Master thesis

BRAIN DRAIN CONTROVERSY

Prepared by Oxana Borta
Supervised by Professor Geoffrey Gooch

Linköping University
Department of Management and Economics
Master’s of International and European Relations
oxabo376@student.liu.se

Linköping, Sweden
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This thesis is dedicated to my daughter Roxana
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Abstract

Like many birds, but unlike most other animals, humans are a migratory species. Indeed, migration is as old as humanity itself. Among the features debated within globalization, the international mobility of skilled workers assumes significant importance. Due to the increased transfer of human capital to developed countries, the costs and benefits of the brain drain and gain of talent are hotly debated. As a result, this thesis focuses on the widely acknowledged so-called brain drain controversy. Specifically, the thesis focuses on developments in traditional brain drain literature towards a new shift, claiming the brain gain effect, as an alternative to the brain drain effect that emigration may bring to a source country. The research investigates not only the obvious negative effects – the so called brain drain – but also the possibility of more subtle, indirect beneficial effects.

In doing so, a three generations theoretical debate-framework will be portrayed, along with the implementation of specific methods and methodology used while analyzing the issue. Generally, the findings of this thesis will demonstrate that skilled workers are very important for the development path of their home countries and that their outflow may involve a loss of large amounts of public funds directly and indirectly invested in them. Moreover, from the estimations of the two described and analysed international institutions- the Organization for Economic Co-operation and Development and the World Bank- it seems that the new brain drain literature exaggerates the benefits of the brain drain. So, it appears that this conclusion gives weight to the traditional view of literature arguing that brain drain is harmful for the source country.
The list of acronyms

EU - European Union
ICT - Information and Communications Technology
IMF – International Monetary Fund
IT - Information-technology
FDI – Foreign Direct Investment
GNP - Gross National Product
WB - World Bank
OECD - Organization for Economic Co-operation and Development
ODA - Official Development Aid
PMT – Professional, Managerial and Technical
R&D - Research and Development
SPV - Special Purpose Vehicle
TNC - Trans National Company
USD - United States Dollar
PART 1: Preliminary part

“From each, according to his ability;
to each, according to his need”
---------------------------------------Karl Marx

Chapter I: Introduction

1.1. Background & Problem definition

The migration of highly skilled and professional labor has for an extended period of time been a major concern to developing countries as it is perceived as a “brain drain” and belief a loss of economic potential could result from this\(^2\). Currently, skilled migration represents an increasing concern for developing countries and its consequences have been extensively studied and vigorously debated from the 1960s onward.\(^3\)

According to the Encyclopedia Britannica, the phrase “brain drain” is “the departure of educated or professional people from one country, economic sector, or field for another usually for better pay or living conditions”.\(^4\) The numerous volumes of literature dedicated to the brain drain phenomenon imply many developing nations are concerned and fearful of the negative effects skilled migration may have on their fragile economies. Common wisdom suggests that the migration of people with a high level of human capital is harmful for the country of emigration and has a potentially negative effect on the economy which jeopardizes development programs.\(^5\) Consequently, the ‘brain drain’ phenomenon is usually seen as a zero-sum game, where one party’s gain is presumed to be another’s loss. As a consequence, in identifying the “winning” and “losing” entities, the positive and negative consequences of skilled migration in both sending and receiving countries have consumed social and political policy agendas and intensely debated in academic discussions.\(^6\)

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1 A slogan popularized by Karl Marx (a philosopher, social scientist, historian) in his 1875 “Critique of the Gotha Program”
4 www.britannica.com, 15/09/2006
1.2. Conceptualizing brain drain/brain gain
According to the traditional literature views, the exodus of human capital is something of a curse for developing countries, and policies need to be considered to oppose or reduce its negative impact on the emigration countries, including the taxation of migrants’ income abroad. However, in contemporary theoretical debates, the term brain drain is contrasted with the relatively new term “brain gain” which emerged in the late 1990s. This literature has taken into consideration the benefits of skilled migration including increased trade, remittances, knowledge, capital flows—including Foreign Direct Investment (FDI\(^8\)), and the skills attained by return migrants in the destination country. As a result, brain drain primarily means the spontaneous phenomena accompanying skilled persons’ decisions regarding where to work and live, without being influenced by any policy-makers or state administration, whereas brain gain is concerned with the intentional efforts of different institutions designed to identify and generate benefits from the outflow of skilled people.\(^9\)

1.3. Aim of the study & Research questions
This research is primarily concerned with analysing the brain drain phenomenon as a possible tool of development, which can be considered as a “beneficial brain drain” or “brain gain.” The motivation which encouraged me to explore this subject is the controversial issue of: on the one hand the increasing numbers of skilled workers leaving developing countries for developed countries and the ensuing concept of brain drain, while on the other hand most developing countries have chronic lack of highly skilled professionals who find it very attractive to migrate to the developed countries of Europe, North America, and Oceania\(^1\).
The first task of this thesis is to assess the developments in literature analysing the phenomenon of brain drain (from the traditional to contemporary approaches). In doing so, I will present and evaluate the significance and effects of skilled migration while considering the debates in academic deliberations on brain drain perspectives. This means that a theoretical debate with it’s behind theories will be analysed. The other undertaking is to identify where international organizations judgments about the brain drain issue can be positioned in the brain drain/gain academic debate. Accordingly, the theoretical elucidation of development institutions, like Organization of Economic Cooperation and Development (OECD) and World Bank (WB) will be presented through their official documents. As the study is concluded, I hope to be able to determine which side of the debate/theory is most appropriate for explaining the brain drain phenomena and, in doing so, include the OECD and WB perspectives on the issue. Consequently, the thesis intends to answer the following questions:

- How has the brain drain/gain theoretical debate been contrived?
- Where do the OECD and WB stand in the brain drain/gain debate?

1.4. Theoretical and Empirical literature

This thesis is based on the theoretical literature deriving primarily from academical journals and official documents as sources of data. The journals incorporate the views of different theorists analysing the question of brain drain. I will analyse the views on brain drain from the perspective of authors such as Sullivan, Commander, Schiff, Bhagwati, Moguerou, etc. The principal materials utilised while analysing the position of these authors mentioned will be journals such as the “International Migration Journal”; “Globalization, Societies and Education Journal”; “Journal of Education and Work”; “Journal of Population Economics”; “International Economic Review”; “Higher Education in Europe Journal”; etc. Additionally, I will draw on working papers from the Center for Comparative Immigration Studies. When referring to specific migration theories, I will use date from publications prepared by, for example, Massey, Wallerstein, Brettell, Hollifield, etc. Analytical studies of the brain drain controversy will comprise of a variety of publications concerned with migration issues. In regard to analysing the positions of International Organizations, I will focus on official publications and reports focused on the issue of brain drain and its effects. From the OECD perspective, these are:

1.5. Delimitation & Structure of the thesis
The focus of the study concentrates on the brain drain/gain debate. This entails a theoretical debate outlook and afterwards incorporates the perceptions and ideas of development institutions on the issue. The thesis intends to depict the question of skilled migration from the perspective of developing countries to those which are developed. It should be noted when the research refers to highly skilled migrants it is referring to those who have at least a tertiary-education. In the analytical section of the thesis, two international organizations- the OECD and WB- are utilised as empirical evidence to answer one of the research questions, although the thesis has a more theoretical orientation. These two institutions have been chosen because of their concern towards the brain drain issue, more concretely because of their investigations aimed for finding the brain drain determinants and its outcomes on the sending and receiving countries.

Generally, I focus my attention in this thesis on three main premises: the objectives of the analysis of brain drain, descriptive components, and evaluation. In order to find objectives for a study on brain drain, it is essential to: give a precise concept of brain drain debate and provide a sufficient descriptive frame of it. Mainly, this thesis is divided into three parts. The first is primarily theoretical, the second is descriptive with an analytical combination and the third is analytical.
This section of the thesis has an introductory aim. It intends to outline the issue of the brain drain controversy and to identify its components along with the debates. Before doing so, the aim and research questions which underpinned the research will be presented, along with the adopted methods and methodology.

Chapter 1: Introduction
This chapter has an introductory aim describing the background and the problem definition, followed by the conceptualization of the brain drain/gain issue and its importance. Afterwards, in the next section, I will emphasize the significance of choosing such a topic and the investigation questions will be formulated. Also, delimitations of the study and literature are revealed.

Chapter 2: Method and Methodology
This chapter will illustrate the methodology and method of the thesis. The adopted qualitative methodology is outlined along with its features and critics. Also, the perspectives on theory, ontological and epistemological positions are reflected through a description and a chosen strategy. This chapter also highlights that the thesis is a literature based research.

Chapter 3: Theoretical brain drain/gain controversy
This chapter outlines how the brain drain issue is keenly debated in academic discussions. This chapter looks at the theories supporting the debate and how they evolved and shifted towards a new direction. The debate will be analysed from different theoretical points of view which surround the issue of brain drain along with its potential significance and consequences on the economy of a country.

PART 2: BRAIN DRAIN CONTROVERSY THROUGH INSTITUTIONAL LENSES
The second part of the thesis aims to depict and analyze the idea of brain drain through the lenses of international organizations- the OECD and WB- chiefly how they perceive the role of skilled workers in the brain drain phenomenon and the impacts of brain drain on sending/receiving countries.

Chapter 4: Brain Drain occurrence through OECD’s lenses
Through the OECD’s continuous Reporting System, this chapter defines highly skilled workers, their role for the economy of a country and the determinants of brain drain.
Afterwards, the reports interpret the possible negative and positive impacts of brain drain on the sending/receiving countries. Finally, before concluding the outcomes of reports, some suggestions towards the brain drain problem introduced by OECD are outlined.

**Chapter 5: Brain Drain occurrence through WB’s lenses**

This chapter identifies the World Bank’s perception of the brain drain phenomena. It intends to explain and analyse the official reports and publications where the main reasons and impacts of the outflow of skilled people are identified.

**PART 3: ANALYSING BRAIN DRAIN CONTROVERSY**

This is the final part of the thesis. It intends to analyse the described issue of brain drain controversy, and answer the research questions. Consequently, the analysis will conduct us to the conclusion of this thesis.

**Chapter 6: Analyzing the outcomes of the research**

This division evaluates the findings of the research into brain drain versus brain gain. Initially, from the theoretical standpoint of the debates in the brain drain literature, I will discuss how the brain drain controversy has been contrived. Secondly, from the reports utilised in the thesis I will analyse where the OECD and WB opinions of brain drain occurrence can be positioned in the development of the debate. Finally, among the competing theories discussed, a predominant theory or theories will be discussed from brain drain literature.

**Chapter 7: Conclusion: Back to the brain drain controversy**

This is the final chapter of the thesis. It aims to summarise the main findings and to give my personal opinion about the brain drain/gain debate.
Chapter 2: Method and Methodology

2.1. Qualitative social research
Quantitative and qualitative research can be described as displaying a set of unique but contrasting preoccupations. This thesis will apply a qualitative research methodology. Rather than via quantification, qualitative research concepts and theoretical elaboration emerge out of words in the collection and analysis of data. The reason why a qualitative methodology was selected is that it offers plausible techniques for the analysis of political approaches and behaviors both on people and interest groups within and outside the political arena.\(^\text{13}\)

My ontological and epistemological position is determined by the choice of analyzing the theoretical brain drain/gain controversy and its attitudes in explaining the phenomena. Thus the scheme of this thesis looks in the following way:

Figure 1: The thesis’ elements interaction

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\(^{12}\) Teresa Morris, the director of social work programs at California State University, in “Social Work research methods: Four alternative paradigms”, Sage Publications, 2006

2.2. An epistemological position
Generally, epistemology examines the question of what can be considered as appropriate knowledge about the social world; specifically whether or not principles and procedures of a natural science model of the research process is applicable for the study of the social world. Acceptable knowledge is phenomena that can be defined by our senses and science, and the scientist has to be objective and avoid normative statements. Departing from this, few positions can be affirmed. The philosophical position that states the importance of imitating the natural sciences is known as positivism. Consequently, according to positivism, the principles of natural sciences are the proper approach for social science. An approach that on the contrary of positivism perceives social science as something primarily different from natural science is interpretivism. The notion includes the outlooks of writers who have been critical of the application of the scientific model to the study of the social world and who have been influenced by different rational traditions: like people and their institutions which is different from that of the natural sciences. Interpretative qualitative research’s main task is therefore “to explicate the ways people in particular settings come to understand, account for, take action, and otherwise manage their day-to-day situations.”\textsuperscript{14} That is why qualitative data is concerned with actions which carry with them aims and implications, and lead to consequences. As a result, interpretivism compliments the distinctions between people and the objects of the natural sciences and therefore involves a subjective meaning of social action. When adopting the interpretative epistemology, the researcher admits the interpretations of others and attributes them a scientific framework of ontology, theory and literature of a discipline.\textsuperscript{15} Consequently, the epistemology that corresponds with the qualitative methodology is described as interpretivist and that is the epistemology chosen for this thesis. This position highlights the importance to understand the social world by examining the interpretation of that world by its participants. Consequently, the present research aims to understand the interpretation and meaning of brain drain controversy and what possible effects the process produces.\textsuperscript{16}

\textsuperscript{16} Bryman, A., “Social Research Methods”, 2\textsuperscript{nd} edition, Oxford University press, 2004
2.3. *An ontological position*
Generally questions of social ontology are concerned with the nature of social entities. It can comprise: *objectivism* as the position of social phenomena and their meanings being independent from the social actors; and *constructionism* as an orientation toward social reality that assumes the beliefs and meaning people produce and use essentially create reality. There is no inner essence that causes the reality people see; it is a product of social processes.\(^\text{17}\) The particular ontology of qualitative research\(^\text{18}\) and the one of this thesis is *constructionist*, in the sense that a social phenomena such as brain drain is considered to be the outcome of social interactions, rather than phenomena ‘out there’ and disconnected from those involved in its construction. Thus, the only way the brain drain debate to be understood is to completely and thoroughly comprehend the perceptions, or constructions engaged in that process.

2.4. *The view of theory*
The nature of the relationship between theory and social research for this thesis is an *inductive* study. This strategy has been chosen in order to generate theory from the empirical material. With an inductive attitude, theory is the outcome of research, which is the vise-versa way of deductive strategy and associated more with quantitative methodology. However, in the case of the present issue of brain drain controversy, the inductive process entails a little of deduction. Once the theoretical manifestations have been carried out, additional data was collected from different documents in order to establish under which circumstances the theory holds or not. Bryman calls this strategy *iterative*.\(^\text{19}\) Generally, qualitative researchers have become increasingly involved in the testing of theories and that this is an indication of the growing maturity of the strategy. The previously mentioned can be generalized as that of a qualitative researcher who seeks an understanding of social behavior, values, and beliefs. As a research strategy, qualitative methodology is inductivist, constructionist, and interpretivist.\(^\text{20}\)

\(*\text{ibid, p.10}\)
\(*\text{ibid}\)
2.5. Documents as sources of data
The method used in this study is the collection and qualitative analysis of texts and documents, principally from different official documents deriving and produced by organizations. The method proposes four primary criteria for assessing a qualitative study:

- Authenticity- authorship or the origin of the source genuine;
- Credibility- if the evidence is free from error and distortion;
- Representativeness- the distinctiveness of the evidence;
- Meaning- document’s clarity and comprehensibility.\(^{21}\)

Sources which can not fulfill these criteria’s can also be helpful, particularly because of their errors. For instance this can happen when different facts that derive from private sources vary with those produced by state.\(^{22}\) This investigation is conducted through a secondary analysis and content analysis, meaning that the used evidence could not have been produced at the request of the present research. By doing this, I will use two kinds of documents, both equally important; those that are deriving from theoretical literature and also official documents from international organizations, as well as virtual outputs, such as Internet resources used after analyzing the correspondence with the four criteria mentioned above. I have decided upon this approach of analysis because through an interpretivist perspective documents can be seen as giving important insight into the social senses that underpin social action, and how brain drain literature interprets the phenomena.

2.6. Criticizing Qualitative Methods
Qualitative methods have been criticized, mainly by quantitative researchers, as being too dependent upon the researcher’s often random views about what is important and what is not, and for also being too subjective. Nearby has been also a critic addressed to the qualitative research as to be difficult to replicate. There is also the problem of generalization and that the scope of the findings of qualitative investigations is restricted. It is also increasing claimed to not be transparent, that is, sometimes it is difficult to establish under which circumstances the researcher came to a specific

\(^{22}\) ibid
Finally, there have been criticisms that it does not go far enough in its commitment with participatory methods and practices. But at the same time, compared with quantitative research, qualitative approaches are less codified and less influenced by strict guidelines and directions about how to collect data and analyse it. Instead, a more descriptive meaning is used, outlining the different ways qualitative researchers have gone about research or suggesting optional ways of performing research or analysis based on the writer’s own experiences or those of others.

Chapter 3: Theoretical brain drain/gain controversy

Some centuries ago, the Russian tzar, Ivan the Terrible, sent 17 young people to study abroad who, on their return home, were to bring prosperity and wisdom to Russia. The experiment failed, as none of the young people returned. A similar tactic, used by Peter the Great, in the eighteenth century, proved more successful. Of the 50 people he sent abroad, many returned and later became eminent scientists or admirals.  

Human migration comes from different historical events that define a particular social and economic context. The gap in living standards between the richer economies of the West and those of many developing countries has shaped tempting disparities in wages and is building migration flows of skilled people. Brain drain gained wide usage in the late 1960s as developed countries were attracting skilled personnel. Nowadays it is again a hotly debated issue as skilled migration flows have considerably increased, partly as effect of explicit poaching policies. Skilled individuals are attracted to Western countries by higher salaries, better working conditions, stability and political freedom, and improved educational prospects for their children. Another attractive factor for the emigrants is the rapid development of the Research and Development (R&D) sector in Western countries. Trade policies that hasten the globalization of goods and services also enhance the international migration of skilled people from less-developed nations to industrialized nations. Consequently, the global brain drain generally increases as the globalization process accelerates.

There are decades of economic literature estimating the development and global effects of the brain drain. Nowadays, contemporary literature refers to the term brain drain as the phenomenon whereby a country endures an outflow of its educated individuals, on a

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26 Joseph Joubert, a French essayist, in “The Notebooks of Joseph Joubert”, Edited and Translated by Paul Auster Published by North Point Press/SF, 1983
degree threatening the needs of national development in the long term. Conversely the opposite term, brain gain, is relatively new; it was invented in the 1990s to perceive the financial benefits and collectively the attempts, efforts, programmes and projects designed to draw positive externalities from brain drain.\textsuperscript{30} As a result, two camps of the literature on brain drain persist. From the traditional side, brain drain impairs developing nations, because highly-educated persons and the benefits they bring to society leave. And another side of the brain-drain literature, termed the “brain-gain” literature, contends that there are beneficial outcomes from the migration of skilled professionals.\textsuperscript{31} Following this, the brain drain controversy is raging at both political and theoretical levels: who wins, who loses and how much? Before describing the debate, I will first of all introduce some concepts which will ease the understanding of brain drain controversy.

3.1. Developing countries profile and human capital as a mean of development
In order to understand more comprehensibly the idea of the brain drain occurrence, this section first of all will present a general view of developing countries profile. Afterwards through Human capital theory’ lenses, I will present why highly-educated persons are so important for the economy of a country.

Developing countries witness certain similarities concerning features associated with economic development, one of which is vulnerability of the economy. This is conceivably the main grounds of increased emigration in the recent past. Merging debt burden with sluggish economic growth and few opportunities for both rural and urban employment has forced them to move to developed countries.\textsuperscript{32} This is due to the fact that economies became vulnerable to changes in the world market due to the structural inequality. Persisting situation of the acute balance of payment deficit, high external debt burden, declining terms of trade, increasing costs of imports, growing poverty and the International Monetary Fund/World Bank supported programmes of economic restructuring, liberalization and adjustment, have pushed for further migratory

\textsuperscript{31} Maurice Schiff, “Brain Gain: Claims about Its Size and Impact on Welfare and Growth Are Greatly Exaggerated”, May 2005, Discussion Paper No. 1599, Germany, ftp://repec.iza.org/, 03/09/06
aspirations. The question is how a country can shift from the developing path to a more developed one?

In 1776 in “The Wealth of Nations” Adam Smith originated the basis of what was later to turn into the science of human capital. Over the next two centuries, first of the two schools distinguished between the obtained capacities that were ordered as capital and the human beings themselves, who were not capital. A second school of thought maintained that human beings themselves were capital. Human Capital Theory has been re-theorized under as primarily an economic device. It is considered to be the most influential economic theory of Western education, setting the framework of government policies since the early 1960's. It was seen increasingly as a key determinant of economic performance. The focus in determining the economic performance has been to adopt a notion of individuals as human capital and various economic metaphors such as ‘technological change’, ‘research’, ‘innovation’, ‘productivity’, ‘education’, and ‘competitiveness’. In modern Human Capital Theory all human behavior is found on the economic self-interest of individuals working within liberally competitive markets. Other forms of behavior are excluded or treated as alterations of the model.

However, this theory has been criticized as having a poor notion of capital. It is incapable to realize human activity other than as the barter of commodities and the notion of capital employed is purely a quantitative one. Moreover, capital is a free social force where the creation of social value comes during its capital formation and constant alteration through the circulation of commodities.

3.2. Workers’ aspirations as determinants of migration

According to Anna Ferro, the traditional push-pull framework specifies a number of factors shaping international skilled migration as a result of a globalizing economy. The

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33 Afolayan, A., A., 2001
determining factors of migration have traditionally been oriented to social, economic and political aspects from a macro-sociological perspective. An important contribution comes from economic theories on migration pressure between wanting to migrate and actually migrating. Straubhaar characterizes migration pressure as a part of migration potential not realised because of restrictions imposed by immigration countries. When deciding to migrate, potential migrants consider and evaluate various conditions, like: dissatisfaction with his/her present economic, family, political or social conditions compared with the expected situation in other countries, based on information from personal experiences (travel, study abroad) or from other sources (friends, the mass media, books); the conviction that personal improvements and the fulfillment of aspirations are very unlikely to be accomplished in the country of origin; and the idea that desires concerning one’s personal, social and economic situation could be fulfilled in another country. Through a process of anticipatory socialization, the potential migrant is believed to have knowledge of lifestyles, values and information, to know the practical possibilities for migration and the entry regulations and to weigh up all the benefits against the costs of migration. Consequently, all these aspects of migrant’s considerations to migrate are a combination of push and pull elements articulated at a personal, family, social and economic level.

Massey presents and evaluates theories that have been forth to explain the social, economic, and political forces that drive and perpetuate international migration around the world. Given the fact that theories are looking on the causes of migration from different levels of analysis - individual, household, national, and international – they cannot be assumed, a priori, to be inherently incompatible. However, according to Massey, the leading theoretical treatment of the forces that promote emigration from developing countries is World Systems theory describing how flows of capital, goods, and labors fit together and are interlinked. It doesn’t see migration as the consequence of the characteristics of individual economies, but as a result of dramatic influence of the capitalist penetration of rich economies into poor, creating a total world system. In the

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38 Straubhaar, T., “Migration pressure”, International Migration, 1993, 31(1), 5–41
39 Anna Ferro, 2006
poor countries, such penetration destroys traditional sources of income and simultaneously creates a pool of mobile labor, part of which is driven to migrate internationally. Capitalist expansion facilitates such flows by developing communication and transport links.\footnote{Stalker, P., “Workers without frontiers: the impact of globalization on international migration”, Lynne Rienner Publishers, UK, 2000}

### 3.3. Traditional view of the brain drain phenomena

Up till recently, according to development and migration theories, the brain drain from developing countries had almost exclusively negative impacts on the development path of the source country. By modernization theory as well as by dependence theory this “brain drain” is considered to be one of the most important causes of the under-development in the source countries.\footnote{Uwe Hunger, January 2002}

The accumulation of human capital is especially relevant to developing countries that need to catch up. The brain drain condenses economic growth during the reduction of a source country’s human capital assets, and also through unrecompensed investments in education.\footnote{Cătălina Andreea Pânescu, “Brain Drain and Brain Gain: A New Perspective on Highly Skilled Migration”, Diplomatic Academy, Ministry of Foreign Affairs, Bucharest, 2003, http://www.cenpo.ro/files/10/10/2006} The consequences of emigration can not only siphon off excess of workers, deprive sending countries of people they actually require, but it can also deprive a country from the economic growth. Consequently, while it may be beneficial for the individuals, this “brain drain” signifies a considerable loss to countries that have invested in workers training and skills. Moreover, it goes without doubt that the migration of science professionals and other specialists is profitable for destination countries. The estimated losses of the source country are that, given the educational expenses incurred, the country of origin gets fewer specialists than it would if not for brain drain. These relative losses are aggravated by a selection process whereby people whose level of education is relatively high choose to emigrate.\footnote{Stalker, P., 2000}

### 3.4. Brain Gain hypothesis

The basic idea of the “brain gain” hypothesis suggests that intellectual and technical elites from the developing countries who immigrated to an industrialized country
represent a potential resource for the socioeconomic development of their home country. This hypothesis predicts long-term positive effects in case of a return or network building processes of the emigrated highly educated elites. In addition, the new hypothesis attempts to show how brain drain can be transformed into a long-term brain gain for the developing country. As a result, “brain drain” is not seen as the end of a negative development that intensifies the economic and social crises of developing countries. Instead, it can be considered a transitory stage within a long-term process with the option of a final resource profit for the developing country.

According to Uwe Hunger, the “brain gain” hypothesis is supported on two basic hypotheses: - Firstly: skilled workers from developing countries that immigrated to a developed nations can play an important role in the development course of their origin country through return migration and/or transnational networks (shortly: remigration). - Secondly: It is possible to give the emigrated skilled workers of developing country adequate motivations to emigrate even if they have already been living abroad for a long time and have not yet built up any productive contact to their country of origin. Policy makers can on purpose start and amplify the positive development impulse of remigration mentioned in the first hypothesis.

Following the “brain gain” hypothesis, every “brain drain” is a potential “brain gain”. However, the decisive question is how this can be realized in concrete. Recent investigations of brain drain suggest that, a first step would be to evaluate the potential and the quality of the “brain drain” population of a developing country. Secondly, is to assess the potential of the developing country to motivate and induce its Diaspora to return home and/or to build up transnational networks.

3.5. Assessing brain drain/gain academic debate
The issue of impacts of brain drain on the home-country is debatable and complex. Like a triangular relation between countries of origin, countries of reception and the migrants themselves, it is useful to bridge the separation which has traditionally been established

45 Uwe Hunger, January 2002
46 ibid
47 ibid
48 ibid
between those objects of study. One constructive approach to understand the effects of migration on sending and receiving countries is to relate the consequences of migration to its determinants, and also to relate to the causes of migration and its continuation. As the “first question, once answered, will help to answer the next”. This debate is fundamentally about property rights. As human beings cannot legally be bought and sold, the problem for those who have paid for the education of the highly skilled workers is to secure the returns from their investment. Having invested in the education of its citizens, a country can consider that another country who recruits them is guilty of poaching.

Given the paucity of theorizing about the politics of international migration, it is therefore not surprising that migration theory tends to be dominated by economic or sociological explanations focused in their units of analysis on different questions of the labor market in the receiving society or the economy of a sending society. These produce different bodies of theory about dual and segmented labor markets, about aggregate income and income distribution, about the impact of capitalist development, about the implications of emigrant remittances, or about global cities. Following this, the brain drain/gain controversy is influenced by different theoretical contemplations supporting the arguments of the debate.

3.6. Three generations of the brain drain controversy

This section will present the development process of the brain drain controversy, outlining its supportive theories arguing about the effects of the brain drain occurrence. At the same time I will present arguments debating these theoretical assumptions of the mentioned period.

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50 Sullivan, J., ”Poaching the best talent worldwide: tools and approaches ranging from aggressive to passive”, Journal of Corporate Recruiting Leadership, 21, November 2005
3.6.1. *First generation from the 1960s to the 1968th: The debate between Don Pantinkin and Harry Johnson; and the neoclassical growth model of the “laissez passer…”*

It is considered that the first anthologies on the brain drain debate were developed in 1968 between Don Pantinkin and Harry Johnson.\(^{52}\)

Don Pantinkin’s nationalist model supports the protective and restrictive labor and migration policies, from preserving domestic jobs for natives to preventing the outflow of home-trained skilled workers. Their premise is that each nation must create and use its own human capital and the flight of any resources, especially human capital, hinders the capacity of the nation state to safeguard its economic and political stability and well-being. Nationalists criticize the selectiveness of recipient countries as a mechanism that perpetuates the problem by filtering out skilled labor from a source country. This perspective is based on a key statement that producing highly skilled personnel is expensive and usually financed substantially by public funds; thus countries attracting skilled workers are blamed of poaching brain power.\(^{53}\)

As opposing the nationalist protectionist view of the sending countries, Harry Johnson’s “Internationalist” Model also referred to as the world or cosmopolitan model; distinguish the brain drain as a reciprocally positive exchange of human and fiscal capital in a contemporary global labor market. Proponents of this model believe that human beings intentionally seek the highest rewards corresponding with their education and training, and the trend reflects voluntary choices made by migrants. This perspective believes that, all things being equal, migration will be based on the demand and supply forces in the labor market and how well a worker can take benefit of or use acquired skills. Internationalists argue that the negative effects observed, if any, are temporary that the brain drain is likely to cause economic losses in the short run until replacements for the emigrants can be trained. However, one of the losses recognized by internationalists is the loss in tax revenue to the government from these professionals, who would have been getting relatively high salaries. Here Johnson suggests that it is required a service or a tax paid by the receiving country or employer, but it would be less in the liberal spirit and would be problematic to enforce internationally. So, it is up to origin country to make it

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53 ibid
attractive for their skilled workers to stay rather than to expect host countries to pay subsidies or compensation for people who on their own decide to emigrate. The internationalist viewpoint states that losses faced by the society at large from the brain drain occurrence, are not significantly detrimental. Accordingly, losses must exceed the private gain to the migrant and the country of immigration.\(^\text{54}\)

The contrastive Don Pantinkin’s nationalist model attacks internationalist model by arguing that in practice it is used to support the right of out-migration more than the right of in-migration. It is used to attack countries trying to limit who leaves; it is less often used to attack countries trying to limit who is coming in, which is taken as the correct exercise of national sovereignty.\(^\text{55}\)

Additionally, in order to prove that skilled workers migration is good not only for the world at large, but also for both sending and receiving countries, the theoretical cosmopolitan model of reference proposed by Grubel and Scott during the first wave of the brain drain debate supposes the immobility of physical capital and the absence of externalities.\(^\text{56}\) According to these assumptions, an emigrant takes with him all his marginal contribution to the total product of the source country, and if the emigrant’s human capital is higher than the average capital per capita of the source country, then the GNP and per capita income will be lowered, but not the individual earnings of its residents. Consequently the outflow of skilled worker will contribute to the optimal distribution of capital and raise the overall level of welfare of source and destination country. Moreover, Grubel and Scott maintain that the source country can benefit from feedback effects (remittances, and technological transfers if they come back) and from a beneficial spill-over result: free access to the new knowledge co-produced in destination’s research countries by highly skilled natives and immigrants.\(^\text{57}\) In a nutshell, till domestic wages did not increase as an answer of the shift in labour supply, there


\(^{55}\) Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006


\(^{57}\) ibid
is no welfare impact from brain drain on those left behind.\textsuperscript{58} According to Grubel and Scott the world income should be higher with mobile human capital and marginal productivity will tend to balance, thus the policy conclusion is neoclassical growth model “laissez passer” viewing the human capital as a factor of production.\textsuperscript{59}

\textbf{3.6.2. Second generation of the brain drain controversy from the 1970s to the 1990s: Towards a negative Brain Drain?}

Generally, this period hold the view that the outflow of skilled people generates huge disruption in the sending country, especially; remittances sent by migrants could lead to dependency syndrome. And when migration of skilled workers occurs, the gap between poor sending countries and rich receiving countries could be enhanced.\textsuperscript{60}

World Systems Theory emerged as a second line of historical-structural theory and drew on the work of the dependency theorists. Through his theory, Wallerstein aims to clarify why modernization had such widespread and different effects on the world. In essence, world systems theory instead of perceiving migration as the result of the characteristics of individual economies ascribes it to the penetration of capitalist economic relations into non-capitalist or pre-capitalist societies.\textsuperscript{61} At first, neither world system nor dependency theory was interested in international migration. But in the late 1970s, the position changed dramatically when various “guests” were not going back home. One particular concern of these theorists was their interest with the “brain drain.” They argued that the emigration of skilled and educated workers certainly damaged the prospects for development in poor countries by depriving them of essential human capital. They attributed to it as another symptom of the unequal terms of trade between developed and developing countries and one more means by which global capitalism developed underdevelopment. By poaching and recruiting, the most fruitful workers from developing countries, core nations drained off an important resource for future economic


\textsuperscript{60} Daniele Joly, “Some structural effects of Migration on Receiving and Sending Countries”, Integration Migration, Vol.38(5), 2000

prosperity. Worse than that, the brain drain in fact was a subsidy of wealthy nations by the poor because the last ones covered the costs of feeding, clothing, educating, and maintaining the emigrants until they reached productive age.\textsuperscript{62}

Scholars like Bhagwati and Hamada, Bhagwati and Rodriguez were the first worried about the possible effects that brain drain could exert on welfare and growth on the source economy.\textsuperscript{63} They studied a general equilibrium framework and emphasized on the welfare implications of skilled migration for those who were remained in the source country. They suggested that the brain drain might have detrimental consequences for developing countries as a result of the introduced two sets of alterations, the first related to the wage setting and the second to the financing of education. Further negative impacts, despite the loss of fiscal revenues, for sending countries, consist of the loss of initial educational investments or the increasing weakness of the science sector as consequences of the outflow of qualified workers. As a solution to the problem, Bhagwati and Hamada advise the implementation of policies to tax brain drain or to adopt more neoliberal reforms.\textsuperscript{64}

\textbf{Neoliberal thought.} For numerous reasons, human capital is significant to a nation’s development. Human capital expenditures, like education and health care, raise earnings and improve health over a person’s lifetime. All these assets are important to the economy of a country because, these expenditures cannot be taken away from an individual’s knowledge, skills, health or values like it can be done with financial and physical assets. In the case of brain drain occurrence, investments in the education travel with skilled individuals. Therefore, the global brain drain compounds the confrontations faced by less-developed countries in raising the human capital level of their citizens. According to Eleanor Cambridge, besides the financial concerns, skilled-labor emigration raises significant social costs, in the sense that it eradicates the stabilizing political

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influence of the middle class.\textsuperscript{65} If brain drain happens permanently and rapidly, it removes institutional memory in developing nations. Skilled-labor emigration leaves fewer workers to pay taxes, fill pension accounts, or look after the elderly. For instance, World Bank and IMF, in the name of neoliberal economic philosophy, implemented a concrete set of education spending reforms as a condition of receiving loans. Developing nations have to reduce their general spending on education or healthcare and refocus the remaining spending on primary education; this as a result will lower rates of brain drain. These Neoliberal reforms are often perceived as a mechanism of globalization; and that nations by adopting these reforms will become more integrated into the global economy. On the one hand, the overall effects of these reforms on developing nations are still questioned, and significant questions remain as to if the Neoliberal and structural adjustment policies of the World Bank and the IMF create a net negative or positive impact on the developing world. On the other hand, according to recent developments, developing nations that adopted Neoliberal reforms in education spending have correlated to a reduction in brain drain than their peers. This means that rising the effectiveness and consistency of primary education decreases the pressure on skilled individuals to migrate to industrialized states.\textsuperscript{66}

The negative impact of the brain drain has also been stressed in the Neo-classical Growth literature, mainly in its endogenous version, affirming that the size and the quality of endogenous factors, e.g. the human capital stock, correlate positively with the main forces behind a self-sustaining economic growth. This is the theoretical basis of the new ‘knowledge economy’ doctrine. For this doctrine to develop, however, a critical accumulation of human capital is necessary where the role of the state is to promote and restore economic growth. Here the “brain drain” occurrence is based on the premise that the migration of the “brightest brains” of a developing country has negative impacts on its socioeconomic development.\textsuperscript{67} As a consequence, a brain drain would increase the already high stock of destination country and reduce the stock of source country under

\textsuperscript{66} ibid
\textsuperscript{67} Uwe Hunger, The “\textit{Brain Gain}” Hypothesis: Third-World Elites in Industrialized Countries and Socioeconomic Development in their Home Country”, University of Muenster, Germany Visiting Fellow, Center for Comparative Immigration Studies, Working Paper 47, January 2002
the requested threshold would induce deviating growth paths, and possibly lead it into a ‘poverty trap’. The suggestion here is that a nationalist protectionist policy is necessary from the source side and/or compensation from destination country’s side. Another solution for the brain drain source country is to accumulate human capital at a high enough rate to maintain (or increase) its stock notwithstanding emigration by a higher level of public expenditure for education, but the boomerang result can be that it will generate more migration. Migration opportunities increase the expected return to education and so encourage more people to invest in education. If this incentive effect results in more skill-creation than skill-loss, then emigration will provide for the sending nation with a net brain gain.

Consequently, on the one side, brain drain is explicitly reducing human capital, which seems to be a loss of welfare for the remaining population because of the loss of scarce skills. This model of the growth theory mentions that the reductions in the average level of human capital has, without doubt, negative slow effects on economic growth. Furthermore, brain drain implies different growth trajectories between rich and poor countries. On the other side, receiving countries are benefiting from increased knowledge gains from highly skilled immigrants as positive technological externalities of immigration arise by the additional human capital that is available to the host economy. The recent arguments, mainly, the “brain gain” hypothesis, overturns this conclusion and deduces that through a remigration of elites the human capital stock increases and so does the potential growth of the developing country. This doesn’t mean that human capital stock is increased from the brain drain process but it means that an additional qualitative gain is acquired through the knowledge gathered by living in an industrialized country. This assumption acknowledges in the case of the remigration brain drain acts positively to the development process of the source country. Moreover, it is not only assumed that the human capital is increased by the remigration of the elites, but also that financial capital transfers into the developing country are likely. This argument was supported by

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findings of migration research, that well educated migrants are able to accomplish positions of high status in industrial societies which permit them to accumulate capital. Consequently, financial capital is mainly transferred through remittances from the migrants to their families and friends in the home country. This view of theory, assumes that returned migrants will probably invest their capital with advanced economic know-how that they have gained in the industrialized country. Besides, it is possible, that capital can be invested more successfully by returned migrants than by local elites who were not able to increase their human and financial capital abroad. If the human and financial capital is also a third form of capital, the so-called social capital, can be increased in the developing country through the remigration of elites. The proponents of new brain drain literature argue that remigrating entrepreneurs, for example, can provide access to the markets in industrialized countries, which is essential for economic success. Scientists can build up co-operations with leading research centers in industrialized countries. All these relations can be useful, to open new investment ways for the developing country. In this case remigrating elites would function as “bridge-heads” between developed and developing world. Thus, developing countries can create incentives to attract the emigrated elites and incorporate them in the development process. This statement seems to be the most serious objection to the “brain gain” hypothesis.

However, the proponents of the traditional view of brain drain literature, or those supporting the idea of a negative brain drain influence, conclude that the assumption of remigrating functioning as “bridge-heads” between developed and developing world is theoretically and empirically improbable that emigrated elites will return from a developed country, especially if they have achieved a standard of living abroad that is more advanced comparing to the usual standard of living in their home country. Here, the migration of elites has been seen as an irreversible loss for the developing country.

Still, the “brain gain” hypothesis is debating this conclusion, instead it supports the opposing assumption: it is theoretically possible and in reality achievable for developing

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72 ibid
73 ibid
countries, to attract their elites from abroad and to incorporate them in the development process. This statement is based on models which affirm that inequalities of living standards in developing and industrialized countries result in strong pull- and push-factors for talented and educated people, to leave the poor country and start a new life in a rich country.\(^{74}\)

### 3.6.3. **Third generation of the brain drain controversy—from 1990s and beyond:**

*Towards a beneficial brain drain?*

Regardless that the traditional brain drain view strongly persisted, it has been challenged in a range of theoretical documents researching the impact of migration prospects on human capital formation within a context of uncertainty. The new brain drain literature underlines that the outflow of skilled persons may give important inputs to new business and activities in their home countries through networks or remittances.\(^{75}\) Consequently, there are two growth effects distinguished. First, an ex ante “brain effect”, when migration prospects foster investments in education because of higher returns abroad; and second, is an ex post “drain effect” caused by the actual migration flows. A brain gain emerges when the first effect dominates, i.e., when the regular level of human capital is higher in the economy opened to migrations than in the closed economy.\(^{76}\)

In order to assess the validity of the brain gain hypothesis, Cătălina Andreea Pănescu in her article, when analyzing the brain drain effects, used two potential channels for a brain gain, namely: an *ex ante gain* conditioned by informational asymmetries and an *ex-post gain* through scientific diaspora networks, trying to set them against a sound theoretical foundation. She stresses that according to recent studies, there are some incentives in reversing brain drain in a brain gain. The key idea is that under uncertainty about migration part of the additional human capital accumulated might constitute a brain gain for the home country. As the significance of theoretical models she follows her research with an empirical analysis, aims at testing the brain gain theoretical assumptions.

\(^{74}\) Uwe Hunger, “The “Brain Gain” Hypothesis: Third-World Elites in Industrialized Countries and Socioeconomic Development in their Home Country”, University of Muenster, Germany Visiting Fellow, Center for Comparative Immigration Studies, Working Paper 47, January 2002


Looking at the hypothesis of a brain gain, Pânescu starts by explaining the role of human capital in the new endogenous growth approach.\textsuperscript{77} So, Pânescu finds more types of knowledge networks among which intellectual/scientific diaspora networks have as precise aim the positive impact on the development of the origin country. These networks are a lot dependent on the Internet and act in various joint developmental projects with government agencies and private and non-profit organizations at home. Mainly, their activities are research projects, technology transfer and expert consulting, training courses and bringing foreign based companies in the home country. After migration occurred, because the highly skilled expatriates share the same social capital with their co-nationals, there is an important potential for effective links and involvement in developmental projects.\textsuperscript{78}

The new endogenous growth theory. In the contrast with the first line of endogenous growth theory, the second wave has taken into consideration a beneficial brain drain even for sending countries. Here, human capital accumulation is approached not only as an individual, but also as a social activity because of the positive spillovers it generates. The focal point supporting the convergence hypothesis of neoclassical theory is the decreasing marginal product of capital. With a stable marginal product of capital however, there is no steady state level thus ruling out the idea of convergence. To explain this, the new endogenous growth theory adopts a broader concept of capital: physical capital and human capital are seen as corresponding inputs into production. It no longer considers fixed the other form of capital in the calculation of the marginal product so that they create a virtuous circle.\textsuperscript{79}

Following this, the new assumptions of new endogenous growth theory are debated by the traditional view proponents. In spite of the fact that the new endogenous growth theory is a step forward in recognizing the importance of human capital, the view it offers is still very limited. Skill asset is reflected like any other production process and skill itself as a form of physical capital in a personal advance that ignores the social underpinning of an economy. Nonetheless human capital is not an aggregate like physical

\textsuperscript{78} ibid
\textsuperscript{79} ibid
capital, but a structure with complex interactive links and spillovers between its components.\textsuperscript{80}

We can see that some possible benefits of brain drain for the source countries are hotly debated. In the same new endogenous growth theoretical frame of mind, Miyagiwa measured scale economies in advanced education and confirmed that brain drain may raise the education and income levels of the source country.\textsuperscript{81} Mountford demonstrated that, when migration is not a persistent process, brain drain may raise average productivity in the source economy.\textsuperscript{82} Mountford also promoted the idea of a beneficial brain drain via the incentives for education. People opt to educate themselves more in order to become appropriate for migration, and then to have access to the higher returns of the foreign labour market. He explained that, if to prohibit the migration of some skilled workers; the motivation effect linked to the higher wages available abroad may promote human capital accumulation in the home country and may counterbalance the negative effect of the brain drain.\textsuperscript{83} Accordingly, if not to allow all skilled workers to migrate, the gains in total human capital accumulation produced by these incentives may balance the human capital loss represented by the actual brain drain. Thus, brain drain might be beneficial for growth and welfare in the sending country. Mountford also in his studying is criticizing and overturns the assumptions of Haque and Kim who argued that under standard assumptions on the human capital accumulation function, a brain drain always reduces per-capita income.\textsuperscript{84} Stark et al. concluded that brain drain can bring the source country to a higher average level of human capital per worker.\textsuperscript{85} The same conclusion of a beneficial brain drain was followed by Beine et al after using the data from 36 OECD countries.\textsuperscript{86}

\textsuperscript{80} Uwe Hunger, The “\textit{Brain Gain” Hypothesis: Third-World Elites in Industrialized Countries and Socioeconomic Development in their Home Country}”, University of Muenster, Germany Visiting Fellow, Center for Comparative Immigration Studies, Working Paper 47, January 2002


\textsuperscript{83} ibid

\textsuperscript{84} ibid


Regardless that many theorists opt for the beneficial brain drain estimated above, Donald Lien and Yan Wang describe that, brain gains seem to be more reasonable for developed countries while brain drains succeed in developing countries. The article shows that a migration prospect may lead the origin country to a worse human capital level formation and thus a lower social welfare. In 2004, Mariani, concludes that if temporary, brain drain is expected to encourage human capital formation only if human capital is quite equally distributed.\(^\text{87}\) If lasting, however human capital flight is depressing the average income of the source country.\(^\text{88}\)

Also, Maurice Schiff, the lead economist in the International Trade Unit at the World Bank, is critical of the brain gain view of theory, claiming that the brain-gain remittance economy does not replace the value of human capital lost to emigration.\(^\text{89}\) Schiff contradicts the “new brain drain” literature saying that “these claims are exaggerated”. He finds that “the impact of the brain drain on welfare and growth is likely to be significantly smaller, and the likelihood of a negative impact on welfare and growth significantly greater than reported in that literature, because various negative effects of the brain gain on human capital, welfare and growth have not been taken into account”.\(^\text{90}\)

He observes that in the process of migration both the origin and receiving community suffer a negative externality in social capital, as in both receiving and sending countries social capital depends negatively on level of migration. Consequently, according to Schiff, “brain drain,” or loss of human capital, weakens the progress of less-developed nations and slow downs their ability to compete in the global marketplace.\(^\text{91}\)


\(^{89}\) Schiff, M., “Brain Gain: Claims about its Size and Impact on Welfare and Growth Are greatly exaggerated”, IZA Discussion paper No.1599, May 2005, p.3-4

\(^{90}\) ibid

\(^{91}\) Schiff, M., May 2005
3.7. Conclusion

The idea of this chapter was to explore the developmental implications of skilled migration through the persistent academic debate. From the start, I presented theories like human capital theory explaining why skilled workers are so important for the economy of a country; afterwards a theoretical outlook has viewed the determinants of skilled migration. Following the debate, in principle, most theories about the ‘brain drain’ have measured the advantages and disadvantages of this occurrence with respect to the triangular interaction between sending countries, the receiving destinations and the migrants themselves. Besides to the direct human capital loss with its corresponding detrimental growth effect, I have outlined channels for beneficial effects of brain drain. It can be seen that the global effect of migration on growth is not proved yet and, in order to analyze brain drain effects the point of departure should be human capital transferability across countries and observables of human capital itself.

Generally, traditional “brain drain” literature maintains that the emigration of skilled workers is clarified with an overweight of incentives for a life in an industrialized country and/or negative conditions in the developing country. The “brain gain” literature states that these circumstances are reversible. A return of emigrated elites and/or the building of transnational networks are expected if the pro-arguments for a return into the origin country and/or the counter-arguments for a stay in the industrialized country prevail and the migrant therefore benefits from remigration. Once remigration has started and networks have been established, further remigrations are likely to follow.  

Actually, traditional brain drain and brain gain coexist with international mobility. And it seems unsure if brain drain occurrence may be understood as being permanent and irreversible emigration and may have detrimental impacts on source countries. Even if some authors deny the concept of return as it indicates the closure of a migration cycle, a gain might be still accepted if there are knowledge interactions with the home country.

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PART 2: Brain drain controversy through institutional lenses

“Distinctions must be kept in mind between quantity and quality of growth, between its costs and return, and between the short and the long run…”
Goals for ‘more’ growth should specify more growth of what, and for what”.

Chapter 4: Brain Drain occurrence through the OECD’s lenses

4.1. Background
According to the Organization for Economic Co-operation and Development, the OECD is a dynamic forum where the governments of 30 democracies work together to concentrate on the economic, social and environmental challenges of globalization. The OECD is also at the head of efforts to understand and assist governments with reacting to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population.

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960 (and which came into force on 30th September 1961); the OECD is empowered to promote policies designed:

- To achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- To contribute to sound economic development; and
- To contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The OECD defines globalization by determining that the phenomenon is increasingly acknowledged as creating large and in some cases new influences on the economy. These

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93 OECD “The well-being of nations, the role of human and social capital”, (Quotation published in “New Republic”, 1962)
94 Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxemburg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States
95 Globalization refers to an evolving pattern of cross-border activities of firms, involving international investment, trade and collaboration for the purposes of product development, production and sourcing, and marketing.
96 OECD Employment Outlook, OECD, 2006
are in many cases extensions of the well-documented gains which result from international trade and investment flows. Consequently, according to the OECD, the migration of people across national borders is a result of the globalization process. The OECD maintains that it has played an important role in sketching together internationally comparable indicators of human capital formation, and undertaking policy analysis on the basis of such indicators. Guaranteeing sustained economic growth and improving the well-being of all citizens are major challenges for OECD societies. In the rapidly challenged global economy the importance of human potential in meeting these changes is as important as ever.

According to the ongoing debate, all countries have experienced an adjustment in demand from unskilled workers towards more highly skilled workers, which are perceived as human capital. For the past thirty years, the OECD's Continuous Reporting System on Migration has been producing annual reports on the analysis of the migration trends. For several reasons, international migration has been on the policy agenda in most OECD countries over the past decade. First, OECD points that starting 1990s immigration flows increased rapidly during the 1990s and are now growing again. Estimates demonstrate that currently close to three million long-term immigrants enter the OECD area legally every year. Secondly, with ageing populations and falling interest in certain occupations in OECD countries (sciences, building trades), it is predictable that there will be requirements for additional worker immigration in the near future. Governments are hence confronted with the delicate task of managing stability between openness to international migration with the aspiration of attracting the required skills to satisfy domestic requirements, and the realization of effective policies to guarantee immigrant integration. Certainly, during recent periods of economic growth there has been a strong argument in demand for skilled labour relative to unskilled labour. Especially the information technology sector together with an obvious lack of such

101 ibid
workers in a number of OECD countries has encouraged numerous governments to employ policies to ease restrictions on the entry of foreign skilled workers.\(^{102}\)

According to the OECD, all nations want high-skilled immigrants. Historically and currently, persons with tertiary education tend to be overrepresented among international migrants. Nearly all OECD countries have become receiving countries; nevertheless, the eagerness to attract and retain the highly skilled in particular will increase. In 2004 and 2005, OECD member countries announced their interest in migration policies for employment and their determination to tighten controls over immigration flows. At the same time, the mounting interest in migration for employment focuses on the recruitment of highly skilled immigrants by selective policies in a context of international competition to attract and retain these workers to alleviate labour shortages. In order to ease the immigration restrictions of highly skilled workers in several OECD countries, a group of measures were implemented.\(^{103}\) For instance, in January 2005, the first such measure was implemented when the European Commission published a Green Book on a common approach to the management of labour migration. In December of that year, the Commission proposed a programme of measures in response to a decision taken by the European Council on The Hague Programme.\(^{104}\) The category of most interest is that concerning highly qualified workers, whose entry needs to be accelerated and for whom the Commission is considering the creation of an EU work permit (Green Card), delivered by a member state, but which would be applicable within the whole EU area.\(^{105}\)

4.2. Who is moving?

The OECD’s “International Movements of the Highly Skilled” report defines highly skilled as not being a homogeneous group, although in broad terms they may be described as professional, managerial and technical (PMT) specialists.\(^{106}\) Consequently,

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102 “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
103 “Trends in International Migration”, SOPEMI 2004, OECD, 2005
104 The Hague programme is a five-year programme for closer co-operation in justice and home affairs at EU level from 2005 to 2010. It aims to make Europe an area of freedom, security and justice. The programme's main focus is on setting up a common immigration and asylum policy for the 25 EU member states.
skilled people or the so-called human capital is vital for a broader notion and measure of human and social development. *Human capital represents the knowledge, skills and health embodied in individuals that facilitate the creation of personal, social and economic well-being*”.  

International mobility of the highly skilled concerns persons with a broad range of educational and occupational backgrounds; university students, nurses, information-technology (IT) specialists, researchers, business executives and managers, and intra-company transferees. Some of these highly skilled individuals migrate on a temporary basis, while others migrate with an intention to settle permanently in the host country. A role to the increase in the mobility of highly qualified workers has been also the transfers of staff within multinational companies.  

The OECD’s reports indicate a tendency towards the recruitment of finishing students, who may represent serious losses to source countries, especially in small countries, albeit this is compensated by large remittances. This is due to the fact that many OECD countries have launched special provisions allowing foreign students to stay on to work after the completion of their studies, in particular in areas where there are labour deficiencies.

4.3. *The role of skilled workers for the economy of a country*

Changing economic and social conditions have given knowledge and skills-human capital a progressively more essential role in the economic development of nations and individuals. According to the OECD, even though there is a continuing dispute over its precise importance, commonly recognized by economists and others, competence and knowledge is the key in stimulating economic growth.  

The OECD suggests that better-educated people are more likely to be employed, and the role of education and learning in producing new technology and innovation should be given greater recognition. Skilled workers are important for the development of innovative research and the ability to acquire and adopt it. Knowledge and human capital perform like yeast to boost productivity even across the economy, while other factors such as a technological

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108 “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
advance or discovery unexpectedly flourish productivity.\textsuperscript{111} In addition to economic returns (in the form of labour market advantage), learning experiences — both in and outside school setting — bring other types of benefits. OECD recognized that education is closely connected to better labour market outcomes. Returns to individuals in terms of higher wages are only one part of the story in which education and social disadvantage interact to affect individuals’ livelihoods and well-being. Other benefits from education are positioned on the connections between education and outcomes like health, crime and civic participation and engagement, often in the context of a wider agenda on social capital. The OECD concluded that changing patterns of education and income inequalities have implications for future patterns of social mobility.\textsuperscript{112}

4.4. What drives highly skilled people to move internationally?
Recently, the OECD reported a large increase in economic output across its members with an increase in standards of living and working conditions as well as in health and educational attainment.\textsuperscript{113} Although not at the same level everywhere, levels of absolute poverty and deprivation have declined in OECD countries since the 1950s. Following extraordinary increases in economic output, concern has increasingly turned to the quality of economic growth and how to realize more increases in well-being; more attention was paid to the quality of labour, particularly the level of education and training in the workers.\textsuperscript{114} According to the OECD, flows of highly skilled labour arise within a new global division of labour which has resulted from the restructuring of the world economy.\textsuperscript{115}

Immigrants account for more than 10\% of the total population in a large number of OECD countries...\textsuperscript{116} In fact in most countries the percentage of immigrants with a

\textsuperscript{111} The well-being of nations, the role of human and social capital", Education and Skills edition, OECD, Paris, 2001
\textsuperscript{113} OECD Employment Outlook, OECD, 2006
\textsuperscript{114} “The well-being of nations, the role of human and social capital”, Education and Skills edition, OECD, Paris, 2001
\textsuperscript{116} “International Migration Outlook”, annual report, OECD, Paris, 2006, p.43
tertiary education exceeds the corresponding percentage in the native born population. This is due to the reason that tertiary educated people are more used to international labour markets and have a higher likelihood of achieving their plans than do persons with less education. The reasons of skilled people to migrate are, like other categories of migrants, push factors: economic opportunities abroad that are better than those existing at home as well as in response to the migration policies in destination countries. Other factors, however determine why highly skilled people are prone to migrate and their choice of destination which include intellectual pursuits, be it education, research or language training, and the support for research and, demand for Research and Development staff and academics is also an important determinant in the migration decision and destination. Among the entrepreneurially-minded, the climate for innovation generally, and for business start-ups and self-employment in particular, may also affect the decision of the highly skilled to migrate. The major flows of highly skilled workers today reflect the global expansion of world trade, the international expansion of trans-national corporations (TNCs), and the activities of institutions such as government departments and recruitment agencies.

There also can be particular situations, like the end of cold war which encouraged the use of market-driven solutions to economic problems and their support in others improved the globalization of economic movement of persons, which increased the overall level of competition in a great number of markets conventionally associated with high employment levels. A combination of technological progress, keener international competition and high relative wages, together with a shift towards post materialist attitude appears to point to a new equilibrium between the development and developing world. For instance, the Russian Federation and the Ukraine have appeared since the year 2000 as major new source countries of skilled persons. Italy and Spain are significant destination countries for Romanians and Ukrainians, whereas Turkey is the

118 ibid
119 “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
121 towards more aesthetic, intellectual objectives and opinions, and values of solidarity, freedom of the press, the need for respect, affiliation and belonging
122 “OECD Societies in transition, the future of work and leisure”, OECD, Paris, 1994
destination of choice for Bulgarians. The period of a working permit of skilled persons in the host countries can be temporary, or sometimes passageways to settlement, without the necessity of a return to the home country. If to consider the expected increase of the skill shortages in the coming years, especially in science, medical and ICT (Information and Communication Technology) occupations, it is likely that recruitment and retention of skilled workers will continue and expand.¹²³

In line with recent developments, estimates conclude that wages in OECD countries are the highest. World System Theory argues that changing trade patterns- in particular, rising trade with low-wage emerging economies-have been a key root of the trend toward rising inequality.¹²⁴ Nevertheless, the OECD has concluded that trade made a quite modest contribution to the declining labour market position of low-skilled workers and have pointed to skill-biased technological change as being a more important factor.¹²⁵

The OECD argues that the mobility of highly skilled is critical from a general demand-side requirement over the past few years; and that the labor market situation has improved radically in the majority of OECD countries. This improvement reflects a combination of cyclical and structural factors, including changes in the functioning of labour and product markets resulting from policy reforms and the introduction of new technology. According to this view, "traditional" organisations require their employees to have specialized skills consistent with standardized production processes.¹²⁶ According to one of the OECD reports, “despite trade barriers and differences in wages and job opportunities, most people do not migrate. Migration is extraordinary; for this reason, most of today’s unwanted migrations began with industrial country programs that recruited workers from what become an emigration country.”¹²⁷ While pull factors are essential in influencing migration flows, it should however be admitted push and pull factors can be complimentary.

¹²⁵ OECD Employment Outlook, OECD, 2005
¹²⁷ “Globalisation, Migration and Development”, social issues/employment, OECD, 2000, P.64
4.5. What is the impact of brain drain on the source countries?
Economic analyses conducted by the OECD, as well as in OECD member countries and non-member countries, have made it possible to assess the economic impact of the migration of skilled and highly skilled labour on sending and receiving countries. One way of determining the economic impact of human capital is through the calculation of earnings-based “rates of return” on investments in learning. For instance, private rates of return can be projected using data on private costs and post-tax earnings over a lifetime; social rates of return should combine the full variety of public and societal costs and profit involved in investing in more human capital.

The OECD stresses that when a population pursues mobile human capital from declining regions to growing regions, this shrinks the labor market slack in the former and improves labor market shortages in the later, without generating much regional disparity. The OECD’s reports that skilled workers can play important roles in providing the basis for economic growth, social cohesion and personal development; and that the market of highly skilled is perceived as a feature of the development of a global economy. Generally, it was estimated that when brain drain happens the negative impacts emerge on the source country in the name that its prosperity faces obstacles because of the lack of specialists. Moreover, in the case that workers’ education was financed on the public expense by the government than, the loss is even greater.

However, the potential benefits from brain drain in the name of remittances, return migration and a better use of human capital in order promote the economic development of sending countries has been an issue of contention over the last two years. The matter of remittances and the growth recorded during the last decade have fascinated several international organisations (IMF, WB, OECD), at a time when the volume of official development aid is tending to diminish slightly.

128 “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
130 ibid
131 ibid
4.6. Assessing some potential brain drain’ positive effects on the source countries

According to the ongoing brain drain debate, for sending countries the loss of human capital can have a positive result by the return of migrants and the development of networks assisting the circulation of skilled workers between host countries and their country of origin. On the other hand, if migrants return to economies that have not changed, they may rest and retire rather than be a force for economic change, and also many skilled migrants settle abroad and have their families join them, which limits their contribution to development in their country of origin. Brain gain can be also offset positively by encouraging investment in training in sending countries and increase inflows of foreign currency through remittances. The existence of a “scientific Diaspora” and “immigrant entrepreneur networks” can also be helpful for sending countries to capture some benefits from the outflow of skilled people. But, according to the recent estimations, due to the weak implementation objectives, the Diaspora proved to be not as successful as it was expected. Such networks are regularly sponsored at the local and institutional level, but national and international maintain is often an important catalyst. The picture is totally different when emigration affects the provision of basic socio-economic services. Many of the benefits for sending countries, yet, can only be achieved in the longer term and need that countries invest in science and technology infrastructure and the development of the opportunities for teaching, research and entrepreneurship at home. The OECD advises that in order to experience some positive effects of brain drain is that more attention should be paid to civil society and private initiatives in both the receiving countries and sending countries, as well as to the decentralized co-operation processes, and to the role of local authorities, the scientific Diaspora and the next generation.

4.6.1. Remittances’ role

The role of remittances in compensating the human capital loss of developing countries through migration and their possibility in boosting economic growth was already recognized in the beginning of the 1980s. A large scale of issues related to remittances became the topic of political debate, as well as of more in-depth research. Over the past

133 “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
years, partly due to the sharp raise in remittance flows, the research on these issues gained force, resulting in a mushrooming of scientific literature.\textsuperscript{135}

This was the background document for the Marrakech Conference\textsuperscript{136} co-organised by the OECD (February 2005) which wanted to identify the essential conditions for remittances to play a better role in the economic growth of the source country. The analysis has tended to focus on three main issues. Firstly, the direct impact of remittances on income distribution, poverty alleviation and individual welfare. Secondly, the subsequent effects of remittances on the economy as a whole, discussing the impact on employment, productivity and growth. Thirdly, the contribution of remittances on covering the trade balance deficits.\textsuperscript{137}

In several emigration countries, remittances in 2004, estimated by the IMF at USD 126 billion, largely exceeded the volume of official development aid (ODA), and in certain cases even of FDI or income from the export of goods and services.\textsuperscript{138} The “International Migration Outlook” report defines remittances as private transfers and the savings involved belonging to the migrants and their families, who decide on their allocation.\textsuperscript{139}

Generally, the OECD estimates that remittances constitute a substantial source of hard currency for countries of emigration, sometimes covering several months of imports. According to certain analysts, remittances, considered as structured financial flows, could contribute to a poverty reduction, and represent an essential supply of foreign hard currency for economic growth. An evaluation of latest studies on remittances and development demonstrated their role in improving the living conditions of migrants and their families, but, due to the personal use of remittances, problems arise when they are used to attract and particularly orient these funds towards the economic development of the home countries of skilled migrants. Remittances are private transfers and the savings involved belong to the migrants and their families, who decide on their allocation. This is the most intuitive motivations for remitting money back home is what has been

\textsuperscript{135} “Migration, Remittances and Development” –The development dimension, OECD 2005
\textsuperscript{136} Marrakech Conference aims at improving the performance of countries and development agencies to achieve sustainable improvements in country outcomes for long-term impact on poverty reduction and increased standards of living. It placed particular emphasis on the topics: remittances and the economic development of sending countries.
\textsuperscript{137} “International Migration Outlook”, annual report, OECD, Paris, 2006
\textsuperscript{138} ibid, p.101
\textsuperscript{139} ibid, p.145
characterized in the literature as “altruism”: the migrants’ concern about relatives left in the home country.\footnote{140}{“International Migration Outlook”, annual report, OECD, Paris, 2006} Under an altruistic model, the migrant gains satisfaction from the welfare of his/her family. Nevertheless, according to OECD, good practices persist: migrants’ savings which are not required for personal or family consumption may be forwarded for reasons of relative profitability of savings in the home and host country, and can be explained in the framework of a “portfolio management choice”. Here, the objective of which is to help migrants to make better choices, to gain their confidence, and to rely on the networks built up both abroad and in the home countries, to put remittances to good use for individuals, their families, and social and economic development as a whole. Indeed, the implementation of sound macroeconomic policies and policies of good governance, as well as development strategies involving all actors in the economy are the best way to exploit the impact of remittances on economic growth in developing countries. Good governance, a sound banking system, respect for property rights, and an outward-oriented trade and FDI strategy, are fundamentals for enhancing the efficiency of remittances in an economic development perspective. The state plays a key role in creating these important building blocks for economic development, supported by the international community. Remittances are neither a substitute for ODA or for FDI flows. Consequently, the artificial distinction between “productive and non-productive” uses of remittances must be reassessed. Firstly, they are used to alleviate household poverty and satisfy basic needs, but also to increase investment in health and education, \textit{i.e.} to improve investment in human capital in the countries of origin. Finally, policies should be oriented for the support and accompaniment of migrants who are eager to engage in entrepreneurial activities. Some good examples\footnote{141}{Countries like Mexico and Morocco} portrayed by the OECD in using remittances for development, showed that migrants not only contributed to the financing of the infrastructure at local level (electrification, water provision and irrigation, road building, medical centers and schools), along with profound transformations in the way of life and of traditional local management.\footnote{142}{“International Migration Outlook”, annual report, OECD, Paris, 2006}
4.6.2. “Boomerang effects” of remittances

Even debatable by the brain gain literature, using panel methods on a large sample of countries, the OECD reports that remittances can have at the same time a negative effect on the economic growth. The force of remittances on private consumption, saving and investments is just one aspect of the debate about the contribution of remittances to the growth and development of source countries. Furthermore to the domestic household income, remittances are also the receiving side of the balance of payments. Remittances counterbalance persistent balance of payments deficits, by reducing the scarcity of foreign exchange. Remittances can facilitate the alleviation of restraints imposed on the economic development of the migrants’ home countries by balance of payments deficits. Accordingly, remittances have a more positive impact on the balance of payments than other monetary inflows (such as financial aid, direct investment or loans), because their use is independent and for particular investment projects with high import content, they bear no interest and do not have to be repaid. Besides, remittances are a much more stable source of foreign exchange than other private capital flows and for certain countries they exhibit an anti-cyclical character.\(^{143}\) However, separately from the positive balance of payments effects, remittances can have a negative impact on the economic activity in the home country. Depending on the way they are used, remittances’ effects on production, inflation and imports will be different. Consequently, as OECD estimates, remittances can have a “boomerang effect”. This happens when remittances spur an increase of imports and trade balance deficits in the remittance-receiving country. A further negative effect can be when a greater demand’s on tradable goods is generated than the economy’s capacity to produce, inducing to an appreciation of the real exchange rate. This may further lead to balance of payments pressure, a slower growth of employment opportunities, and consequently to a further increase in the incentive to emigrate.\(^{144}\)

Regardless, the assessment of remittances effects by OECD made a very important assumption regarding the contribution of remittances in compensating the human capital loss of migrant sending countries in that migrants’ inclination to remit shrinks with education. This means that with a brain drain process, the source country is facing a more negative balance effect than a positive one, and that it’s development path is seriously

\(^{143}\) “International Migration Outlook”, annual report, OECD, Paris, 2006, p.156

\(^{144}\) “Migration, Remittances and Development” –The development dimension, OECD 2005
doubted. In conclusions, high-skilled workers by leaving depressed regions possibly reduce their countries growth potential.

4.7. What is the impact of highly skilled migration on receiving countries?

OECD’s “International Movements of the Highly Skilled” report outlines that nowadays the significance of international recruitment and movement of the highly skilled is increasing. When human expertise proficiency is not accessible locally, employers often compensate it from importing abroad. This is possible in the context of two basic and interrelated processes: the development of domestic labour markets by employers, on the one hand, and of the institutional framework by governments to assist the global interchange of skills, on the other. As a result, the highly skilled have come to move more freely as work permit systems have changed to accommodate the global search for expertise. OECD ascribes a pure economic interest to the migration of the highly skilled.

Generally, investigations made by the OECD, indicate several net positive effects for the receiving countries, particularly the stimulation of innovation capacity, on the scientific and technology assets and an increase in the stock of available human capital and the international dissemination of knowledge and economic performance. Australia, Canada and the United States and Luxembourg, Sweden and Switzerland gain significantly from migration of the highly educated within OECD countries. Factoring in immigration from the rest of the world substantially reduces the skill shortages and brings positive effects to many host countries. Employers’ needs and workers’ skills should be better harmonized in large cities or in industrial zones. This would outcome in efficiency gains.

Researchers of trade in goods suggested that there has been a small negative effect on demand for unskilled labour in OECD countries due to trade with non-OECD countries, but that losses of unskilled jobs have been largely offset by jobs gained through trade in

147 “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
149 “OECD Employment Outlook”, OECD, 2005
goods produced by skilled labour.\textsuperscript{150} Clearly the presence of highly-skilled specialists can improve diverse sectors within receiving countries. For instance, the report presents data from the UK’s Science and Engineering Policy Studies Unit showing that the incorporation of scientists and engineers from Eastern Europe had increased in a variety of institutions in the UK over the previous few years.\textsuperscript{151} It can be concluded in few words: a generally favourable picture is present for the host country from the immigration of skilled workers.

4.8.\textit{Some OECD’s suggestions and policies}

According to OECD, countries suffering from brain drain need to develop a permanent economy's growth, which actually depends on adequate levels of investment, and that in turn require sufficiently high flows of national saving. A stable economic environment depends also on price constancy – inflation low enough not to harm business and household decision-making. Structural policies must function in tandem with macroeconomic policy in any successful strategy to improve growth and employment. At the same time, the transition from old to new technologies is a demanding process that can create mismatches between the skills that people have and those that are needed. Strengthening the aptitude of economies to foster new jobs is one facet of the strategy to reduce unemployment and thus to reduce the mobility of brains. But a high-productivity, high-wage job strategy can work only with qualified people to fill the new jobs.\textsuperscript{152} The “scientific Diaspora” and “immigrant entrepreneur networks” has to be taken seriously into account because it can also be helpful for sending countries to capture some benefits from the outflow of skilled people. Such networks are regularly sponsored at the local and institutional level, but national and international preserve is often an important method.\textsuperscript{153}

Due to globalization, governments today face greater international interdependence of their economies. Like companies, they need to "think global" so that national policies fit within an international context. At the same time, OECD countries should use the policy

\textsuperscript{150} “\textit{The OECD jobs study\textquoteright}; facts, analysis, strategies”, OECD, Paris, 2004
\textsuperscript{151} John Salt, “\textit{International Movements of the Highly Skilled\textquoteright};, Directorate for Education, Employment, Labour and Social Affairs - International Migration Unit - Occasional papers N°3, OECD, Paris, 1997
\textsuperscript{152} \textit{OECD Employment Outlook}, OECD, 2006
\textsuperscript{153} “\textit{International Mobility of the Highly Skilled\textquoteright};, policy brief, OECD, July 2002
co-ordination process to ensure that the setting of macroeconomic policy is more reliable across countries. Co-operation between OECD countries is necessary to respond to migration pressures and these issues must be included in the wider trade, investment and co-operative development activities between OECD countries and principal emigration areas, both in the developing countries and in Central and Eastern Europe.\textsuperscript{154}

Chapter 5: Brain Drain occurrence through WB’s lenses

5.1. WB’s profile

The mission of the World Bank is poverty alleviation with a center of attention on economic and social development in low and middle income countries, the Bank’s client countries. The WB has been an advocate and supporter of a trade agenda that permits developing countries to gain as much access to foreign markets as possible, but it has also stressed the importance of developing countries opening their own markets to international trade and investment. According to Frannie A. Leautier, the vice president of World Bank institute, international migration is a more and more development issue. Transition to a knowledge-based economy generates a more integrated market for skills and put a premium on talent. Since skills and talent are so significant assets for world economy, the brain drain is increasing and has hindered development in some developing countries. The WB’s International Migration and Development Research Program, conducted by the Development Economics Research Group, focuses on the issues of remittances; brain drain; the determinants of migration; temporary movements of persons; social protection and governance; and the links among trade, FDI, and migration. Generally, WB’s papers aim at identifying key challenges and opportunities, including win-win solutions that would permit sending and receiving countries in and around Europe to profit most from geographic mobility of people. To this end the aim seeks a balanced approach in the

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Margaret Thatcher, the Ex-British prime-minister, in “Margaret Thatcher: The Great Speeches”, 2004
Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006
finding of challenges and prospects for both sending and receiving countries of migration flows.  

5.2. WB’s foreword

According to WB, countries around the globe are becoming more globalised. The integration into a more globalised economy is a product of reduced costs of transport, lower trade barriers, faster communication of ideas, rising capital flows, and intensifying pressure for migration. Globalization has caused anxieties about going up inequality, shifting power, and cultural uniformity. Millions of people are migrating, and millions of those are highly educated people moving to developed countries from developing ones that already endure low levels of human capital and skilled workers.

Despite some economic benefits, brain drain is still controversial. This is due the fact that migration, like trade and capital movements, has distributional consequences, whereby net benefits for society may mask important losses for some individuals and groups. But at the same time, it is typical for migration to spark resistance because the movement of people has economic, psychological, social, and political insinuations that the movement of goods or money do not.

The WB takes two key stylized facts about the brain drain:

1. It recognizes that there are large university educated stocks of highly skilled expatriates from developing countries in developed countries;

2. It acknowledges that the skilled expatriates could be an important source for the development of their home countries.
Before going to the interpretation of the reports, some assumptions suggested by WB have to be taken into consideration. Firstly, the migration of skilled individuals, like any migration is a diverse occurrence and its economic impact on the sending/receiving country depends heavily on the particular circumstances involved. Further, there is a deficit of basic data on migration and remittances, so it is difficult to forecast the impact of policy changes; it means that is vital to be done a better data and more research. And finally, migration implies social and political implications that may be just as important as the economic analysis provided in the reports described.  

**5.3. Knowledge economies as present reality and preferred future**

The WB believes that knowledge accumulation and demand have turn out to be key aspects in economic development and are increasingly at the core of a country’s competitive advantage in the global economy. The most important is that tertiary education directly influences the national productivity, which basically establishes living standards and a country’s capacity to compete in the global economy. Countries need tertiary educated individuals for the creation of the intellectual capacity on which knowledge production and utilization depend; and also for the encouragement of the lifelong-learning performances necessary for modernization people’s knowledge and skills. As a result, more and more developed nations are or aspire to be what are called knowledge economies. *The knowledge economy* is an information economy or information society, where wealth, prosperity and economic development depend on people’s abilities to out-invent and outwit their competitors, to accommodate to the desires and demands of the consumer market, and to change jobs or develop new skills as economic fluctuations and downturns require. Also, knowledge societies are network societies dealing with increased communication and travel and also endorsing greater

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166 ibid
167 Andy Hargreaves Paul Shaw, “Knowledge and Skill Development in Developing and Transitional Economies”, An analysis of World Bank/ Knowledge and Skills for the Modern Economy Project by Boston College University of Victoria, 2001
knowledge sharing among participants with a common interest to achieve success – promoting increased collaboration above and beyond the public/private divide.\textsuperscript{168}

So, development depends on learning and learning depends on searching, development depends on linking the domestic economy to the larger, outside world, because even the strongest economies cannot generate all state-of-the-art ideas in isolation. Brain drain and its most inclusive outcomes, is central for learning and development.\textsuperscript{169}

5.4. Drivers of Developing-to-Developed brain drain migration

According to Yevgeny Kuznetsov, in this 21st century marketplace, where knowledge is recognized to be the most important factor in economic development, the richer countries compete to attract and retain the world’s best-trained minds in many ways. The more influential “pull” factors of professional migration are envisaging effective policies that stimulate R&D activities and increase direct investment, offering attractive postgraduate training and research opportunities, and recruit younger graduates and professionals.\textsuperscript{170}

The WB assumes that the migration of the most educated people is supported through human capital theory. By this view, household variables, together with assets and the human capital of household members other than migrants, are imagined to persuade migration choices via their result on migration costs (including the opportunity cost to households of allocating their members to migration work) as well as the impacts of remittances and the income security that migrants give on the expected utility of the household as a whole.\textsuperscript{171}

According to the WB, the rising brain drain to Europe – mostly deriving from the geographic neighborhood – is related to major economic, demographic and political gaps between the EU and vicinity regions. It is still unclear whether and under what circumstances international migration causes brain drain that can be harmful to the economic and social development of particular sending countries or under what situation it directs to circulation of skills, their improvement, and eventual later return while high unemployment at home would result a great under use of these skills and therefore

\textsuperscript{168} Andy Hargreaves Paul Shaw, 2001
\textsuperscript{169} Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006, p.3
\textsuperscript{170} ibid
\textsuperscript{171} Çağlar Özden and Maurice Schiff, “International Migration, Remittances, and the Brain Drain” World Bank and Palgrave Macmillan, N.Y., 2006
eventually to “brain waste.” However, it was estimated that better economic prospects drive brain drain due to the fact that workers in high-income countries earn a median wage that is almost five times the level of that of workers in low-income countries. But this is not the only reason for the increased brain drain- is also the growing importance of selective immigration policies introduced by some countries.\textsuperscript{172} And no matter what the actual consequences are, receiving countries have been accused by certain sending countries and nongovernmental organizations of “skimming off” skills. Thus, the brain drain’s direction, duration and intensity are strongly related to capital’s global location strategies.\textsuperscript{173} Also, there is an increase of the outflow of skilled individuals because many non-OECD countries have not calculated the expected rate, and thus these countries are saturated by tertiary-educated workforce, ready to be poached. Sometimes, brain drain can act as a safety valve to relieve the pressure of a pressing problem rather than to resolve it. The safety valve happens for the reasons that migration affords the skilled workers with individual exits like; it facilitates export the unemployment problem for skilled workers, alleviates the pressure to change the structural barriers to improving the business climate, and also remittances increase the harmful effect of brain drain by relieving the pressure of pressing problems.\textsuperscript{174} Implicitly, brain drain can be understood as an export industry for which payment is made in the form of remittances.

5.5. Brain drain impacts
Regardless the potentially far-reaching consequences, it was estimated by the WB that brain drain has rarely been an explicit public policy alarm. This is due to the reason that this neglect consist of respect for universally accepted human rights such as freedom of movement and choice of employment,\textsuperscript{175} plus the complex and shifting interaction of “pull” and “push” factors encouraging individuals to migrate. However, it is obvious that

\textsuperscript{172} “Global, Economic Prospects - Economic Implications of Remittances and Migration”, WB, Washington, 2006
\textsuperscript{173} Çaglar Özden and Maurice Schiff, “International Migration, Remittances, and the Brain Drain” World Bank and Palgrave Macmillan, N.Y., 2006
\textsuperscript{174} Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006
\textsuperscript{175} Universal Declaration of Human Rights, Articles 13 and 23
no matter what are the motivations, the brain drain and scarce human resources will continue to present long-term risks for tertiary education investments in many nations.176

5.5.1. Brain drain impacts on receiving countries
The potential impact of a proactive attracting skilled workers migration policy on the receiving countries is manifold but not fully predictable. The intention of this policy is to compete for the skilled labor potentially ready to migrate, as a consequence ensuring that the economy facing skill shortages will catch up with other economies like the United States in terms of innovation and competitiveness. Generally, by attracting highly educated workers, receiving states could first and foremost expect a positive impact on economic output in both absolute and in per capita terms. Clearly, an increase in the population generates positive outcomes on supply capacity and demand, which will result in output gains. Additionally, it is genuine to expect supplementary momentum for productivity growth—and therefore per capita income—from increased migration of qualified people.177

5.5.2. Brain drain impact on sending countries
WB defines human capital as “the stock of economically productive human capabilities” Human capital is the product of investments in improving skills and knowledge of the labor force and, it can be increased through education expenditure, on-the-job training, and investments in health and nutrition. An in order to estimate the monetary valuation of human capital is therefore to see the returns to such investments.178
Brain drain economic impact on each origin country depends on many circumstances—among them the skills and former employment of migrants, the history of migration (the existence and location of a large Diaspora), the sectors affected, patterns of trade and production, the investment climate, and the size and geographical location of the country. According to WB, sending countries face both favorable and unfavorable consequences from brain drain. Typically, migrants are better educated, younger, and more mobile than

178 ibid
the majority in their country of origin. That's why sending countries may not only lose an important amount of their well-educated domestic work force, but also some of their innovative and motivated youth. Considerable out-migration could lead to both a brain drain and a youth drain from poorer countries. In some instances, high-skilled emigration has a negative impact on living standards of those left behind and on growth. This is because: (a) those left behind in the home country may suffer because they lose the prospect for training and mutually beneficial exchanges of ideas; (b) the provision of key public services with positive externalities, such as education and health, may be damaged; (c) opportunities to achieve economies of scale in skill-intensive activities may be reduced; (d) society loses its return on high-skilled workers educated at public expense; and (e) the price of technical services may rise. This means, that if highly educated workers would stay in their countries, they could help to improve governance, improve the quality of debate on public issues, encourage education of children, and strengthen the administrative capacity of the state—contributions that would be impaired in the case of brain drain. However, due to the ongoing debate about brain drain impacts on sending countries, WB has emphasized some potential gains from brain drain occurrence.

5.5.3. But high-skilled migration is often beneficial for origin countries
The questions of curiosity is what is the real degree of the brain drain the developing world suffers from, and do these costs associated with brain drain exceed such benefits of migration as remittances and skill transfers. The WB, as mentioned above, agrees with the fact that brain drain may reduce living standards of those left behind and impair growth. But at the same time, in the line with the “brain gain” hypothesis and the ongoing debates about it, the WB suggests that brain drain can also be beneficial. Like low-skilled migration, high-skilled migration is

beneficial for migrants and their families; can help relieve labor market pressures; and an erudite Diaspora can improve access to capital, technology, information, foreign exchange, and business contacts for firms in the country of origin.\textsuperscript{182} Departing from this, the next sections will analyse the possibilities of a beneficial brain drain.

5.6. \textit{The return migration as a tool for the beneficial brain drain}

According to WB, the return of skilled workers to their home country is a positive occurrence because they may be more efficient than foreigners in transferring knowledge back home because of their understanding of local culture.\textsuperscript{183} But simultaneously, the WB debates this supposition, since returnees may also represent retirees, or the less skilled of the skilled cohort of emigrants, they may be those dissatisfied by the wages or working conditions or may have more difficulty in finding or retaining jobs. Moreover, it is considered that the prospect to emigrate enhances the returns to education, leading more individuals to invest in education with a view to emigrating.\textsuperscript{184} However, only some of the educated people will actually emigrate. If the amount of human capital loss in the brain drain occurrence is less than those skilled individuals unable to emigrate, then societies’ human capital rises following the opening of “brain gain”. The result will be prevalent in countries with large stocks of emigrants (so that the probability of emigration is high). However, these models have been debated, because according to the WB foreign firms are not able to discriminate among educated workers (otherwise they would take the best qualified, and so destroy incentives for education by marginal candidates), and because these models do not apply where family reunification programs, unrelated to the skills, predominate.\textsuperscript{185}

5.7. \textit{“Temporary” skilled Labor Migration as a permanent way of life}

According to the WB, temporary migration can be beneficial phenomena in the sense that workers would monitor societies with more economic development and different laws,
institutions, and habits; also they would learn industrial skills and new technologies that could then enhance development in their home countries. It should be admitted that this is quite possible. However, the temporary skilled migration phenomenon has not, mostly, driven development in the origin regions. Mainly, the failure is due to the explanation that there is nothing more permanent than temporary migration. Consequently, temporary skilled labor migration is frequently not temporary. One simple example of the permanent migration is that usually migrants have some entrepreneurial drive toward self-betterment, some skills and some continuing achievements which they cannot perform on the local arena. Another case is the case of remittances which actually create a dependency syndrome and transform a temporary migration to a permanent one. Consequently, this highlights another way in which brain drain can be ‘poisonous’ to development. Brightest talents and capabilities are not brought to tolerate on overcoming the barriers to development at home.

The WB concludes that temporary migration may facilitate greater migration flows because for the legal migrant, being accepted on a temporary basis may be less desirable than permanent residence, which provides for free movement between destination and origin countries.

5.8. Remittances’ effect on the source country
Remittances are a central focus related to international migration, and the WB is dynamically engaging in research to document both the scale and the direction of flows and to find out the impact of remittances on development. Empirically, it was estimated that remittances have a beneficial impact on poverty reduction. If to take into consideration the economic, demographic, and political imbalances mentioned above, it seems less likely that brain drain will be significantly reduced; in fact, the opposite might be true. Increasing globalization and interdependence could further promote international

\[\text{\textsuperscript{186} Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006}\]

\[\text{\textsuperscript{187} ibid}\]

\[\text{\textsuperscript{188} “Global, Economic Prospects - Economic Implications of Remittances and Migration”, WB,}\]

\[\text{Washington, 2006}\]
Brain Drain Controversy

As the theoretical brain drain/gain debate is going on, the WB is identifying and analysing few positive or negative causal effects of remittances:

5.8.1. Remittances: streamlining transmission and increasing developmental impact
WB estimates that on the whole, larger than aid, remittances transfers volume is growing rapidly, so that the market for remittance transfers is attracting more for profit and nonprofit competition. Remittances are expected to be correlated with the extent of opportunities for investment, thus biasing the estimated remittance effect. A common old stylized fact suggests that most remittances are spent on consumption, health care, education, land, and the like, but that there is little expenditure or investment in direct productive uses. However, according to WB, regardless the nonproductive spent of remittances, there is still a pro-development multiplier effect, especially if the expenditures are used locally instead of on imports. Two problems persist in this multiplier argument: firstly, the multiplier is like a double-edged sword. As an apparent decline, decreases in expenditure have a downward multiplier effect. Business needs not just a start, but also continuation- remittances will generate a vested interest in the economy for continued migration and remittances as a way of life. Secondly, the multiplier argument is a delicate distinction between expenditures that are essentially sterile for development and expenditures that bring into view development that is soon independent of reliance on remittances.190

5.8.2. Remittances can improve country creditworthiness and thereby improve its access to international capital markets.191
WB estimates that in the countries where the financial system is underdeveloped, remittances alleviate credit constraints and work as a replacement for financial development, improving the allocation of capital and therefore accelerating economic

190 Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006
growth. Moreover, for some receiving countries, remittances can create a stable stream of foreign-exchange earnings.\textsuperscript{192}

\textbf{5.8.3. Remittance securitization can help countries raise external financing by using structured finance techniques.}

WB estimates that it is possible to raise relatively cheap and long-term financing from international capital markets via securitization of future remittance flows. Typically, this mechanism involves the borrowing entity (such as a bank) guaranteeing its future remittance incomes to an offshore special purpose vehicle (SPV). The SPV issues the debt. Designated correspondent banks are directed to channel remittance flows of the borrowing bank through an offshore collection account managed by a trustee. The collection agent makes major and interest payments to the investors and sends surplus collections to the borrowing bank.\textsuperscript{193}

\textbf{5.8.4. Remittances are stable and may be countercyclical}

According to the WB, remittances may shift counter cyclically comparing to the economic cycle of the recipient country. Remittances may increase for the reason that migrants may send more money during hard times - like when the recipient economy suffers a decline in activity or macroeconomic shocks due to financial crisis, natural disaster, or political conflict- to help their families and friends. Accordingly, remittances may smooth consumption and contribute to the stability of beneficiary economies by balancing for foreign exchange losses due to macroeconomic shocks.\textsuperscript{194}

\textbf{5.8.5. Large remittance inflows can lead to exchange rate appreciation and lower export competitiveness}

The WB suggests that the adverse effect of large and constant remittance inflows can cause an appreciation of the real exchange rate and make the production of cost-sensitive tradable, including cash crops and manufacturing less profitable. Even if this assumption

\textsuperscript{192} Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006

\textsuperscript{193} “Global, Economic Prospects - Economic Implications of Remittances and Migration”, WB, Washington, 2006

\textsuperscript{194} “ibid
wasn’t yet proved, it is believable that this effect exists and is important for some small economies where remittances are very high.\(^{195}\)

**5.8.6. The effect of remittances on inequality is unclear**

No strong conclusion is found by the WB in the relationship between remittances and inequality. According to WB’s household studies: on the one hand remittances occasionally go inexplicably to better-off households and so expand inequalities, on the other hand they appear to target the less well off, causing inequalities to reduce. Some studies suggest that the remittances from new migration may raise inequality in the short term, but the effect on inequality is small over the durable process. The rate of investment of remittance income will be high when: \(^{196}\)

- When they are viewed by household as being transitory rather than permanent and thus should be saved and invested rather than spent.
- When remittances are predestinated for particular reasons, which are more likely to involve investment (for instance, education) than current consumption.
- The remittance is aimed to family members more likely to use the funds for investment purposes.
- When remittances are disproportionately put by households in accounts set away for investment intentions. \(^{197}\)

**5.8.7. Government policies can affect remittance flows**

According to the WB, just recently, many origin and destination governments thought to formulate policies to increase remittance flows and promote transfers through formal channels. In the remittance-receiving countries, these policies include tax exemptions for remittance income; improved access to banking services by recipients; incentives to attract investments by the diaspora; access to foreign exchange or lower duties on imports; support for the projects of migrant associations; and help for migrants in accessing financial systems. In the remittance-source countries, they consist of policies affecting access to banks, access to foreign exchange, support to migrant groups, types of

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\(^{196}\) ibid

\(^{197}\) ibid
immigration regimes, and cooperation with receiving countries. But, attempts to encourage remittances sometimes generate unwanted effects. Taxes incentives may at the same time attract remittance inflows, and also create prospects for tax evasion. Similarly, matching-fund schemes for migrant associations may channel collective remittances to development projects, but also they may switch funds from other local funding priorities.\(^{198}\) While it is the migrant who decides how much, when, and to whom to send money, there have been cases when sending or receiving governments, banks in the home country, or employers have fixed on to retain a certain proportion of pay for remittances. The motivation for such “forced” remittances is to ensure that temporary migrant workers do not stay on, but that they will be back home after the end of their contract; and also is to maneuver the use of remittances to investment in the country of origin.\(^{199}\)

In sum, the WB concludes that even if not directly, skilled migration and remittances may: reduce poverty of recipient households; increase investment in human capital (education and health) and other productive activities; and increase entrepreneurship. Furthermore, remittances have a greater outcome on investment in human capital and other productive activities than that from other sources of income, and that income gains may also increase to households without migrants.\(^{200}\) Even if indirectly, brain drain engenders remittances and is likely to have spillover effects on trade and investment between sending and receiving countries. Consequently, migration and remittances even where they appear to have little impact on measured inequality, act beneficially on the development and welfare of the sending countries. On the other hand, remittances cannot compensate the economic loss which a country suffers from a large outflow of skilled workers, so the evidence on the effect of remittances on long-term growth is questionable. The WB estimations conclude that relaxation of restrictions on migration should generate significant welfare gains for both sending and destination countries,

\(^{199}\) ibid, p.97
\(^{200}\) Çağlar Özden and Maurice Schiff, “International Migration, Remittances, and the Brain Drain” World Bank and Palgrave Macmillan, N.Y., 2006
especially the increased investment in human capital in source countries acts as a key determinant of long-term development and growth.  

5.9. Diaspora Networks as a tool for the beneficial brain drain

Diaspora networks are globally distributed populations that are connected by common faith, ethnicity, or national identity, and that activate and renew these connections by networking locally, globally and back to their homeland. They provide one powerful means for developing economies to access knowledge, skills and investment from elsewhere.

The WB started in 2006 a new agenda of promoting policy reform and institutional innovation in collaboration with diaspora networks. The WB identifies actors of diaspora as bridges between global state-of-the-art in policy, technological, and managerial expertise and local environment in their home countries.

5.9.1. Organizing the Diaspora

According to the WB, the high-skill stream is made up of diaspora networks. Some time ago, some expatriates became pioneer expatriates in accelerating technology exchange and foreign direct investment. Some of these pioneers had, and still have, nonfinancial reasons for early-stage participation. Others had, and have, means of mitigating risk unavailable to other investors by virtue of their knowledge of their countries’ language, culture, institutions, and counterparts. Thus, as Kuznetsov suggests, it is not necessary for expatriates to be investors or make financial contributions in order to have an impact on their home countries. They can act as “bridges” by providing access to markets, sources of investment, and expertise. The most important assets of diaspora networks are policy expertise and managerial and marketing knowledge. Diaspora’s prominent members can shape public debate; articulate plans, and help implement reforms and new projects. Thus, WB maintains that developing countries have to take seriously diaspora

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202 Andy Hargreaves Paul Shaw, “Knowledge and Skill Development in Developing and Transitional Economies”, An analysis of World Bank/ Knowledge and Skills for the Modern Economy Project by Boston College University of Victoria, 2001
203 Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills” - how countries can draw on their talent abroad, WBI development studies, Washington, 2006, p.v
204 ibid
networks over immigrant communities and multinational firms firstly, because diaspora may depoliticize the relationship between domestic actors and the foreign actors from whom they learn, transforming an unstable, even absurd, struggle for power into a mutually beneficial economic exchange. Secondly, it is assumed that economically powerful ethnic minorities have traditionally been suspected of having greater loyalty to their ethnic community than to the host country and of being tempted to exploit the latter to benefit the former. Thirdly, the members of network Diasporas are likely to be suspected in their host countries that personal gains or ethnic ties prevail above managerial professionalism; which makes them, from the sending country side, to be more workable and more cooperative on a truly equal footing. Finally, one more positive outcome is in the case that talented workers still go abroad to continue their work in the developed economies, but then use their own global networks, and especially those of their diasporas, to help build new establishments in their home countries. Hence, Diasporas are mirrors of national development, reflecting the migratory pushes of national crises and the pull of the global economy.\textsuperscript{205}

As mentioned above source brain drain countries have reason to encourage diaspora networks. Receiving countries also have their own reasons to encourage diaspora networks. Impeding mobility in an epoch of decentralization imposes stay-or-go choices on energetic, ambitious, immigrant elite, potentially spurring the return en masse of high-skill expatriates. But encouraging the circulation of high-skill labor from source country to destination one and back reduces this risk and is thus almost surely in the long-term economic interests of the receiving countries.\textsuperscript{206}

The WB advises that it would be ideally if sending and receiving countries will develop these new, harmonizing programs in concert. Sending and receiving countries are concerned at regulating the working conditions and environmental tasks of decentralizing supply chains to prevent protectionist reactions to off-shore ventures by rich countries and local protests against multinational imperialism in poorer ones. Obviously, the realization of potential gains will be often impeded by political realities, but an approval

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\item\textsuperscript{205} Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”, how countries can draw on their talent abroad, WBI development studies, Washington, 2006
\item\textsuperscript{206} ibid
\end{itemize}
\end{footnotesize}
of the possibilities will help improve effects even when ideal solutions are beyond reach.\textsuperscript{207}

5.9.2. \textit{Leveraging Diasporas of Talent}

If to combine all the mentioned above elements in organizing the diaspora, and as a matter of pure luck, the Diaspora’s contributions can be impressive. But, elsewhere diaspora networks have failed to succeed despite the large number of high-skilled migrants who are not even trying to be aware of their home countries. A successful Diaspora has to combine:

- Networks bring together people with strong intrinsic motivation
- Members play both direct (implementing projects in the home country) and indirect roles (serving as bridges and antennae for the development of projects in the home country)
- Successful initiatives move from discussions on how to get involved with the home country to transactions.\textsuperscript{208}

5.9.3. \textit{Diaspora activities are easy to initiate, but problematic to carry on.}

WB argues that Diaspora members by discussions and transactions can be helpful to their home countries. Discussions comprise Web sites, conferences, workshops, online communications, and other activities that facilitate diaspora members get to know one another, connect, and identify how they can contribute to the development of their home countries. Transactions are actions that typically require a time commitment. Even do not have to; transactions can also involve monetary donations. There is a great interest about getting involved is in diaspora Web sites, conferences, and other meetings, but after a while initial enthusiasm tends to disappear as easily as it emerges: people get tired of meetings and discussions alone without spiraling them into concrete outcomes. Despite the fact that individuals are the initiators of Diaspora’s process, home country organizations are what to continue it. The quality of home country organizations tends to be a very important determinant of diaspora initiatives.\textsuperscript{209} Shortly, according to the WB,

\textsuperscript{207} Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006
\textsuperscript{208} ibid
\textsuperscript{209} ibid
the far-flung Diaspora is the result of the worldwide hunt for the best and brightest from the developing world; and regardless, Diaspora has been recognized to be important and that it had assisted development, it is difficult to quantify these benefits.

5.10. **Other productive choices to migrate**
Additionally to the mentioned above, WB suggests that brain drain will also have a partial negative impact if it is difficult for high-skilled workers to find productive employment in the country of origin. This may be the case for three reasons. First, due to political instability or other reasons, the investment climate may be so poor, that many high-skilled workers cannot practice their professions. However this is debatable, the WB accepts that even in this case brain drain may be detrimental if it deprives the government of competent administrators and limits the prospects for growth once the investment climate improves. Second, because a large fraction of high-skilled workers may not be trained in professions required by the economy, due to the government subsidy policies. And third, some of the smallest developing countries don’t have the possibility to productively employ a large number of specialized professionals because of their economic scale.²¹⁰

PART 3: Analyzing Brain Drain Controversy

“The empires of the future will be empires of the mind.”
--------------------------------------------------Winston Churchill ²¹¹

Chapter 6: Analyzing the outcomes of the research

The brain drain controversy and its consequences has been examined and analysed in this thesis through the use of theoretical evidence. From the previous chapters of the thesis, clearly, the global labor market for advanced human capital is developing the circulation of skills and the associated problem of “brain drain” to the forefront of national concerns, particularly in developing countries. Undoubtedly, nations worldwide are upping the stake in the competition for talent. So, in the present climate, it is like a phase of turmoil, where inequality is rising; people are mobile; and it seems to be a vicious circle.²¹²

I argue that the debate is passionate and has no end is in sight. Also, from the analysis and findings made it can be easily seen that skilled emigration is cumulative and self-perpetuating. Moreover, the necessity to assess the validity of the claims of the new brain drain literature has increased with the growing flight of skilled workers from developing countries, and with the related skilled immigration programs recently put in place by a number of destination countries.

6.1. How has been brain drain/gain theoretical debate been contrived?
As we have described and analysed in chapter 3 of this thesis, there are three decades of brain drain literature evaluating the development and the effects of the emigration of human capital. Every view of literature is keenly debated. The first generation commenced with the seminal work by Johnson/ Pantinkin in one of the first anthologies on the brain drain phenomenon. Additionally, Grubel and Scott debated the nationalist protectionist model. These scholars paid particular attention to the physical movement of people; the policy preoccupations were the physical return of migrants to their home countries. If to analyse the brain drain factor from its commencement, it can be concluded the larger diversification of migratory actions implicitly were a sign of globalization of

²¹¹ A speech at Harvard University in 1943, the Economist, Oct 5th, 2006
migration; more countries have turn out to be either sending or receiving countries. So, brain drain was conceptualized through the framework of the globalization of economies, and must therefore be analysed from an international perspective, emphasizing the interdependence of sending and host countries, as opposed to the nationalist approach which concentrated on these countries’ own impact on each other. A paradoxical relationship, therefore, exists between migration and globalization.

By the 1980s, the development literature of authors like Wallerstein on divergence or the vicious circle or core-periphery view of skilled migration had primarily emphasized the negative impacts of brain drain in distorting the well-being of the source country. This theoretical view gained a revival with the birth of the so-called New Growth literature and its endogenous version considering “brain drain” to be one of the most important causes of under-development in the source countries. Also, here, as we have seen in chapter 3, the neoliberal reforms appear to be a solving solution for alleviating the brain drain appears to be the reforms through the neoliberal thought.

The second period did not gain renewed attention until the 1990s. It is estimated that the sharp increase in skilled emigration from developing countries and also the large remittances from migrants to their home economies changed perspectives in the brain drain debate. The third generation of literature focused on the positive outcomes of brain drain, namely brain gain. It embraced arguments that the networks of professionals organized in Diasporas and other forms of brain circulation networks are beneficial for the sending countries. And, partly because the return of expatriate professionals has proved unrealistic, the literature has painted leveraging the skills and capital of expatriate professionals. It is intuitive in outlining the credibility of expatriate professionals as sources of capital and knowledge, yet in this new brain drain literature, skilled Diasporas tend to fall like manna from heaven. According to the “brain gain hypothesis” claims, Diasporas and brain circulation networks emerge rapidly as a magical solution,

213 “Globalisation, Migration and Development”, social issues/employment, OECD, 2000
216 see chapter 3 introducing the Diaspora effects, and also chapter 5 explaining the term and how it works
permitting home countries to take advantage of leveraging the experience of their expatriates. 217

6.2. The OECD and WB’s 3 Rs strategies as possible tools for a beneficial brain drain

Within the brain drain/gain controversy, and particularly the OCED and WB who define brain drain as a result of globalization, there is predicted to be an amplification of the outflow of skilled individuals from developing countries to developed ones.

Generally, I argue that the two institutions described and analysed below do not have a concrete theoretical preference when analyzing the brain drain phenomenon. But, even though the OECD and WB are not directly involved in the debate, their strategies still seem to have similarities with the behind theories218 of the brain drain/gain debate.

First impressions seem to indicate that the OECD and WB, while considering the validity of the new brain drain literature, adopt the “three Rs” when summarizing the impacts that skilled migrants can have on the development of their home countries. The three Rs mean: recruitment dealing with who migrates, asking why they do this, whose departure leads to layoffs and reduced services; the second R is remittances or the money sent home by migrants abroad, asking if their volume can contribute for the benefit of the migrant well-being or the country of origin; and the third R is return migration asking whether migrants return with new technologies and ideas of use to them and their country, or just return to rest and retire. 219 So, we have seen that the effects of the three Rs are keenly debated by many theorists and carefully investigated by the OECD and WB. Following this, I will analyze the main findings.

6.2.1. Analyzing the 1st R: Recruitment

If to compare the migrants themselves analysed in this thesis, then we can definitely confirm they had one common feature - internationally marketable skills. The predominant influential decision to migrate as defined by the OECD, WB and different theoretical perspectives is more of an economic character. Not only does a skilled individual have a growing or multiplier effect on production and economic growth, but it

218 see chapter 3 describing the theories arguing the brain drain’ outcomes
219 “World Migration” report, IOM, 2005, chapter 8
also has a force on the speed and prospects of technological innovation and future human
capital development - this is why, as argued by the OECD and WB, skilled workers are so
important for the developing path of their home countries.
As previously mentioned, highly skilled professionals are lured and encouraged by
different sets of circumstances and provisions, but generally it can be proposed that if a
skilled individual decides to emigrate he or she taking matters into one’s own hands,
while if an individual stays they are placing their trust in the government or market.220
From the analysis made of the brain drain phenomenon, I propose the circumstances of
the brain drain phenomenon can be called meritocratic. This means the world systems
theory could be applied arguing that country A might be able to maintain and amplify its
benefit over B by poaching the most capable people from B.221 So, the meritocracy here
is based on the success of one’s virtues migrating to a more prosperous nation, not
working to make one’s home nation more prosperous and wealthy. As a result, this
meritocratic design is willing to perpetuate the gains of country A.222 Hence, according to
world systems theory, the highly skilled gravitate towards the ‘core’, which gains from a
more than proportional increase in income. A ‘vicious cycle’ develops; the poor regions
become poorer and the rich regions become richer and the ‘Brain Gain/ Brain Drain’
effect is intensified.223
Moreover, as the OECD and the WB assigns a high priority to the emerging significance
of knowledge as a key driver of economic development, the human capital theory seem to
be a preference in this direction. First of all, this is due to the reason that the WB believes
that human capital is the supplier to intangible capital residual, which is the wealth of
nations.224 Second, knowledge and human capital perform like yeast to boost productivity
evenly across the economy, while other factors such as a technological advances or

220 “Globalisation, Migration and Development”, social issues/employment, OECD, 2000
221 Stalker, P., “Workers without frontiers: the impact of globalization on international migration”, Lynne
Rienner Publishers, UK, 2000
222 “Global, Economic Prospects - Economic Implications of Remittances and Migration”, WB,
Washington, 2006
223 Thomas Straubhaar, “International Mobility of the Highly Skilled: Brain Gain, Brain Drain or Brain
Exchange”, discussion paper 88, Hamburgisches Welt-Wirtschafts-Archiv, Hamburg Institute of
224 “Where is the wealth of nations”, measuring capital for the 21st century, WB, Washington, 2006
discoveries unexpectedly flourish productivity.\textsuperscript{225} Finally, human capital theory is a well developed body of literature addressing the question of migrant selectivity.\textsuperscript{226}

6.2.2. Analyzing the 2nd R: Remittances

One more central aspect which addresses the definition of beneficial brain drain is remittances. Macro-level approaches tell us how remittances can have an impact on national interests such as labor-force composition, balance of trade, and gross national product. It can be demonstrated that the flow of remittances has given rise to a kind of euphoria, with migrant remittances being proclaimed as the newest “development mantra” among institutions like the WB and the OECD.\textsuperscript{227} Both the OECD and WB claim remittances are a very steady and sometimes countercyclical source of capital and, even when not invested, can have an important multiplier effect. More tangible, according to the OECD, remittances can be a very sound source of capital.\textsuperscript{228} Yet analysis suggests remittances can also generate a negative effect on the source economy. If, due to remittances, demand increases more than the economy’s capacity can meet it, this demand falls on non-tradable goods and remittances can have an inflationary effect. Additionally, remittances are the reason for continued skilled migration which creates dependence among recipients accustomed to the availability of these funds. As a consequence, the source country will face not only a skills shortage, but also it will perpetuate an economic dependency that weakens the prospects for development. Despite this, remittances are not a panacea and cannot substitute sound economic policies in developing countries. Consequently, the OECD ascribes to remittances as having a boomerang effect.\textsuperscript{229}

As with the OECD, the WB agrees that remittances do reduce poverty. Even though the evidence can be contradictory; the WB believes remittances openly affect economic growth to the extent that they finance education and health and increase investment.

\textsuperscript{225} “The well-being of nations, the role of human and social capital”, Education and Skills edition, OECD, Paris, 2001
\textsuperscript{227} Hein de Haas, “Global Migration Perspectives: International migration, remittances and development: myths and fact”, Global Commission on International Migration, Centre for International Development Issues, Radboud University, Nijmegen, The Netherlands, paper. Nr.30, April 2005
\textsuperscript{228} “International Migration Outlook”, annual report, OECD, Paris, 2006, p.154
\textsuperscript{229} “Migration, Remittances and Development” –The development dimension, OECD 2005
Additionally, remittances can create a stable stream of foreign-exchange earnings, develop a country’s creditworthiness for external borrowing and through innovative financing systems, widen access to capital and lower borrowing costs—consequently. Remittances may also improve living standards and reduce poverty and income inequality due to increased consumption.\(^{230}\) However, even if the WB appears more positive than the OECD estimations, the WB still doubts that skilled migration and the flow of remittances have generated sustained growth. Yes, the WB demonstrated migration and remittances have a significant positive effect on poverty decline, but like universal wisdom suggests, remittances could jump-start the local engines of development but does not supply the ongoing fuel. If the skilled outflow of workers as a way of life continues, than the project of local development will probably be lost.\(^{231}\) As a consequence, can remittances be claimed to have a more beneficial impact for the source country as is claimed in new brain drain literatures? Let’s imagine for example a more idiomatic situation in that a poor and undeveloped country discovers a large deposit of oil and gas, so that the standard income is substantially improved and living standards are enhanced. Is that by itself development? Now, let’s reformulate the scenario and replace oil and gas with long term skilled migration from developing to developed countries, with the ensuring flow of remittances to the sending country. These remittances reduce poverty, increase incomes, and improve living standards. Are they not, then, a form of successful development?\(^{232}\) It can be concluded then that according to both the OECD and WB, the final conclusion on the impact of remittances is that they cannot recompense the economic loss for which a country suffers from a large outflow of skilled workers.

As a result, the two institutions appeared to be uncertain that remittances and other financial transfers by migrants can have a substantial development impact, even if they are undoubtedly an important device of poverty alleviation. So, here I argue that the endogenous growth theory can be applied to the OECD and WB emphasizing the positive externalities and spill-over effects of skilled workers on economic growth, and warning

\(^{231}\) Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”—how countries can draw on their talent abroad, WBI development studies, Washington, 2006
that increased movement of human capital from poorer to richer countries could result in sluggish growth in developing countries. Moreover, the world system theory framework reminds us that local economies are often distorted by the arrival of global capitalism and that the outcome can be the negative for local populations and the loss of skilled workers.²³³

6.2.3. Analyzing the 3rd R: Return skilled-migration

I suggest that in line with contemporary brain drain literature, along with endogenous growth theory, the WB concluded that skilled migrants can generate a gain on developing countries by starting up small-scale businesses or engaging in other types of investments upon their return to their home country, resulting in a transfer of skills they obtained while living and working abroad.²³⁴ But, it can be argued migration is beneficial for skilled migrants and their families, but the same cannot be said for the source countries as migrants did not make much contribution to the investment climate of their origin country. And in the case of return migration, statistics demonstrated that it is theoretically and empirically improbable emigrated elites will return from a developed country, especially if they have achieved a standard of living abroad that is far beyond the usual standard of living in their home country.²³⁵ Moreover, as the OECD also claimed, if skilled migrants return to economies which have not improved, they may come back for retirement rather than be a force for economic change, and may also settle abroad and have their families join them, which limit their contribution to development in their country of origin.²³⁶ However, it needs to be taken into consideration that if skilled workers left their home because of a lack of job opportunities, then their return may have little positive impact on the labor market if they cannot find jobs. Still, if skilled workers gained better experience and skills abroad and they return to their origin countries, and if their skills are relevant to the needs of the home country economy, than

²³³ Hein de Haas, “Global Migration Perspectives: International migration, remittances and development: Myths and fact”, Global Commission on International Migration, Centre for International Development Issues, Radboud University, Nijmegen, The Netherlands, paper. Nr.30, April 2005
²³⁶ “International Mobility of the Highly Skilled”, policy brief, OECD, July 2002
return migration may be beneficial for development.\textsuperscript{237} Additionally in regards to skilled migrants returning to their home country, the WB proposed “brain circulation” as a means where highly skilled migration can temporarily fit back into the ‘back drain/brain gain’ element of the debate: e.g. if skilled professionals return home, they act as an equalizing transfer to their origin country of technological and organizational know how.\textsuperscript{238} But even here, the argument proved to be unconvincing as the WB argued “nothing is more permanent than temporary migration”, mainly due to the dependency syndrome which remittances generate.\textsuperscript{239}

Nevertheless, both the OECD and WB do believe in Diaspora effectiveness.\textsuperscript{240} According to the WB, a Diaspora performs like a bridge in the transfer of knowledge between destination and origin countries. The ‘Diaspora effect’ is one other element where human and non-human flows of capital move together from the core to the developing countries. So, maybe at this point it is necessary to adopt a more internationalist perspective, however, assuming a more proactive rather than \textit{laissez-faire} attitude from the very beginning of the brain drain debate. According to Ansah, this proposed model can be called a globalization model suggesting that the brain drain is a result of, and necessary contributor, to the process of globalization. This perspective advocates that via the process of globalization, there actually is, and must be, a “brain circulation” that does not automatically demand the physical transfer of migrants back to their home countries. As an alternative, this brain circulation draws on migrants’ skills regardless of where they reside. So, the model opts for academic and cultural exchanges that must be supported to promote collaboration and experience of otherwise spatially isolated skilled individuals. This model’s main proposal is that globalization and technological innovations must be used as tools in brain circulation, where knowledge can be shared across continents to the benefit of “losing” donor countries.\textsuperscript{241} However, the skill circulation through the Diaspora’s effectiveness, as described in the previous chapter, appeared to be uncertain.

\textsuperscript{237} “\textit{World Migration}” report, International Organization for Migration, 2005
\textsuperscript{238} Çağlar Özden and Maurice Schiff, “\textit{International Migration, Remittances, and the Brain Drain}” World Bank and Palgrave Macmillan, N.Y., 2006, p.221
\textsuperscript{239} Yevgeny Kuznetsov, “\textit{Diaspora Networks and the International Migration of Skills}”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006
\textsuperscript{240} ibid
(and not because it wouldn’t be a beneficial solution), but due to many obstacles such as weak government support, little desire on the part of migrants to make contributions to their origin country and dialogue made in vain without any actions. So, when new brain drain literature theorists debate the knowledge transferability through Diaspora networks, they ignore the elements which actually obstruct its effectiveness.  

6.3. Where do OECD and WB stand in the brain drain/gain debate?

Although there is not a firm theoretical approach, we have seen that the issue of gains and losses has attracted the extensive attention of WB and OECD in recent years given their efforts and desire to turn the brain drain into a net brain gain. Some of the analyses made by these two institutions were based on an optimistic assumption through adopting the new endogenous growth theory about the size of the brain gain, as assumption shared by the new brain drain literature. But, as explained, there are many reasons why the brain gain can be asserted as being smaller than suggested in the new brain drain literature. In conclusion, according to the OECD the brain drain phenomenon clearly has both positive and negative impacts on economies, but as has been explained, it seems that the negative impacts exceed those which are positive. Moreover, it seems that skilled migration can be both the cause and the result of poverty, while poverty itself can be both improved and aggravated by skilled relocation. By and large, the problems caused by brain drain in nations experiencing a skilled migration exodus are great and the claims of the new brain gain literature regarding its positive results are uncertain.  

Migrants from developing countries are generally more likely to stay in the host country than migrants from advanced economies. Remittances seem to have a painful boomerang effect, and the Diaspora network is fledgling with little positive results to show for itself. The result is that the most economically developed countries regularly exchange high level skills, while increasingly the less developed world is being brought into skills exchange and “brain drain” networks. 

It can be proposed from the research made by the OECD that clearly the world is stratified in developed and developing nations, where developed nations enter the

243 “World Migration” report, IOM, 2005, chapter 8
developing world aspiring to attract their skills and in this way to enhance their greater prosperity, while the situation harms the prosperity of the developing country. Apparently, the World System theory argues that the world is divided into core nations with a periphery and semi periphery, where the core is improving its prosperity with the periphery and semi periphery’s nations “help”.244 The “smart” way to systematize such a stratified society is as a meritocracy, in which the best and the brightest from the lower stratum can be recruited without prejudice into the upper stratum. Moving into the upper stratum is like a definition of success for someone born into the lower stratum.245 The OECD’s reports underline the fact that OECD member states increasingly find themselves predisposed of developing policies to exclude certain types of migrants, while at the same time allowing entry to those whose presence is deemed economically desirable, emphasizing the virtues of skills and youth.246 If this is taken into consideration, World System theory (which contends capitalist penetration is facilitated by states), compliments the OECD which believes the institutional framework created by governments is designed to help the global interchange of skills.247 Many governments, even if sometimes skeptical, agree on the advantages to their economies of more or less open borders for high levels of skill and expertise, and that triggers policy decisions by the same countries.248 So, World Systems theory may be accurate for describing some elements of the brain drain phenomenon. According to Massey, this theory is considered to be the leading theoretical treatment of the forces that promote emigration from developing countries; it offers explanations why developed countries attract immigrants; and it clarifies how structural relations emerge to connect areas of origin and destination.249

245 Yevgeny Kuznetsov, “Diaspora Networks and the International Migration of Skills”- how countries can draw on their talent abroad, WBI development studies, Washington, 2006
247 Here, the report gives the example of Australia, Canada and the US and how they developed programmes to increase the numbers and proportion of the highly skilled in their overall intake.
It can be concluded that, even if aspiring for a beneficial brain drain through the new endogenous growth theory, the WB still believes that the dynamics of the brain drain phenomenon demonstrated that the net brain gain is equal to zero in the steady state. In other words, a so-called positive brain drain cannot take place in the steady state and, a net brain loss is prone to hold throughout the transition. Moreover, the impact of the brain drain on welfare and growth is expected to be noticeably smaller, and the likelihood of a negative impact on welfare and growth considerably greater than claimed in the new brain drain literature. This is based on the conclusion that: (a) The brain gain is smaller than has been indicated in the new brain-drain literature, (b) The brain gain implies a smaller human capital gain, and (c) Various negative effects of the brain gain on other sources of externalities, such as human capital, welfare, and growth, have not been taken into account.

Consequently, the two international institutions analysed here (the OECD and WB) seem to have more or less the same perception about the brain drain phenomena. It can be expected that both of these institutions apply the new endogenous growth lenses for a ‘positive-sum game’ brain drain success story, where the former immigrants have become transnational entrepreneurs, structuring two-way flows of skill, technology and capital which, with the strong support of their government, fuelled a rapid economic growth. However, we can argue that the conclusions made by the OECD and WB concerning the “brain gain” question are based on a hypothesis which greatly exaggerates the beneficial outcomes of skilled migration.

This finding then directs us towards the second generation debate/or the traditional view of brain drain occurrence and maybe towards the arguments of the classical version of the “New Growth Literature”. This theory affirms that the size and the quality of endogenous factors, e.g. the human capital stock, links positively with the degree of economic growth. According to this theory, the decreasing marginal product of capital is the focal point supporting the hypothesis of convergence and can be an accurate explanation for the consequences on the source country resulting from the outflow of skilled individuals. If the human capital stock of a developing country decreases due to

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251 Ibid, p. 203
the brain drain, than the fragile economic forces in this country declines and results in stagnation and/or a degeneration that in extreme cases can lead to the breakdown of entire sectors.252

In one final observation, the OECD and WB arguments while debating the “brain gain” literature parallels that of academics such as Donald Lien and Yan Wang, Mariani,253 and others who are proponents of the traditional view of the impact of the brain drain phenomenon on source countries.

253 p.31 of the thesis
Chapter 7: Conclusion: Back to the brain drain controversy

The principal conclusion of this thesis finds the relationship between migration and development as a reciprocal relationship. After all, skilled migration is both an element of development and a self-regulating factor affecting development in migrant sending and receiving societies.

In conclusion, the brain drain debate commencing in the 1960s has been assembled into three generations. The first two generations contend that in the perspective of increased globalization and knowledge based economies, a brain drain occurrence may be understood as being enduring and irreversible emigration and may have detrimental impacts on source countries. The third stage of the debate developed the “brain gain” hypothesis which does not support the traditional view of brain drain literature by emphasizing the harmful consequences on the source countries and instead supports the contrary assumption: it is theoretically believable and in reality probable for developing countries to draw their elites from abroad and to include them in the development process. Implicitly, the brain gain hypothesis considers emigrated skilled persons a valuable resource for the development of their home countries and can be intentionally opened. Surely this proposal can be employed in the development process by developing countries (and it seems rather obvious), but as the research has proved through the lenses of OECD and WB, it seems hardly been followed. So, the insinuation of the traditional brain drain literature mentioned in this thesis was that it is perhaps the more pertinent of the theories analysed in this paper. Therefore, the two assumptions common in the new brain drain literature seem dubious, chiefly that the source country determines the migration probability and that this probability is exogenous.

254 Roger Bacon, “The Opus Majus”. It is a treatise on such things as grammar, logic, mathematics, physics, and philosophy, 1267, http://latter-rain.com/eccle/baconr.htm,

Definitely, as a result of the research conducted, it seems highly skilled individuals bring economic benefits to the country where they reside. And the ongoing “who wins, who loses and how much” debate, besides being irresolvable—analytically and empirically—escorted institutions like the OECD and the WB to investigate carefully the poaching game itself, a vertical power game of transferring costs and risks to the less powerful.

I argue that the two institutions analysed, the OECD and the WB, conceive the brain drain phenomenon by eschewing a firm theoretical framework and the results actually demonstrate initially that the debate is far from being completed; secondly that the gains claimed in the new brain gain literature are greatly exaggerated; and finally; it has been demonstrated that a considerable brain loss may be a too high price for the source country.

So, if to analyse, the traditional brain drain debate and the contemporary brain gain arguments coexist with international mobility.\(^\text{256}\) In my opinion, it will be a long time until the brain drain/gain theoretical debate will be settled. And the question, “Is brain drain a zero, positive or negative sum game?” seems to me like a question of asking if a bottle is half full or half empty. Currently, skilled migration clearly brings both positive and negative impacts for sending and receiving countries, even if these are not always shared equally. And this is due to the reason that we are breathing in a progressively more globalised world which can no longer depend on domestic labor market alone. This is the actuality that has to be managed and, if managed properly can bring more benefits than drawbacks. An appropriate objective would be to create a win-win situation, or a balance between brain gain here and brain drain there. The preliminary stage could be the challenge of adopting neoliberal reforms proposed by the WB in the name of neoliberal ideology. If so, there is yet optimism that globalization will not certainly lead to the irregular concentration of capital and expertise in mainland, large, urban centers, while the small and insular suffer an disgraceful fate as abandoned, resource-starved locations or playgrounds for the rich and famous.\(^\text{257}\) So, there is still hope for beneficial brain drain phenomena- in the name of virtuous circles which can be interpreted when recruitment,

\(^{256}\) Schiff, M., “Brain Gain: Claims about its Size and Impact on Welfare and Growth Are greatly exaggerated”, IZA Discussion paper No.1599, May 2005, p.3-4

remittances and return speed up growth in sending countries, while hastening convergence and reducing migration pressures. But this can only be possible if the controversy and negative perception of the brain drain phenomenon is seriously addressed and takes into consideration policies and recommendations proposed by institutions such as the OECD and WB. Meanwhile, with the mixed effects of skilled migration on sending countries, the process can be viewed as a vicious circle for development where the “three Rs” interact in ways that widen the very gaps which motivate international skilled migration. Thus traditional brain drain literature still seems to be an accurate description of the brain drain phenomenon with its proponents like Wallerstein’s World System theory divergence or vicious circle or core-periphery view. Consequently, it can be emphasized that this is not to undervalue the negative effects which even a small international brain migration can have upon a supply country. So, the zero sum game can be evaluated, where one country’s gain is presumed to be another’s loss.258

To conclude, why should we be worried about growing inequality? Easy: Inequality equals creative waste. A good deal of research has shown that high levels of inequality actually impede rather than prompt economic growth.259 The diligence of regional inequalities within each country implies that market mechanisms are often too fragile to play a self-equilibrating role. The movement of labor from developing regions to developed regions is one such mechanism.

258 “World Migration” report, IOM, 2005, chapter 8
259 Florida, R., “The flight of the creative class, the new global competition for talent”, Harper Collins Publishers, NY, 2005
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