Brain Circulation: the Issue of Brain Drain and Brain Gain

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Abstract

The purpose of this study is to investigate the phenomenon of brain circulation in the issue related to brain drain and brain gain which is one of the direct effects of globalization and international migrations. At its initial start, and especially during the emergence of globalization fifteen to twenty years ago, brain drain tended to be considered as a negative global phenomenon due to the ‘drain’ of skilled workers around the world, fleeing their own country and traveling to other countries in the objective to find better life and work conditions with higher salary. Nowadays, brain drain does not seem to be pointed out as a global problem anymore as countries seem to be gaining from it. That is how the phenomenon of brain gain started to emerge: although countries lose some of their skilled workers, they seem to be gaining in exchange an international skilled workforce which in fact is turning the ‘drain’ into a ‘gain’.

Keyword: Brain circulation, brain drain, brain gain

Introduction

After the researcher has thoughtfully looked at all related studies to brain circulation, the researcher has found that brain drain and brain gain seem to affect all fields of studies (education, medicine, economy, and organizations) this topic indeed created curiosity to the researcher leading him to write this academic article. To better understand the phenomenon of brain circulation, one must look back into the past and analyze what have changed till now.

In the past, before traveling was fashionable and convenient, it was difficult to travel and move from one country to another because of international laws, rules and regulations such as visa laws that minimize the time a person can stay in one country. Therefore, in the past, brain circulation did not have the same impact as it has in today’s modernized world. Nowadays in the 21\textsuperscript{st} century, brain circulation has become a major international issue all around the world due to the easiness and convenience of traveling and moving from one country to another. For example nowadays, refugees from countries in war can easily migrate to European countries thanks to the Schengen space in Europe. Indeed, there is nowadays easier access to circulation of goods, merchandise, tourists, refugees etc. to go from one place to another (Chaichian, 2011).
This academic article focuses on studying Brain circulation, and before the researcher goes any further, it is important to first define the meaning of Brain circulation. “Brain circulation” in this study was best described in the academic article entitled “Brain circulation to the UK?” by Harvey (2012), journal of management development. This article describes brain circulation as “skilled migrants who move between their host, home and other countries for business, work and investment purposes”.

In fact, to be able to understand the phenomenon of brain circulation, the researcher has decided to divide this academic article into 3 parts. The first part will focus on the significant difference between past and present brain circulation and people’s perception of this phenomenon. Is there any difference between past and present brain circulation? What are the major impacts of brain circulation? The second part will deal with several migration trends and case examples to understand clearer the changes that have occurred. Last part deals with the 21st century people’s perception of brain circulation and what seems to impact them to move/migrate.

**Part 1: The significant difference of past and present perception on brain circulation**

The evolution between the past and the present days can be clearly noticed in the fact that European people can circulate easily as European Union citizens for educational, political, diplomatic, economic or social purposes, among others. A relevant example can be the one of a Polish worker deciding to migrate to Belgium for economic benefits as workers in Western Europe earn much more than the workers living in countries from the eastern part of Europe, like Poland. In this case, the purpose of the circulation is mostly socio-economic. The migration move can have consequences from the circulation in both positive and negative ways as shown:

- Gain = the hosting country is gaining asset (For example: Belgium gains skilled Polish workforce)
- Drain = the home country is losing asset (For example: Poland loses their skilled workforce as these leave to Belgium)

This is what is meant by brain gain and brain drain. It seems to be clear that some countries benefit more than others from this phenomenon.

It is therefore significant to wonder how countries could benefit from both brain gain and brain drain at the same time.

After having gone through various researches on brain circulation, the method of content analysis on research articles and books related to brain circulation brought the researcher to the result that confirm the other side of brain drain as negative, as Ibraheem and Devine (2013), conducted research review article entitled “Brain drain in African academic libraries: a survey” by library review. This article points out a different side of brain drain and how brain drain can become a brain gain over time.

Ibraheem and Devine (2013) stated in their research that even though in Africa, as a developing continent, brain drain has taken a heavy toll on the continent: many librarians are
moving away from Africa causing a lack in librarian workforce. This obviously affects the development of Africa on the education level, as only 1 example. But there are also positive aspects that can also be recited though: one of the main positive effects of brain drain is the return of the skilled workforce to their home country. It is clear that although in developing continents like Africa, which is highly affected by brain drain, the truth is that brain drain is not always a one way traffic any more. Brain gain has also been created due to the expansion of capability of the drained workforce so brain drain can also become a brain gain, which emphasizes the circulating flux of the departing workforce and the entering workforce.

The research has seen so far that there are both positive and negative aspects to brain circulation, but one thing has become clear: there are not enough studies on this area and this motivates the researcher to write this academic article. Therefore, in part two, the researcher focuses on the migration trends to shown the clear impact brain circulation have on people’s migration and brain circulation between develop and developing country, the researcher will also give an example of a specific case study done in Thailand on brain circulation.

**Part 2: Several Migration Trends**

According to Bhumiratana, Songkasiri, Commins, and Grimley (2009) research entitled “Thailand and brain drain” published in January 2009 in the Maejo international journal of science and technology, three categories of migrations are clearly distinguished: first, the basic brain drain which is a one-way outflow from a source to a receiving country; second, there is the reverse brain drain which is a tendency to return to the source country by migrants; and third, there is the circulating migration “where skilled human resources flow readily between the source and the receiving countries spending periods of time and employment in both”. Bhumiratana, Songkasiri, Commins, and Grimley (2009) stated that the last two trends tend to be considered as gains for the source countries as the latter benefits from the return of its own skilled-workers. To better understand how people are affected by these three migrations let’s look at the two cases that will show a clear example of brain circulation. The first case will be about brain circulation between developed and developing countries, while the second case will focus specifically on brain circulation in Thailand.

**Context: brain circulation between developed and developing countries**

This context will explain the flow of migration trends by looking at the brain circulation between developed and developing countries as follow;

According to the European education and training systems in the Second decennium of the Lisbon strategy report which was written by professor Idesbald Nicaise, and submitted to the European commission in June 2008, globalization has affected and increased migration flows around the world and specifically brain circulation between developed and developing countries, an example is the brain circulation between UK and India, they are impacted by brain circulation on areas like economic growth and education development though exchange in people’s and goods (Nicaise, 2008). The most common situation the people in the developed countries are used to see migrant workers from the developing countries as “poor and low-skilled immigrants. Thus, it’s attracted by European welfare states” in order to increase their standard of living.
In recent years, Tansel and Güngör (2003) emphasized that the change have shown that “another face of migration” exists which is the brain circulation of “young high-skilled workers” fleeing their developing countries and heading to developed European countries in order to be professionally recognized. It seems therefore that this phenomenon is overcoming the problems caused by the aging workforce that Europe is suffering from.

Saleem and Azad (1994) point out that as a consequence, the brain circulation between developed and developing countries are creating a positive response to both sides and have changed the past phenomenon called Brain Circulation where both developed countries and developing countries are gaining though the changes in migration trends mentioned above.

Context: the specific case of Thailand brain circulation

The context in this case will focus on brain circulation in Thailand to compare Thailand with other Asian countries as follows;

Thailand, a South-East Asian country which seems to be less suffering from brain circulation than other countries like Taiwan or South Korea. Thailand still depends on the country’s ability to recognize and monitor its skilled workforce in the future. Thailand will be -or not- benefiting from this global phenomenon on the educational level, depends on how Thailand will be able to keep skilled workforce, the ability of Thailand to develop long term educational planning will be key to Thailand success in educational level, as many skilled workforce are interest in teaching in Thailand, but it seems that Thailand cannot keep the skilled workforce, as other countries give them better income and benefits, causing problem to Thailand losing skilled workforce to other countries. As explained in the article mentioned above, “Thailand is potentially vulnerable to the detrimental effects of brain drain as it cannot produce enough tertiary-educated researchers to fill the country’s needs”. But on the other hand, it seems that Thailand can be a receiving country of Brain Drain benefiting from developed countries’ brains since “developed countries are often the providers of tertiary education, with developing countries making up one of their major markets” this all support that for Thailand to benefit from brain circulation Thailand must have clear strategies to keep skilled workforce, as the country have the possibility to benefit from the global phenomenon of brain circulation, that is also why the researcher focuses in this article on brain circulation, as brain circulation phenomenon impact all counties.

In short, Thailand is benefiting from brain circulation as it is true that Thailand is losing some of their own national skilled workforce but Thailand is gaining at the same time high-skilled workers from developed countries especially in the field of education by employing western-educated professors.

Looking at the two cases and examples given, it seems to be clear that people’s perception of brain circulation has changed from past to present. Therefore, in part three, the researcher will focus on the reasons ‘why knowledge-workforce moves?’ affecting modern day migration and brain circulation.
Part 3: Why knowledge-workforce moves?

The researcher has found a very interesting academic article related to brain gain and brain drain, it shows the people’s 21st century perception on brain circulation. The academic article is entitled “the determinants of brain drain in developing countries” by Ngoma and Ismail (2013), international journal of social economics. This article reflects the fact that internal/external economic factors have consequences on brain drain and brain gain on the globalized world.

In Ngoma and Ismail (2013) research it was stated that the determinants of brain drain in developing Countries refer to skilled workers migrating for three economic reasons which are wage difference, income difference and other benefits. This causes a negative impact on the countries that are drained and benefit the countries that gain. It makes the researcher wonder whether brain gain benefits only rich developed countries or people in poor developing countries also gain from this phenomenon. After learning that capital (money) is the key reason for migration, the researcher became interested in how economy has influenced brain circulation in the 21st century and the researcher came to consider the question ‘why knowledge-workforce moves’ and understood that it could be because of these three economic benefits, therefore to determine whether these three economic benefits have an effect on the migration of knowledge workforce, the researcher will examine these three economic reasons one by one as explained next.

3.1. Wage difference

According to Sjaastad (1962) and Todaro (1969), it was emphasized that expected income differentiation as being the main driver of migration; this is due to the fact that people are influence by the difference in wage. In business there is a saying that goes by ‘money talk’ meaning that if people work and don’t get paid the way people are expecting, but another workplace does pay what people want, many people would likely move. This phenomenon of migration is true on a local level as it is on a larger-global scale.

Chapman (2001) emphasized that in Australia, 25 per cent of academic researchers salary has declined relative to the average of the weekly ordinary-time earnings between 1984 and 2001, causing some workers to migrate and work in other places. This statement shows that people in the 21st century seem to have more obtains than they used to in the past. When things start to turn worse in one place, people suddenly have more possibilities to migrate and live somewhere else as it is shown in the case of Australian academic research: As their salary keeps decreasing, many are likely to be dissatisfied and move to other places or countries that can provide better opportunity for them. This type of problem causes home countries to lose their skilled workforce (brain drain) and to benefit from (brain gain) skilled workforce, returning from abroad.

Stephan (1996) indicated that higher earnings of workers may be available only if the worker ceases to move away from home to gain a higher salary upon doing work that one prefers less, in this case, a potential destination country could offer an unambiguously higher lifetime earnings stream, and with less volatility. This may be enough to dissuade them to move/migrate, but still not all people will be attached to migrate due to the difference in wage
as there are other factors that push people to leave. In short, salary and income decrease is not the only factor to take into account when it came to migration and brain circulation.

3.2. Income difference

Haour (2001) research conveys that locations such as Silicon Valley have attracted workers throughout the world precisely because they are unusual in the extent to which they facilitate the market entry of companies built on new ideas:

✓ Locations such as Silicon Valley offer higher incomes because they have an infrastructure of venture capital, and entrepreneurial and managerial training missing in many other locations.

Teece (1986) indicated that complementary assets attracts migrants because it enhances the prospects of achieving higher incomes and, more generally, of allowing creative, inventive talents to be consummated and fulfilled. The income difference can have a high effect on people willingness to migrate enhancing opportunity and possibility to grow. Income difference affects also people decision on the aspect that possibility to growth in business is very important for most families as people desire to have higher income and more comfortable lives, pushing them to migrate. With the new age of entrepreneurship (21st century) people have been pushed more to adapt and make change than ever in human history.

3.3. Other benefits

Hall (1996) researches have indicated that an individual may wish to stay or move to a certain place because that is where the richest interactions with the scholarly community take place and, perhaps, where the best prospects may lie (personal satisfaction). People are more concerned about their working environment than they used to in past and this is probably due to the wider possibilities brought in the 21st century thanks to globalization, traveling and international exchanges.

This brings us to the fact that people are more concerned to have a positive interaction with their colleagues, have a professional environment where they can exchange and share knowledge to one another. Personal satisfaction has played a key role to people’s desire to move or stay at a workplace, money not being the only thing that can keep people anymore.

From the three key factors that affect people to migrate or stay, it seems to be clear that choices are made nowadays mainly related to a person’s personal goals in life, as in the past people did not have the luxury to choose, in the sense that having a choice is a major change between past and present in our societies. It became clear to the researcher that people’s perceptions on brain circulation depends highly on what he or she experiences in life and what they expect to their life time. This shows clearly the complexity of brain circulation as it is closely related to personal feelings, appreciation and attachments.

Conclusion and Recommendations

From the data collected though these articles, documents papers, websites and books. This study shows a wide range of impacts that brain circulation seems to have, the past to the present day in the 21st century.
From this paper the researcher has pointed out some important issues as follows;

✓ The key difference between the past and present brain circulation is that there is no longer a one-way side benefit like it used to be in the past anymore.
✓ This academic article also has shown clearly that economic factors such as wage difference, income difference and other benefits are having an influence on people’s perception on brain circulation and causes them to migrate-or not- because of better economic benefits.
✓ The three migration trends show clearly a shift in the changes from one way traffic in the past (only develop countries gain), to the multiple benefits of brain gain and brain drain in modern day society were both develop countries and developing countries are benefiting from brain gaining and brain drain. In other words; in the 21st century it is clear that developed countries and developing countries are impacted from the global phenomenon of brain circulation in different ways.

Hence, by doing this study it became clear to the researcher that people’s perception of brain circulation differs, and there is more need to focus on this field.

To point out this problem clearer the researcher will give the example of Thailand. The reason there is more specific study needed for Thailand on the impact and effects of brain circulation because:

✓ With the coming of AEC in ASEAN region there are going to be more brain circulation among ASEAN countries (just like it has been in the past in EU), in many fields including education. Unfortunately Thailand does not have enough studies on brain circulation especially on education level. Meaning that Thailand has no specific clear strategies planning on how to keep their high-skilled workforce, as the low wages and high competitiveness on the global market causes the problem that Thai skilled workforce tend to go to other countries, especially USA.

This shows that we cannot exactly know people’s perception of brain circulation, as they may differ. But this study have shown that economic benefits are influencing workforce to migrate, so no matter if the country is a developed or developing country, if one cannot satisfy 21st century people needs and wants your will be losing.

Therefore, the researcher recommend that each person, company or country must set their priorities, who their target market, what their long term planning and where they want to get to. Planning, analyzing, and developing clear strategies are needed to best benefit from the impact of brain circulation in the 21st century.
References


