Second World War. Since 1961, it has become an international organisation of countries committed to democracy and market economy aiming at economically assisting Less Economically Developed Countries (LEDCs).¹³

⁸ “Immigration.” *Cambridge Dictionary*, <https://dictionary.cambridge.org/dictionary/english/immigration>

⁹ “Root Causes of Migration.” *Justice for Immigrants*, 15 Mar. 2017, <https://justiceforimmigrants.org/what-we-are-working-on/immigration/root-causes-of-migration/>

¹⁰ “Least MEDCs (Ldcs) | Department of Economic and Social Affairs.” *United Nations*, United Nations, [https://www.un.org/development/desa/dpad/least-developed-country-category.html#:~:text=Least%20developed%20countries%20\(LDCs\)%20are,low%20levels%20of%20human%20assets](https://www.un.org/development/desa/dpad/least-developed-country-category.html#:~:text=Least%20developed%20countries%20(LDCs)%20are,low%20levels%20of%20human%20assets)

¹¹ “Take Online Courses. Earn College Credit. Research Schools, Degrees & Careers.” *Study.com | Take Online Courses. Earn College Credit. Research Schools, Degrees & Careers*, <https://study.com/academy/lesson/marginal-product-definition-example.html>

¹² *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://kids.britannica.com/students/article/more-economically-developed-countries/604089>

¹³ “The OECD Creates Better Policies for Better Lives. Read the OECD’s Main Figures to Find out More about Their Work.” *OECD*, <https://www.oecd.org/about/>

Tertiary education

“Tertiary education refers to all formal post-secondary education, including public and private universities, colleges, technical training institutes, and vocational schools.”¹⁴

Tertiary labour force

Workforce that consists of people who have obtained some kind of tertiary education.¹⁵

Remittances

Transfer of money, either in the form of cash or goods, by a foreign worker to a citizen with familial ties living in their home country.¹⁶

BACKGROUND INFORMATION

The importance of human capital

Human capital is a fundamental prerequisite for the economic growth of a country and it is developed as service providers are equipped with knowledge that can be used for innovations. The new ideas combined with a solid base of background education that skilled workers have obtained allows the creation of new technologies and subsequently leads to the improvement of life quality. Therefore, it is evident that MEDCs, which present an increased percentage of tertiary labour, have stronger performance in the economic market than LEDCs, which present low percentages of human capital. For example, in 2020, Singapore, with human capital 0.88, had a Gross Domestic Product of \$345.3 billion, whereas Niger, with human capital 0.29, reached a Gross Domestic Product of just \$13.74 billion.¹⁷

The cycle of human capital and Direct Brain Drain

In Less Economically Developed Countries (LEDCs) while the population is continuously increasing, there is a high possibility that residents will not be able to receive tertiary education or continue with their graduate studies due to lack of resources to fund public institutions and equate the needs of a larger student body; this is the starting point for direct brain drain. A prime example is the Sub-Saharan region, where only 9% of the teenage population moves from secondary to tertiary education presenting the lowest regional

¹⁴“Tertiary Education.” *World Bank*, <https://www.worldbank.org/en/topic/tertiaryeducation>

¹⁵Databank, <https://databank.worldbank.org/metadataglossary/jobs/series/SL.UEM.ADVN.FE.ZS>

¹⁶ Murphy, Chris B. “Remittance: What It Is and How to Send One.” *Investopedia*, Investopedia, 25 Sept. 2022, <https://www.investopedia.com/terms/r/remittance.asp>

¹⁷ “The Globalization of International Labor Flows, its Causes and Consequences by Francisco L.Rievera-Batiz”, *Chapter 16*

enrolment in the world.¹⁸ Despite this percentage, which is representative for most of the other LEDCs, the unemployment rates remain relatively low, as especially the youth cannot afford not to work due to fear of starvation. The lack of decent working conditions or the inability to find full-time jobs pushes the young university graduates or the university students, who participate in technical internships to gain exposure to specialised fields such as medicine, to move from LEDCs to another country.

The agricultural nature of the economy in LEDCs can be a further reason for direct brain drain. Most of the time, there are little signs of heavy industrialisation, and the economy does not focus on producing manufactured goods and services. The second possibility is direct migration of already skilled professionals, who have most probably undergone tertiary education in their country of origin and are moving to another country or reuniting with their already settled family there. This case is mainly applied when talking about brain drain from a More Economically Developed Country (MEDC) to another More Economically Developed Country (MEDC) since they are already well-equipped professionals. These people emigrate because they want to find improved working and living conditions, such as increased salary or greater probabilities of finding a job equivalent to their academic qualifications, that are not provided in the place they live in.

Types of Brain Drain

From LEDCs to MEDCs

MEDCs, many of which are members of the Organisation for Economic Development (OECD), remain the top destinations for the migration of skilled workers. OECD policies that tend to favour educated migrants allow them to enter these countries more easily. Educated migrants can be used in the industrial economies of MEDCs because of the high demand for innovation which is coupled with better living and working conditions. Thus, according to a database on global migration published in 2011, the number of migrants from developing to MEDCs grew dramatically from 10 to 55 million between 1960 to 2000.¹⁹ An example to that is Ghanaian doctors and nurses, who despite having been trained in Ghana, work abroad mostly in developed northern countries such as Canada, USA and the United Kingdom. This might be closely linked to the wage gap between Ghana and OECD countries. A 2010 report by the International Organisation for Migration showed that an employed Ghanaian doctor will have a 25-times higher salary in Canada than in his home country.²⁰ So, it is evident

¹⁸“Tertiary Education.” *World Bank*, <https://www.worldbank.org/en/topic/tertiaryeducation>

¹⁹Docquier, Frédéric. “The Brain Drain from LEDCs.” *IZA World of Labor*, 1 May 2014, <https://wol.iza.org/articles/brain-drain-from-developing-countries/long>

²⁰Voa. “Ghana Faces Worrying Brain Drain.” *VOA, Voice of America (VOA News)*, 10 Jan. 2010, <https://www.voanews.com/a/ghana-faces-worrying-brain-drain->

that they have higher possibilities of being compensated for the education they have obtained, in MEDCs rather than LEDCs. Their living conditions are improved, and they can afford additional expenses including leisure and entertainment, better housing and private education for their children, which were not possible in their home country.

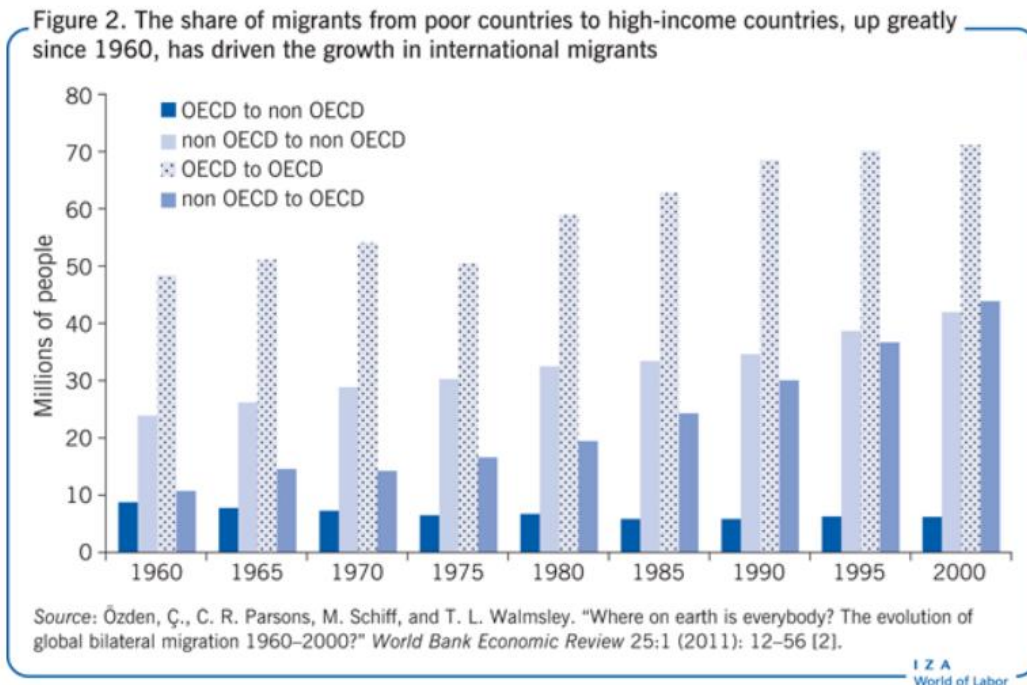


Figure 1: The sharing of immigrants between countries

Between MEDCs

It is important to note that in 2000 migration between MEDCs still dominated the global migrant stock. More specifically, migration between MEDCs constituted around 45% of all international migration of 72.6 million people.²¹ Even an MEDC that has a relatively high Gross Domestic Product (GDP), but underdeveloped economic sectors can face a brain drain crisis. An example of that is Greece, which despite not being enlisted as an LEDC faced huge loss of human capital during the 2010s economic crisis. More specifically, around 20,000 physicians emigrated due to the inability of the national health care system to provide them with adequate tools for operations and sufficient wages combined with a high tax rate that intensified feelings of economic

[81090582/111371.html#:~:text=IOM%20spokesman%2C%20Jean%2DPhilippe%20Chauzy,the%20United%20States%20and%20Canada](https://www.iza.org/publications/papers/111371.html#:~:text=IOM%20spokesman%2C%20Jean%2DPhilippe%20Chauzy,the%20United%20States%20and%20Canada)

²¹ Docquier, Frédéric. "The Brain Drain from LEDCs." *IZA World of Labor*, 1 May 2014, <https://wol.iza.org/articles/brain-drain-from-developing-countries/long>

insecurity.²² The lack of educated doctors and especially surgeons in OECD countries, such as Germany, made the Greeks highly demanded and led to their migration. People moving from a MEDC to another MEDC, having been disappointed by their country's limited support, look for better state-provided work insurance options that can fully protect them, better organised places of work and stable salaries.

Between LEDCs

The phenomenon of brain drain from an LEDC to another LEDC is not very common. The reason for that is quite simple. In LEDCs the government may often be unable to fund the necessary infrastructure for institutions of tertiary education, and even work facilities such as hospitals. There may also be a problem due to limited career opportunities and lack of decent working conditions. Since skilled migrants flee their home country because they are unable to be absorbed by the economy, it is unlikely that they will prefer another LEDC to migrate to because the conditions are similar there. Nevertheless, other factors might force educated people coming from an LEDC to settle in another LEDC. Political instability, and especially war, extreme natural phenomena or wide-spread poverty usually result in a mass exodus of migrants, many of whom are skilled professionals, to emigrate from their country of origin and settle in a neighbouring country with a slightly better economy.

Causes of Brain Drain

Lack of educational systems and institutions

The economy of LEDCs is focused on the primary sector i.e., agriculture by producing mainly primary commodities. Ghana's main exports, for example, are oil and agricultural goods. If there is a rise in the low income of its residents, they will immediately demand more basic goods, like food, rather than services, which are seen as luxurious and unnecessary for them. Thus, the manufacturing and services sectors of the economy, where skilled workers are needed the most, are undeveloped. The primary sector is also highly vulnerable to unexpected natural phenomena and global crises in price crashes. When such situations occur, the economies of LEDCs are hit the hardest and there is a detrimental decrease in the country's revenue and increase in total debt.

The high debts and inability to fund educational institutions and the lack of the state to obtain the required tools for tertiary educational centres create serious impediments for conducting innovative postgraduate research and generally attending tertiary education. Not only that, but it is imperative to mention the discrepancy that traditional culture of most LEDCs places on by sticking to stereotypes

²²iefimerida.gr, Newsroom. "Greece Lost 20,000 Doctors in the Brain Drain, Patoulis Says." *iefimerida.gr*, 25 Oct. 2022, <https://www.iefimerida.gr/english/greece-lost-20000-doctors-brain-drain-patoulis-says>

that prevent teenagers and young adults from pursuing further education. This derives mostly from the fear of western-influenced learning and is especially affecting women by eliminating academic opportunities due to their gender. For these reasons people don't have limited access to education and have two options; they can either be forced back to low-paying and agricultural jobs, which will continue the circle of economic stagnation with no innovation, or they will decide to emigrate abroad to pursue further education.

Limited career paths

As mentioned before, the focus of LEDCs is developing the primary sector for which there is no high demand services. The manufacturing and services sectors of the economy are not prioritised by the state. Therefore, these sectors lack organisation and infrastructure making skilled workers feel unsupported and that their academic qualifications will be put to no use. Mostly high-paying workers such as doctors or engineers flee the country because the state cannot fund the high-cost infrastructure that is needed for such professions. However, it is also these professions that contribute to the development of the country. This happens since the manufacturing goods can be traded globally, so they put a country in competition with others and increase productivity.

The services sector will be the one that will make the industries prosper. For example, transportation will enable products to be transferred abroad and this requires trained-engineers. Research in health care services can also lead to innovation and differentiate a country from the others, thus making it an attraction for investors. With a mass exodus of skilled workers, competition in their fields of work is kept low and there is also no incentive for improvement. So, as time passes by, underdevelopment of the manufacturing and services sector continues and causes significant damage to the economy of the source country.

Poor working and living conditions along with low wages

The wage gap between developed and LEDCs has always been a driving force for skilled people to emigrate from their home country. A tangible example is that of Ghana where the average monthly net salary is 160,94 USD, whereas in the United Kingdom, where many skilled migrants move to, the amount reaches 2,784.84 USD.²³ Moreover, the poor working conditions are evident in LEDCs. Infrastructure, such as hospital buildings, is underdeveloped and proper equipment is underprovided. There is lack of proper administration, limited access to a supportive health care system, legal representation and insurance. This happens as international treaties protecting workers and residents are disobeyed by states and therefore, educated people are pushed towards a mass exodus. Again, it is especially hard for female skilled

²³“Cost of Living.” *Cost of Living*, https://www.numbeo.com/cost-of-living/country_price_rankings?itemId=105

individuals to find a job that provides them with security as it is often the case that due to social stereotypes, they either are confronted with harassment in their working place or are totally unable to be accepted for a working position in their field.

Members of the LGBTQ+ community should also not be forgotten. Despite their academic qualifications, they may be discriminated against both as job applicants or at their workplace because of their sexual orientation or their gender identity. They are also most likely to be excluded from work or even society as a whole especially in countries such as Saudi Arabia where being of the LGBTQ+ community is a punishable crime. Lastly, religious discrimination may also be a cause for brain drain. Individuals who are more likely to be unemployed in their country because of their religious beliefs see fleeing as the only alternative. For example, in India, unemployment for Muslim Indians rose by 17% compared to non-Muslims citizens while they also earn lower salaries.²⁴ Although India holds the third largest Muslim population in the world, they continue to be a minority in the country with a population of 1.4 billion. They face continuous discrimination and conflict between them and non-Muslims arise everyday. So, they often choose to emigrate towards Canada, the USA and the Gulf states.

Political instability

Often instability in the political fields leads to instability in the workplace. In the case of war, a state takes control of the economy and imposes measures to limit internal expenses and focuses monetary funds on covering the expenses of war. Wages might fall, the safety of workers can be jeopardised and unemployment rates are likely to rise. Workers do not only feel physically safe in their workplace, but also due to increased censorship. They can be often inspected or patrolled, so that the state can ensure discipline and loyalty to the country fighting the war. Such levels of suspicion, and political instability create insecure workers, who seek employment elsewhere.

Relaxation of Immigration Policies

High-income countries have been relaxing their immigration policies during the last years both due to the amelioration of racism towards people from LEDCs and the lack of enough skilled workers to satisfy the rising demand for industrial goods. Canada, for example, is the number one recipient of migrants and is characterised for its welcoming migration policies. The country targets at increasing the admission of immigrants by one million by the end of 2022 as the Canadian population has not

²⁴ “Job Discrimination against Indian Muslims Rises by 9% in 16 Years: Report.” *Anadolu Ajansı*, <https://www.aa.com.tr/en/asia-pacific/job-discrimination-against-indian-muslims-rises-by-9-in-16-years-report/2686269>


managed to grow at the required pace. Thus, the skilled workers are vital for filling the gap of supplying enough to satisfy consumers' needs. ²⁵

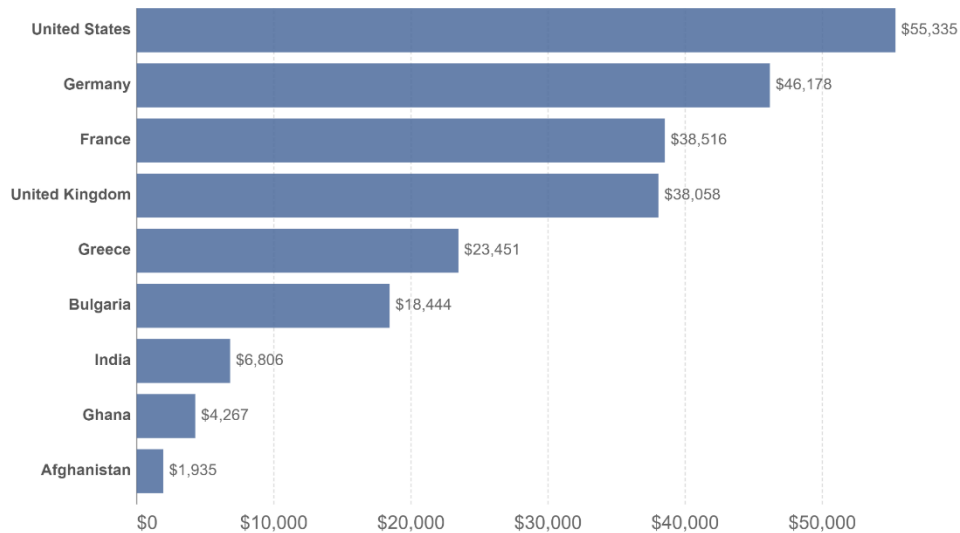
Negative effects on source country

Brain Drain is closely linked to some serious negative effects for the sending country. In fact, if only a relatively small number of migrants who work in their home country and receive a wage that has a value equal to the value of their marginal product, move out, then this will not cause much harm to the economy. To put it in simple terms, as the wage of one worker equals his or her output, in case he or she migrates, then, the government will save this worker's wage. If a small group of workers under the same circumstances moves out, then again, the government will save itself from compensating this group. The only thing that will be lost is a small amount of human capital. Thus, the local wage rate will not be affected as the revenue of the government remains the same. Nevertheless, brain drain becomes harmful to the economy if there is a large outflow of workers who receive wages that have value smaller than the value of their marginal product. The loss is even bigger for employers with a lot of experience, since the loss of their salary is even bigger. Especially in Less Economically Developed Countries, educated workers receive less money than the actual value of the output they produce. Thus, if they choose to leave their home country, then, the loss of human capital will be greater than the wages saved by the government. This is significantly negative for the economy of the country, since there is no benefit for the government anymore. As mentioned at the beginning of this study guide, the loss of human capital places an extreme impediment for the economic growth of the country and practically puts it in an economic stalemate. The loss of human capital is especially harmful to LEDCs that are in an early stage of development and, thus, this phenomenon could hinder their economic growth due to the lack of innovation that could make the country equally competitive against other countries. As the Gross Domestic Product is an indicator of a country's wealth and brain drain results in the loss of human capital that proves to be a vital factor for economic prosperity, countries suffering from the exodus of their skilled workers are faced with a decreasing GDP.

²⁵"The Globalization of International Labor Flows, its Causes and Consequences by Francisco L.Rivera-Batiz",
Chapter 16

GDP per capita, 2018

This data is adjusted for differences in the cost of living between countries, and for inflation. It is measured in constant 2011 international-\$. 



Source: Maddison Project Database 2020 (Bolt and van Zanden, 2020)

OurWorldInData.org/economic-growth • CC BY

Figure 2: Diagram showing the Gross Domestic Product (GDP) of various countries. MEDCs with high levels of human capital present a high GDP, whereas LEDCs experiencing the negative effects of Brain Drain have low GDP

The falling number of the working population also creates the problem of losses in Tax Revenue. Since the income tax of skilled workers is relatively higher to the income tax of unskilled workers, a large outflow of educated residents will cause a large drop to the tax revenues of the government. Tax revenues are used to fund and encourage certain activities, such as education, research projects and healthcare. The loss of government revenues makes the government unable to pay for these activities, in which highly skilled people work, and consequently forces them to flee their home country. Another important negative effect that should be considered are the externalities. More specifically, the loss of skilled workers from the sending country results in lower demand for unskilled workers as well. If, for example, there is a mass exodus of doctors, then, the supply of operations and health care services will decrease. However, in hospitals, doctors are not the only profession that is needed. Along with other skilled workers such as nurses, technicians and cleaning staff are used. So, if the services of the hospital decrease, then less of this staff will be needed. Therefore, the country does not only lose the knowledge and innovations that skilled workers could potentially contribute to the development of the industry, but also the unemployment rate among unskilled workers rises.

Positive Effects on source country

Although brain drain might be viewed as only having negative effects for the source country, there are some key elements brought by this phenomenon which are quite beneficial for the sending country. Firstly, skilled workers usually remit a part of their income received while working abroad to family members or friends to support them due to the low living conditions

in their country of origin. These remittances actually make up a large percentage of the host country's Gross Domestic Product and subsequently, despite the loss of human capital, contribute to some economic growth.

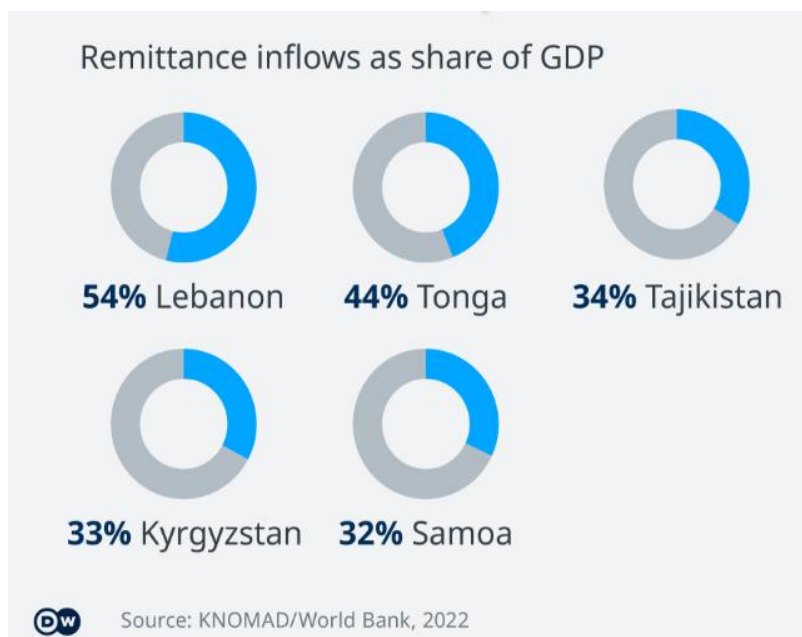


Figure 3: The share of remittances in the GDP of countries presenting with high outflow of human capital

A second positive effect of Brain Drain for the sending country is the fact that educated people can bring back technologies and innovation to their countries of origin and occupy positions in government and civil service after returning from working or post-graduate studies abroad. With the knowledge and perspective gained from MEDCs, they may be able to contribute to the economy and offer ideas for the country's sustainable development in the future. Not only that, but through the use of internet networking, technological advancements and short-term visits, members of the diaspora can reunite with their host country and transfer precious knowledge and opportunities to the younger generation that could set the milestones for economic growth in the country. An additional and of extreme importance positive effect of brain drain is the establishment of partnerships between the countries that "trade" workers. Since LEDCs do not have a sufficient number of educated workers due to low rates of population growth, they are dependent on the inflow of knowledgeable migrants from LEDCs. This interdependence between states allows the establishment of friendly relations between them. Networking between host and source countries takes place, so that technologies and research are encouraged and business contacts are facilitated after close partnership between government and private companies.

Last but not least, the prospect of moving away from the country with tertiary education being the prerequisite provides incentives to the younger generation of LEDCs to seek higher education. Therefore, the skill level of workers is raised leading to economic growth and an

increasing quality of the working class. Yet, there is no guarantee that the government will satisfy this increase in demand for higher education with an equivalent increase in supply. So, the result of this may be the improvement in the quality of education overall due to the greater incentive of students to learn rather than increasing rates of university graduates.

Effects on host country

Firstly, the increase in human capital leads to an adequate increase of the Gross Domestic Product (GDP) of the host country. The knowledge and skills of the incoming educated individuals can contribute to the boost of the economy and its competitive place in the global market.

Secondly, the economy of a host country is benefited through the difference created between what the workers contribute, their marginal product, and what the government pays, their wages. The explanation to that is a key economic phenomenon named the Law of Diminishing Returns. According to it, a small influx of workers results in a corresponding increase of the marginal product of each worker as one worker is able to specialise in his/her area of expertise better. But as the number of workers increases due to a massive influx of skilled migrants, the marginal product of each worker drops from a point and on since there are too many workers and no sufficient resources to facilitate their work. The lowered marginal product now receives a lower wage. Nevertheless, the workers who came in initially and presented an increased marginal product will also be given lower wages. Therefore, the government's expenses are low while the output of the workers will be high. It should be mentioned, though, that the hyper-entrance of migrants might not be manageable by the host country. The government may not be able to deliver wages to an exaggerated number of migrants, but also there might be only a few work places left. So, the initial purpose of the host country to allow entrance to educated migrants to boost the country's innovation now fades away.

The third main impact of brain gain for a country is the one on society. The influx of skilled immigrants especially from LEDCs of the Asian and African continent can raise conflicts between them and local residents. Cultural differences can cause disputes upon the sectors of education and language dominance. Especially in the USA, where large numbers of educated migrants from Hispanic countries of South America and the Caribbean are arriving, language dominance is a continuous controversial topic. Local citizens may view the integration of foreign individuals with insecurity or even hostility. Migrants may also be associated with actions of crime, disruption of civil order and, thus, are treated accordingly; 1 in 5 Black adults say they have experienced police violence.²⁶ Not only that, but despite the education and capabilities of immigrants, they still experience discrimination in their everyday

²⁶ Published: Jun 18, 2020. "Poll: 7 in 10 Black Americans Say They Have Experienced Incidents of Discrimination or Police Mistreatment in Their Lifetime, Including Nearly Half Who Felt Their Lives Were in Danger." KFF, 17 June 2020, <https://www.kff.org/racial-equity-and-health-policy/press-release/poll-7-in-10-black-americans-say-they-have-experienced-incidents-of-discrimination-or-police-mistreatment-in-lifetime-including-nearly-half-who-felt-lives-were-in-danger/>

life or even exclusion from working in the area of expertise. In 2000 just 16.4% of the country's Science, Technology, Engineering and Mathematics (STEM) workforce was foreign-born in the US. However, due to the rise of global campaigns against racism and the gradual shift of public opinion, the situation for skilled migrants has improved. The same study showed that in 2019, the percentage of immigrants making up all the STEM workers in the US increased to 23.1%.²⁷

MAJOR COUNTRIES AND ORGANISATIONS INVOLVED

United States of America (USA)

In 2019, under the Trump administration, a merit-based immigration bill called the Reforming American Immigration for Strong Employment Act or the RAISE Act was proposed aiming at reducing the inflow of legal immigrants to the country. Only 50,000 visas can be approved for immigrants who have been allocated a minimum of 30 points according to English ability, advanced education and job prospects.²⁸ The policy has, in fact, increased the influx of skilled immigrants to the country. Concerning some demographics, the largest group of immigrants in the USA consists of individuals from neighbouring countries, primarily Mexico and the Caribbean. The second largest wave of skilled migration comes from Asia and the Pacific, especially from the Philippines, China, India and Korea. Although there is a small migratory flow from Africa, the biggest ones come from Egypt, Ghana and South Africa among which there are high percentages of tertiary education.

The USA is seen as a place of opportunity for all the aforementioned immigratory groups due to the enormous work opportunities and competitive economy that allows entrepreneurial initiatives and freedoms. However, the unaffordable health care and college system do not make the life of immigrants easy. Immigrants face significant impediments to accessing health care coverage even if they are eligible and have been granted visas due to local fear of immigrants. High costs of living and the discrimination against ethnic minorities are often disregarded. Thus, the conditions under which they live in the USA are not always ideal.

Germany

Germany has faced huge migratory flows from other MEDCs. As a global industrial power, the demand for skilled workers is quite high. In order for a migrant to be granted a residence permit or find a qualified job, his or her foreign professional qualifications need to be assessed by the immigration authorities and be recognized as equivalent to German professional qualifications. The Skilled Immigration Act that was implemented on March 1st, 2020 and has facilitated the residency recognition procedure. According to it, trained workers that come to Germany to look for a job must acquire some knowledge of German at B1 level. Skilled

²⁷“Foreign-Born Stem Workers in the United States.” *American Immigration Council*, 14 June 2022, <https://www.americanimmigrationcouncil.org/research/foreign-born-stem-workers-united-states>

²⁸ “Merit Based Immigration - US Green Card Calculator.” *VisaGuideWorld*, <https://visaguide.world/us-visa/merit-based-immigration/>

migrants from third countries can apply for an accelerated recognition procedure that will shorten its duration to two months. Therefore, it makes the life of skilled migrants easier. Recently, Germany announced its plans to relax immigration rules for non-EU workers to tackle the shortage in health care, IT and construction sectors. Although the detailed policies have not been published yet, the country's goal is to boost its economy by hiring foreign experts.

Saudi Arabia

There has been a massive exodus of many educated individuals from Saudi Arabia towards foreign countries such as the USA and Canada. Saudi Arabia's political system is an absolute monarchy that abides by the Islamic Law, Sharia, which is not codified. Due to the absence of a written penal law, people are being prosecuted and face vague and unfair sentences. There is no freedom of speech and being a member of the LGBTQ+ community is penalised with death. Not only that, but the gender gap in labour force participation rates in Saudi Arabia is one of the highest in the world due to the stereotypical beliefs against the female sex; women make up 30.9% of the employees in contrast with the men who make up 70.1%.²⁹ In general, even skilled workers face ill-treatment and harassment in their workplace. The political situation with ongoing repression and deprivation of human rights prevents the country from economic and social progress. All these, act as push-factors that persuade the citizens of Saudi Arabia to flee the country.

China

China is facing a huge crisis of university students and skilled workers going abroad. Between 1978 and 2007, more than 1.21 million Chinese went abroad for studying and research purposes and only a quarter of them returned.³⁰ The citizens of the country view the single-party state as undemocratic, face the problem of low salaries and many believe that the educational system does not offer young adults many career opportunities. Despite China's efforts to attract talented workers from the country through competitions and grant them increased wages, the problem of brain drain will not be resolved soon. Skilled workers who have moved abroad have adjusted to the Western cultures of the USA and Europe, and find it hard to return back to China. At the same time, the families of young graduates encourage them to continue staying abroad.

Greece

The phenomenon of brain drain in Greece is not something new. Since the 1960s people with university degrees have been leaving the country for improved job prospects especially in Germany, the UK and the USA. However, the number of skilled migrants from Greece reached

²⁹ "The Gender Gap in Employment: What's Holding Women Back?" *InfoStories*, <https://www.ilo.org/infostories/Stories/Employment/barriers-women/>

³⁰ "China's Brain Drain at the High End." *Taylor & Francis*, <https://www.tandfonline.com/doi/full/10.1080/17441730802496532?src=recsys>

its peak during the 2010s economic crisis. A 2019 survey revealed that 69% of people emigrating from Greece hold a masters or a PhD degree and are seeking jobs in the sectors of finance, IT and health care abroad.³¹ During the economic crisis, unemployment rates reached unprecedented levels and many people with degrees were unable to find a job that matched their skills. Recently, there are some government initiatives such as “Brain Regain Greece” that in close collaboration with the European Union aim at attracting young entrepreneurs back to the country and facilitate research programmes. However, economic instability continues to characterise Greece and skilled workers have already been well-established in jobs abroad. In the UK, there are Greek communities such as the Hellenic Centre for example. These bring the Greek diaspora in contact with the culture of their home country, however, the skilled migrants prefer employment abroad since they are not persuaded that much has changed.

International Monetary Fund (IMF)

It is a specialised agency of the United Nations that provides policy advice and financial assistance aiming at reducing poverty and ensuring economic stability. Through surveillance and capacity-building activities, the sustainable growth of the country is achieved. It has provided LEDCs with funds and collaborated with financial policy makers to build resilience of the countries’ economies to shocks. A prime example is the case of Vietnam. Since 1986, the International Monetary with the cooperation of foreign governments have provided financial and technical assistance that have improved public administration, tax policies and foreign investment. Companies like South Korea’s Samsung used Vietnam as an attractive platform for manufacturing and exports. Many skilled workers in engineering and IT are emerging in Vietnam. The country’s Gross Domestic Product has also increased and the economy has gained more stability for the future.

International Organization of Migration (IOM)

It is an intergovernmental organisation belonging to the system of the United Nations and protects for the humane integration of immigrants in societies. At the same time, it helps governments affected by migration to build policies and combat the exodus of residents. In that respect, the IOM launched the Return of Qualified African Nationals programme in 1983. The organisation sought to not force the diaspora of African skilled workers to return to their home countries and give up on the privileges gained abroad, but rather return for a short period of time and transfer their professional skills to the local counterparts. The aim of the project was to pave a way towards sustainable development of the home country since the skills would flow from one region to another. The effort was quite successful, and despite its termination the IOM is continuing to launch such initiatives for example with the Migration

³¹ About the author Katerina Papakonstantinou Dr Katerina Papakonstantinou currently teaches Modern Greek at Greek schools in North London. She was a Visiting Fellow at the Hellenic Observatory from Oc, et al. “Discussing the Brain Drain.” *Greece@LSE*, 10 Mar. 2021, <https://blogs.lse.ac.uk/greeceatlse/2021/03/10/discussing-the-brain-drain/>

and Development for Africa Programme. It is believed that the diaspora is of real importance to the home country when it comes to transfer of skills and investment.

European Union (EU)

Article 45 of the Treaty of the Functioning of the European Union grants free movement to EU citizens between member states. No visa is needed to access employment, academic training and residency. Therefore, members of the EU have freedom of mobility from one state to another and brain drain can take place more easily. EU countries such as Romania, Italy, Greece and Portugal are strongly affected by brain drain, whilst economically stronger EU countries such as Sweden and Germany are affected by brain gain as they are receiving countries of skilled workers.

TIMELINE OF EVENTS

DATE	DESCRIPTION OF EVENT
1983	The Return for Qualified African Nationals is initiated by the International Organization for Migration aiming at the brain gain of skilled African migrants.
7 February 1992	The Treaty of Maastricht is signed allowing the free movement of EU citizens between EU Member States.
1997	The United Kingdom Department for International Development (DFID) is founded.
2001	The Return for Qualified African National Programme is replaced by the Migration and Development for Africa Programme.
2010s	The Greek economic crisis reaches its peak, leading to brain drain especially of health professionals.
2018	The Africa-Europe Alliance for Sustainable Investment and Jobs is launched.
2019	The Reforming American Immigration for Strong Employment Act (RAISE Act) is proposed.
2020	The Skilled Immigration Act is established in Germany.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

United Kingdom Department for International Development (DFID)

This department assists LEDCs in tackling matters such as the brain drain. A primary example is the case of Malawi for which the DFID has developed a special programme to increase the training of health professionals along with job opportunities in their home country that would prevent them from moving abroad. Whilst collaborating with the Ministry of Health, guidelines on the international recruitment of nurses with a list of countries have been implemented. According to that, educated nurses who come from countries facing extreme loss of human capital are restricted from being employed in the UK.

Nevertheless, this policy has proven to be ineffective. Nurses seek jobs in the private sector where the regulation of the British National Health Care System is more relaxed. Therefore, they face unprofessionalism, racism, bullying and also have to engage with care home jobs, to which they are not exposed in their home country since the elderly are looked after by their families. The UK still allows unlimited entrance to skilled professionals regardless of country of origin and thus comes into contradiction with the initial goal of creating initiatives to seek job opportunities in their home country. Therefore, it has been argued that similar but more enforced protocols should be implemented in other sectors, such as academia where African countries are confronting shortages of university professors.

Africa-Europe Alliance for Sustainable Investment and Jobs

It was launched in September 2018, and it is part of the EU's Comprehensive Strategy with Africa.³² This strategy emphasises the importance of Economic Partnership Agreements through the establishment of trade alliances between the EU and African countries for the sustainable development, expansion of investment and increase in competitiveness of LEDCs that creates optimal conditions for skilled workers to stay in their home country. The partners do not pay any tariffs on their exports and therefore are given opportunities to increase the production of manufactured goods and services.

The Alliance has been quite successful since in 2019 South African exports of cars to the EU increased by almost 250% and Ghana increased its exports of semi-processed fruit to the EU by 100% in 5 years.³³ Seeing as Africa is a continent with growing trade, its ability to compete in the global market rises. The number of people employed also rose from 441.4 million in 2018 to 453.6 million in 2019.

Return of Qualified African Nationals

It was a programme initiated by the International Organization for Migration in 1983 to provide incentives to African migrants to return temporarily to their home countries. African

³² "Economic Partnerships." *Trade*, https://policy.trade.ec.europa.eu/development-and-sustainability/economic-partnerships_en

³³ *The European Union and Africa: Partners in Trade*.
https://trade.ec.europa.eu/doclib/docs/2022/february/tradoc_160053.pdf

skilled migrants transferred their professional skills back to their home countries without lowering their standard of living since the visits were short. Due to high costs, the project was terminated in 2001. But it was quite successful as 9,000 Africans returned in the span of 9 years as they were persuaded that real development in their home country was possible.

The programme was replaced by the Migration and Development for Africa Programme through which members of the diaspora come in contact via short visits and mainly internet networking that proved to be more efficient for the countries suffering from brain drain. Skilled migrants train African counterparts to conduct research, advance technologically and facilitate business contacts. Doctors, for example, can teach methods to operate to medical students in an African country despite being hundreds of miles away with the use of online meetings. Such initiatives can be carried by the governments of LEDCs since the costs are relatively low and at the same time the diaspora is motivated to be involved and thus, they might also invest in the local economy. With the transfer of skills, brain drain turns to brain circulation and an African country strives towards sustainable growth and economic independence.

Brain Regain Greece

It is a non-profit body launched in 2010 in Greece aiming at rebuilding communication between Greece and the Greek diaspora. The goal is to reverse the country's brain drain to brain gain by attracting young people with entrepreneurial ideas living abroad back in Greece. This happens through repatriation policies and more specifically entrepreneurs, who are interested in returning to Greece, apply to the Brain Gain Mentoring programme. These mentors are professionals in high positions in Greek companies and are responsible for the guidance of the interested parties. There is also an internet platform called Brain Gain JOBS in Greece distributing high-skilled working positions to attract young minds back in the country. Despite the recent COVID-19 Crisis that put a halt to many economic advancements, this programme is quite successful, despite the superficial successes of the programme. In 2021, the rate of unemployment dropped for the first time since the 2010s economic crisis and the Gross Domestic Product showed a rise of 8.3%, many young professionals are still reluctant to return to Greece.³⁴ The higher wages and the level of professionalism that is not seen in many working positions in Greece are seen as push-factors.

³⁴ "European Economic Forecast. Spring 2022." *Economy and Finance*, 16 May 2022, https://economy-finance.ec.europa.eu/publications/european-economic-forecast-spring-2022_en

POSSIBLE SOLUTIONS

Subsidisation of businesses in source countries

The United Nations Development Programme (UNDP) could provide local businesses in LEDCs with subsidies, in order to raise their total revenues, boost their levels of production and create the incentive to foreigners to invest in the economy of LEDCs. For such a project to take place, countries should be responsible for creating a judging panel under the supervision of the UN. Start-up companies will present their business plans to that panel. If the panel is persuaded that the idea is innovative enough and will help the regional economy, then, it will grant subsidisation and its magnitude. Of course, to ensure transparency the UNDP should closely supervise such activities with annual visits, reports and assessments on the companies' progress and the workings of these panels to ensure that the monetary support goes to the right cause and to prevent corruption. This way, businesses will be able to prosper and more working places will be created, more services will be produced for the public, which will raise employment rents and improve working conditions, to reduce brain drain.

Improved educational systems

Seeing that the problem of brain drain in LEDCs stems from the lack of infrastructure in educational institutions, it is imperative to restore it. The International Monetary Fund could provide monetary support for building the needed facilities such as research and medical laboratories or engineering facilities. Other related organisations could also report and oversee how easily accessible all levels of education are to social groups, such as women, LGBTQ+ and low-class people. Working in close collaboration with MEDCs, LEDCs could facilitate exchange programmes for undergraduate and graduate students with the support of UN development programmes. In that way, innovative skills can be transferred to young adults and later used in their home country to further boost the economy. This will create an atmosphere of development within LEDC communities and low-skilled labour will be updated to accept technological advancement and also fulfil the essential workforce that is needed in every country, e.g. public sector, healthcare etc.

Partnerships and networking between source and host countries

Return migration can be achieved in the light of better career prospects and conditions. So, close collaboration between interdependent states under a certain framework could not only provide security between the two countries, but also the feeling of security to the migrants. Since programmes targeting permanent return to the home country have failed, a solution should be found that promotes short-term visits and internet-networking. Through them skilled migrants can transfer their knowledge to local counterparts and there is a high possibility that they will have the incentive to also invest in the development of economic projects. Thus, the local economy will be boosted and countries initially affected by brain drain will turn to more economically independent with a more equipped labour force body. However, co-operation of partnerships is crucial for these visits from one country to another to take place. Skilled migrants who want to temporarily visit their home country for such

purposes should have freedom of mobility. Nevertheless, they usually face serious delays and impediments in obtaining dual citizenship. Without a permanent residence in the country they have settled, they are unable to travel back to their home country. Thus, close communication between the two sides is vital. In order to ensure that no conflicts arise and that countries reach an agreement that is beneficial to all and not just the more MEDCs, supervision by UN mechanisms and organisations is important. The International Organization for Migration, for example, could oversee the drafting of immigration policies by host countries and publish annual reports on the efficiency of the networking projects between countries.

BIBLIOGRAPHY

About the author Katerina Papakonstantinou Dr Katerina Papakonstantinou currently teaches Modern Greek at Greek schools in North London. She was a Visiting Fellow at the Hellenic Observatory from Oc, et al. "Discussing the Brain Drain." Greece@LSE, 10 Mar. 2021, <https://blogs.lse.ac.uk/greeceatlse/2021/03/10/discussing-the-brain-drain/>

Citizensinformation.ie. Freedom of Movement in the EU, Citizensinformation.ie, https://www.citizensinformation.ie/en/government_in_ireland/european_government/european_union/freedom_of_movement_in_the_eu.html#:~:text=Citizens%20of%20EU%20member%20states,if%20they%20fulfil%20certain%20conditions

Chimbelu, Chiponda. "Migration Brain Drain: Not Just a Negative Trend? – DW – 09/20/2022." Dw.com, Deutsche Welle, 20 Sept. 2022, <https://www.dw.com/en/stuck-in-a-neocolonialist-past-is-the-migration-brain-drain-an-outdated-concept/a-63151008>

"China's Brain Drain at the High End." Taylor & Francis, <https://www.tandfonline.com/doi/full/10.1080/17441730802496532?src=recsys>

Databank, <https://databank.worldbank.org/metadataglossary/jobs/series/SL.UEM.ADVN.FE.ZS>

"Debating Brain Drain." Google Books, Google, https://books.google.gr/books?id=sc2SBQAAQBAJ&pg=PA1&source=kp_read_button&hl=en&redir_esc=y#v=onepage&q&f=false

"Education in Africa." UNESCO UIS, 2 Dec. 2019, <https://uis.unesco.org/en/topic/education-africa>

"European Economic Forecast. Spring 2022." Economy and Finance, 16 May 2022, https://economy-finance.ec.europa.eu/publications/european-economic-forecast-spring-2022_en

“E3: Human Flight and Brain Drain.” Fragile States Index, <https://fragilestatesindex.org/indicators/e3/>

“Factsheet - IMF Support for Low-Income Countries.” IMF, 5 Jan. 2022, <https://www.imf.org/en/About/Factsheets/IMF-Support-for-Low-Income-Countries>

“Finance and Development.” Finance and Development | F&D, <https://www.imf.org/external/pubs/ft/fandd/1999/06/carringt.htm>

“Greece Country Highlights.” BrainReGain Ελληνισμός Ev Δράσει, <https://brainregain.gr/el/article/17/greece-country-highlights>

“How Can Africa Halt Its Brain Drain?” World Economic Forum, <https://www.weforum.org/agenda/2016/03/how-can-africa-halt-its-brain-drain/>

“Human Capital.” World Bank, <https://www.worldbank.org/en/publication/human-capital>

“Human Capital Index vs. GDP per Capita.” Our World in Data, <https://ourworldindata.org/grapher/human-capital-index-vs-gdp?tab=table>

“Job Discrimination against Indian Muslims Rises by 9% in 16 Years: Report.” *Anadolu Ajansi*, <https://www.aa.com.tr/en/asia-pacific/job-discrimination-against-indian-muslims-rises-by-9-in-16-years-report/2686269>

Johannesburg. “New Initiative to Tackle Regional Brain Drain.” *The New Humanitarian*, 5 Jan. 2023, <https://www.thenewhumanitarian.org/fr/node/193240>

“Lack of Higher Education Leaves Millions of Youth out of Decent Work in LEDCs - Office of the Secretary-General's Envoy on Youth.” United Nations, United Nations, <https://www.un.org/youthenvoy/2014/12/lack-higher-education-leaves-millions-youth-decent-work-developing-countries/>

“Looking to Move? These Are the Immigration-Friendly Countries You Can Call Your New Home.” *IndiaTimes*, 22 Sept. 2021, <https://www.indiatimes.com/trending/human-interest/most-immigration-friendly-countries-in-the-world-532507.html>

Murphy, Chris B. “Remittance: What It Is and How to Send One.” *Investopedia*, Investopedia, 25 Sept. 2022, <https://www.investopedia.com/terms/r/remittance.asp>

“New Initiatives to Mitigate Brain Drain in the Least MEDCs.” United Nations, United Nations, <https://digitallibrary.un.org/record/625732?ln=en>

“Take Online Courses. Earn College Credit. Research Schools, Degrees & Careers.” Study.com | Take Online Courses. Earn College Credit. Research Schools, Degrees & Careers,

<https://study.com/academy/lesson/what-is-brain-drain-in-economics-definition-causes-effects-examples.html>

Person. "'Brain Drain' Warning over Indian Muslim Migration." *Arab News*, Arabnews, 4 June 2018, <https://www.arabnews.com/node/1315476/world>

"Press Briefing: Regional Economic Outlook for Sub-Saharan Africa." IMF, 14 Oct. 2022, <https://www.imf.org/en/News/Articles/2022/10/14/tr101422-afr-press-briefing>

"Press Corner." European Commission - European Commission, https://ec.europa.eu/commission/presscorner/detail/fr/MEMO_15_4832

Published: Jun 18, 2020. "Poll: 7 in 10 Black Americans Say They Have Experienced Incidents of Discrimination or Police Mistreatment in Their Lifetime, Including Nearly Half Who Felt Their Lives Were in Danger." KFF, 17 June 2020, <https://www.kff.org/racial-equity-and-health-policy/press-release/poll-7-in-10-black-americans-say-they-have-experienced-incidents-of-discrimination-or-police-mistreatment-in-lifetime-including-nearly-half-who-felt-lives-were-in-danger/>

"Root Causes of Migration." Justice for Immigrants, 15 Mar. 2017, <https://justiceforimmigrants.org/what-we-are-working-on/immigration/root-causes-of-migration/>

Through the Back Door: Nurse Migration to the UK from Malawi and Nepal ... <https://www.researchgate.net/publication/236072318> Through the back door Nurse migration to the UK from Malawi and Nepal a policy critique

"Working Together: Vietnam and the IMF." IMF, 1 Aug. 2018, <https://www.imf.org/en/Countries/VNM/vietnam-raising-millions-out-of-poverty>

Yara al-Wazir Published: 25 April, and Yara al-Wazir. "Brain Drain: Why a Quarter of Young Arabs Want to Leave Their Countries." *Al Arabiya English*, 20 May 2020, <https://english.alarabiya.net/views/news/middle-east/2014/04/25/Brain-Drain-why-a-quarter-of-young-Arabs-want-to-leave-their-countries>

Zulkie, Paul. "Why the Raise Act Is Wrong for Immigrants and for America." *Zulkie Partners*, 19 Sept. 2019, <https://www.zulkiepartners.com/why-the-raise-act-is-wrong-for-immigrants-and-for-america-2/>

MULTIMEDIA RESOURCES

Chimbelu, Chiponda. "Migration Brain Drain: Not Just a Negative Trend? – DW – 09/20/2022." *DW.com*, Deutsche Welle, 20. Sept. 2022, <https://www.dw.com/en/stuck-in-a-neocolonialist-past-is-the-migration-brain-drain-an-outdated-concept/a-63151008>

Docquier, Frédéric. "The Brain Drain from LEDCs." *IZA World of Labor*, 1 May 2014, <https://wol.iza.org/articles/brain-drain-from-developing-countries/long>

"GDP per Capita." *Our World in Data*, <https://ourworldindata.org/grapher/gdp-per-capita-maddison-2020?tab=table>

TEDxTalks. "Brain Drain: Social Challenge or Global Opportunity? | Daniele Zatti | Tedxyouth@lsf." *YouTube*, YouTube, 30 Apr. 2019, <https://www.youtube.com/watch?v=uBPrelqYOMQ>

TEDxTalks. "How to Fuel the Economic Engine of a Brain Drain-Affected Country | Christopher Leake | TEDxRiga." *YouTube*, YouTube, 5 Apr. 2019, <https://www.youtube.com/watch?v=zdoGQNsmEfU>

TheNewYorkTimes. "Greece's Brain Drain Crisis | The New York Times." *YouTube*, YouTube, 9 July 2015, <https://www.youtube.com/watch?v=xjWDoBum3qw>