

**BRAIN DRAIN AND THE GULF IN WORLD LABOR MARKET:  
AN ANALYSIS OF EMPLOYMENT CONDITIONS OF HIGHLY  
SKILLED PAKISTANIS IN FINLAND'S ICT SECTOR**

Jawaria Khan

Master's Thesis

Development and International Cooperation

Master of Social Sciences

Department of Social Sciences

University of Jyväskylä

Autumn Term 2018

## ABSTRACT

**Khan, Jawaria. 2018. Brain Drain and the Gulf in World Labor Market: An analysis of employment conditions of highly skilled Pakistanis in Finland's ICT sector. Master's Thesis in Development and International Cooperation. University of Jyväskylä. Department of Social Sciences.**

Brain drain is a term referring to the phenomenon of international transfer of human capital resources. It means that the most skilled, talented and highly educated people of developing nations migrate to developed countries to achieve a higher standard of living. The source country is usually a poor country, which is unable to provide well-paid jobs and higher incomes according to the talent of the workers. This unequal development of the world forces the potential sources of economic growth (human capital) to migrate from developing countries to the developed countries.

In the developed country, the human capital of the low-income countries has better-paid jobs relative to its home country. However, due to oversupply of labor from the developing countries, the employers of the developed economies get the room to discriminate them on the basis of wages. Therefore, this thesis interrogates if the employment conditions including salaries of highly skilled migrants are, compared to their equally qualified native counterparts, same or do these migrants from developing countries face any sort of labor market discrimination?

The methodology adopted to probe the research questions has been a case study of the Pakistani students, who came to Finland to pursue their higher education and later became a part of the Finnish labor market. For a perfect qualitative research setting, only private companies' employees in the ICT sector of Finland, having less than two years of experience have been interviewed.

By taking a fresh approach to dependency theory of development, the research draws a linkage between labor exploitation in terms of wages and other employment conditions. Instead of discussing the financial capital dependence of periphery on the center, the thesis examines the macroeconomic dependence of human capital of the global South on the global North.

The findings of the research indicate that although wage discrimination between native and migrant workers in Finnish ICT sector is not explicitly visible, yet there are certain barriers which question the social inequality for the migrant employees. Language proficiency, or lack thereof, plays a major role in the recruitment, selection, retention and promotion of migrant employees. Small companies try to exploit the unawareness of international employees by not paying them market competitive salaries. Also, the recognition of prior work experience from developing countries is not acknowledged and hence, not adjusted in the salaries.

Considering this whole scenario of labor market discrimination, the research also establishes the fact that the migrant workers do not want to return to their home country because they still find themselves better off. Hence, the high skilled human capital of peripheral countries is economically dependent on the human capital of core countries.

**Keywords:** brain drain, macroeconomic dependence, wage differential, dependency theory, core and periphery, discrimination, social inequality, language barrier

## ACKNOWLEDGEMENTS

The basis of this research emerged through my passion to contribute something valuable in the society. As a development enthusiast it is my responsibility to highlight those development issues which need a platform to be listened. In truth, I was not able to accomplish my aim through this thesis without an incredible support system. There are some people who contributed academically, practically and emotionally in the completion of this thesis. Thus, I would like to thank them all for their unwavering support.

First and foremost, I would like to thank my supervisor Dr. Teppo Eskelinen, who provided immense guidance and motivation throughout the research process. Thank you for your sincere interest in my thesis topic and for allowing me to have theoretical discussions with you. Along with him, I would like to thank Dr. Päivi Pirkkalainen, my second thesis supervisor for her valuable comments and input. I feel privileged to be associated with such helpful supervisors and mentors.

Besides my supervisors, my sincere thanks also goes to Dr. Päivi Hasu who helped me a lot in choosing the appropriate methodology for my thesis. Further, I am grateful to Dr. David Hoffman who allowed me to present my thesis on several platforms.

I am also grateful to my dearest friends Farheen Javed and Midhat Maqsood who willingly helped me with the best of their abilities. Their genuine feedback and considerate comments assisted me in refining my thoughts and analysis on the topic. In addition to them, I am obliged to all my class fellows and especially those who acted as my discussants during the different phases of my thesis and provided me constructive critique.

Finally, I take this opportunity to express my profound gratitude to my parents who raised me with a love of education and supported me in all my pursuits. I am always thankful for their love, conviction and unfailing encouragement. I am also grateful for the moral support of my siblings and parents in law. Last but not the least, I am indebted to my beloved husband, whose has been by my side throughout the research process, living every single minute of it and without whom, I would not have had the courage to embark on this journey in the first place. Undoubtedly, his eternal support and understanding of my goals and aspirations have been my major strength throughout.

Thank you all for your encouragement!

With gratitude,

Jawaria Khan

December, 2018

Espoo, Finland

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## **Acronyms**

HRST	Human Resources in Science and Technology
ICT	Information and Communication Technology
MDG	Millennium Development Goals
OECD	Organization for Economic Co-operation and Development
SDG	Sustainable Development Goals
UN-DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Program

# Chapter 1

## 1. INTRODUCTION

This Chapter lays the foundation of the thesis by giving an overview of the problem, by explaining the rationale of choosing the topic under study, by digging the specific research questions to be probed and by stating the objectives of the research. The Chapter also introduces the reader to the overall structure of the thesis.

### 1.1 Background

Globalization has opened world borders for international trade and communication with the primary aim to promote growth of both the poor and the rich economies. This results in the exchange of goods, services, capital, ideas, culture and human capital resources. The two categories of human capital resources are high skilled workers and higher education students. High skilled migrant workforce has a major contribution in the economic growth of the destination country, likewise, international students are a channel for increasing the availability of skilled workers in the country. According to 2017 international migration statistics report published by OECD, almost 258 million people were living outside their birth country, half of these migrants have settled permanently in high income OECD countries (OECD, 2018). Among these, 2 million foreign workers and 3 million international students were recorded in OECD countries who have migrated from developing countries (ibid.). In this context, on one hand, the human capital of developing countries is seeking to migrate to developed countries to find better opportunities. On the other hand, many developed countries are also trying to increase their human capital stock by minimizing the mobility barriers for high skilled individuals. Therefore, after the competitive flow of goods and capital, the skills and talent of human capital are most desired in the global world. As a consequence, we see that despite its negative connotation, ‘brain drain’ has dominated the migration discourse of outflow of highly skilled people from the developing countries. The reason for this dominance is the permanent loss of engines of growth for the sending country. The examination of the determinants of brain drain will reveal the macroeconomic perspective of this issue.

Overall, the expectation of higher income abroad is one of the compelling reasons of migration of the highly skilled from the developing to the developed countries. However, considering the



possibility of native migrant wage differential in the developed world, the question of discrimination of this human capital in comparison to equally qualified native counterparts arises. The aim of this thesis is to explore the disparity in the job market between the equally skilled natives of a developed country and the brain-drain migrants from a developing country. However, this investigation will then be further analyzed by drawing a correlation between the macroeconomic dependence of core human capital of the developing countries on the developed countries.

This brain drain phenomenon has been studied since decades, however, this thesis is exploring a totally different perspective of brain drain. The students who migrate to developed countries to pursue their higher education and then later decide to become a part of the workforce and settle permanently in the developed country have been studied in this thesis. The purpose of studying them is to counter the excuses of lack of required skills and experience in terms of employment conditions by the employers of developed world.

## **1.2 Problem statement**

The purpose of this case study research is to explore the phenomenon of brain drain and the gaps in the labor market to highlight social inequality for international migration organizations, government, companies and policy makers. By investigating the substantial differences in employment conditions between the natives and migrants in a developed country, the research will draw a linkage of human capital dependence of developing countries on the developed countries on the basis of economic discrepancy.

## **1.3 Objectives**

The aim of this thesis is to achieve the following objectives:

- I. To understand the rationale of highly skilled migration from a developing country to a developed country.
- II. To establish the relation between labor markets discrimination of high skilled migrants in developed countries with the dependence theory.
- III. To investigate the reasons behind labor market discrimination between natives and foreign immigrants in a developed country. To find out the different mechanisms of labor market discrimination for migrants.

## **1.4 Research questions**

People move abroad in pursuit of attractive income, more esteemed professions and better opportunities to earn more and to have lucrative careers. The main theme of the thesis is to explore how fair is the recruitment, selection, retention and appraisal process in the developed country for the migrants from developing countries. The following (specific) research questions will be addressed:

- I. How does the phenomenon of brain drain affect the labor market dynamics in the developing and developed countries? What are the implications of brain drain on the developed and developing countries?
- II. What are the barriers to entry for the high skilled migrants, who have completed their higher education in the recipient country? What are the mechanisms of labor market discrimination for these migrants?

## **1.5 Motivation**

The research is primarily concerned with the disparity issues of highly skilled migrants from a developing country. The main motivation to explore this issue is firstly, the increase in the number of immigrant population in search of a better quality of life, which leaves any developing country in a condition of mere despair. Secondly, brain drain further amplifies the economic problems of developing countries, leading to the macroeconomic dependence of the global South on the global North in terms of human capital. This thesis will be an essential step towards highlighting the social injustice which global human capital migration perpetuates.

## **1.6 Structure of thesis**

On a more general level, this research has been broadly divided into two main categories of theoretical knowledge and practical knowledge gathered through qualitative research. However, in order to dig deeply into each phase of the research being conducted, the thesis has been divided into seven main Chapters, the description of which is mentioned below.

The Chapter 1 of the thesis lays the basis of the thesis by exploring the rationale, defining the problem statement, investigating the research questions and objectives, and explaining the structure of the whole manuscript.

An extensive literature review of the research problem has been examined in Chapter 2 of the thesis. Starting with digging up on the debate of migration-development nexus and the overview of migration trends, the research analyzes the previous work done in the area of brain drain and native-migrant wage differential. This comprehensive Chapter also covers the background situation of Finland and Pakistan in the light of statistics and facts.

Chapter 3 introduces the reader to the theoretical domain of the subject under study. It covers all the relevant development theories like dependency theory, world system theory and neoliberal globalization to give a broader perspective of the phenomenon of brain drain and macroeconomic dependence of developing states on the developed states. After explaining the theories, this Chapter gives a totally different view of the dependency theory in terms of human capital dependence through a well-thought-out pictorial representation.

Next, Chapter 4 lays the foundation of the methodology used to study the defined research questions. This Chapter plays a vital role in introducing the method of data collection and in justifying the approach chosen to collect the data.

Chapter 5 reveals the stepwise approach adopted to analyze the data. It gives a comprehensive overview of how the data was analyzed, taking into account the ethical considerations.

The findings and discussion of the data are examined in the Chapter 6 of the thesis. It is the Chapter where the research problem is revisited in the light of literature review and other emerging themes.

Finally, Chapter 7 concludes with the summary of the results in the light of research questions and recommends areas for future research work. It also encompasses the limitations of the research conducted in the thesis.

## **Chapter 2**

### **2. LITERATURE REVIEW**

This Chapter serves as a comprehensive background of the thesis. It has been divided into five sections to give more specific literature on each related context of the thesis. Firstly, the role of high skilled migration from the global South to the global North with its relative importance to economic development has been discussed. The next section digs into the literature of brain drain, exploring its history, determinants and a major category of international students, falling into its domain. Consequently, the ongoing global discrimination of migrant labors is highlighted through extensive literature. Followed by that, the condition of Finnish labor market, especially the ICT sector has been explored. Last but not the least, the situation of brain drain from Pakistan has been studied to understand the whole picture in this context.

#### **2.1 High skilled migration and economy**

In order to delve into the debate of brain drain, there is a need to establish the impact of high skilled migration on the global economy. Hence, this section of the thesis will dig deeper into the literature of migration in general. For the sake of convenience, it has been further divided into three sections. The first section will explore the impact of migration on development, next section will analyze the global trend of migration, and consequently, the last section will dwell into the role of migration in the development debate of SDGs.

##### **2.1.1 Migration and development nexus**

The debate on migration and its positive impact on development has been somewhat new in the academic research. Not long ago, migration was seen as a hindrance to development; causing issues of security, national identity and social integration (Castles, 2008). However, now the policy makers have been emphasizing a lot on the benefits for the source country of migration (ibid.). This policy debate on the pros and cons of migration on development has been swinging back and forth since the last few decades now. Starting with the rise of optimistic view of migration in 1950's and 1960's to giving birth to contradictory pessimistic views in the 1970's and finally with the advent of twenty-first century, it was reversed to more optimistic views (De Haas, 2012).

The issues of brain-drain and brain-gain have given opposite views of skilled migration; brain drain representing the pessimistic view of migration, whereas, brain gain sees migration through

an optimistic lens (De Haas, 2012). Thus, the problems of brain drain are countered by putting emphasis on the positive externalities of migration. These include the flow of remittances, fostering of trade relations, and transfer of knowledge, information, attitudes and ideas through international migrants in the source country (Lowell and Findlay, 2001; Stark et al., 1997).

The positive impact of migration in the current policy and research debate has become the latest attraction at the regional, national and international level. As highlighted by Castles (2008), migrants are portrayed as ‘heroes of development’. The positive impact of migration is particularly based on the role of remittances from developed to developing countries by migrants. This perspective has been put forth on various platforms; in 2005, a report was published by Global Commission on International Migration (GCIM), in 2006, United Nations High-Level Dialogue on Migration and Development emphasized this perspective and in 2007, the Global Forum on Migration and Development held a meeting in Brussels to discuss the impact of migration (Castles, 2008).

However, this migration-development linkage has been exemplified by Northern countries only. The voice of Southern states has never been brought to attention while evaluating the impact of migration - either positive or negative - on development. This unrepresentative attitude itself questions the very understanding of development. Migration cannot be studied in isolation; including the perspectives from South will give a comprehensive view on the global North-South relationship dynamics. It will allow one to explore the meaning of development for the South, for instance, in order to explore the unanswered questions like: why would coercive mobilization of human capital to the North would lead to development? What kind of social inequality migrants face in terms of human rights and social integration in the host country? All of these can only be investigated if migration-development debate considers the perspectives from the South. (Castles, 2008)

During 1960's to 70's, a few developing countries like Philippines, Morocco and Turkey encouraged their unemployed and underemployed workers to migrate to developed countries of western Europe or USA for better opportunities (Castles, 2008). In this way, the source countries hoped that they might get a financial and political stability. However, due to oil crises of 1973, Europe also suffered from economic distress and as a result, there was huge unemployment (De Haas, 2012). In addition to that, the brain drain and economic dependency of developing states on

wealthy countries increased (ibid.). Also, as Castles (2008) argues that the countries that relied on emigration as a safety valve to their problems did not consider migration as a development tool. Rather, they wanted to have an alternative for their local problems. However, it turned out that the local situation of the countries did not improve rather it was worsened due to dependency on industrialized states.

In order to consider the economic benefits of remittances on development, the impact of migration in the developing countries needs to be examined. The studies show that majority of people who migrate from the South includes the “the best and the brightest” workers of the economy (Ellerman, 2003). Hence, the source countries get deprived of their core human capital which becomes a major hindrance in the economic development. So, weighing the withdrawal of human capital against the inflow of remittances, the impact of migration on development cannot be measured positively.

Another dimension of brain drain shows the negative consequence of skilled migration on development. Ellerman (2003) argues that considering the brain drain of a doctor from the South to a Northern country, one can infer that he might have migrated to learn the skills and to get the experience in order to practice them in his own country. On the contrary, rather than going back to his home country, he prefers to settle abroad. This happens with majority of people who migrate. Hence, the idea of poor countries gaining from knowledge and experience becomes fragile.

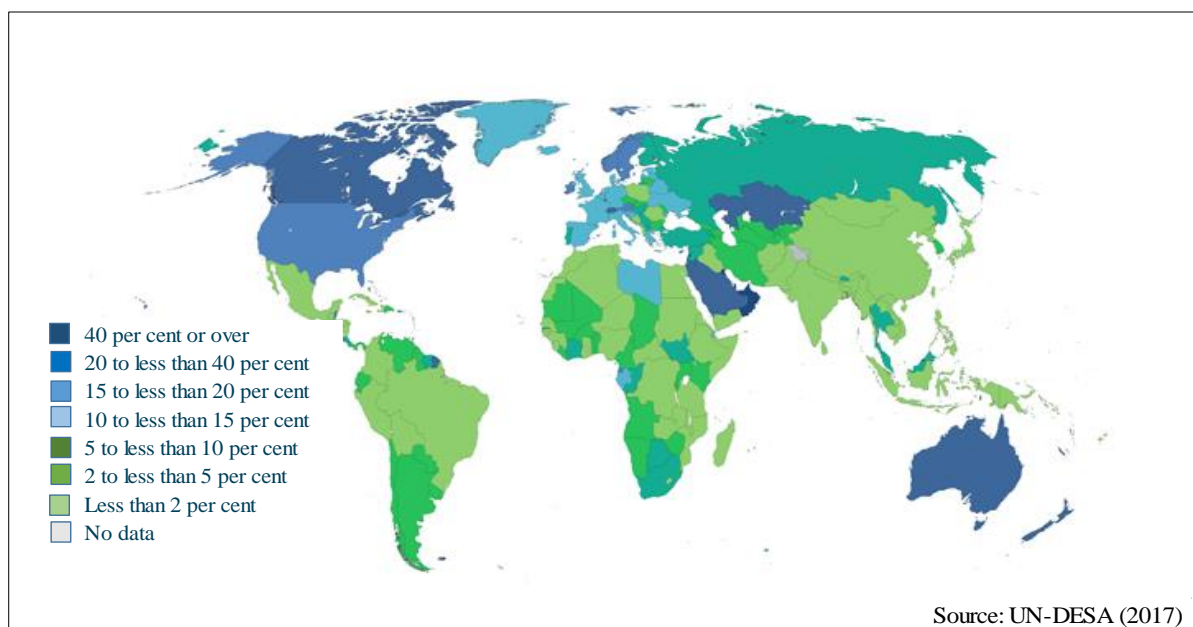
Moreover, the theory of “relative deprivation” supplements the argument of negative impact of migration on development. It is a known fact that the economically better off people in the society migrate to improve their future. Castles (2008) notifies in his book that this migration creates a sense of relative deprivation in families who are unable to migrate due to economic deprivation. They do not get any tangible or intangible benefits of migration like remittances or knowledge. Rather, the poorer of the society suffer from further inequality in terms of relative deprivation.

The debate about the role of remittances in migration notifies both the optimistic and pessimistic views of cash flow due to migration. The pessimistic view highlights that remittances are temporary and unreliable sources of income which are spent on overconsumption of usually imported goods (De Haas, 2012). Hence, the local production is undermined by the irrational consumption of remittances by few people in the society which further increases the dependency (ibid.). However, the optimists of migration counter argue that although remittances increase consumption, but they improve the overall standard of living (ibid.).

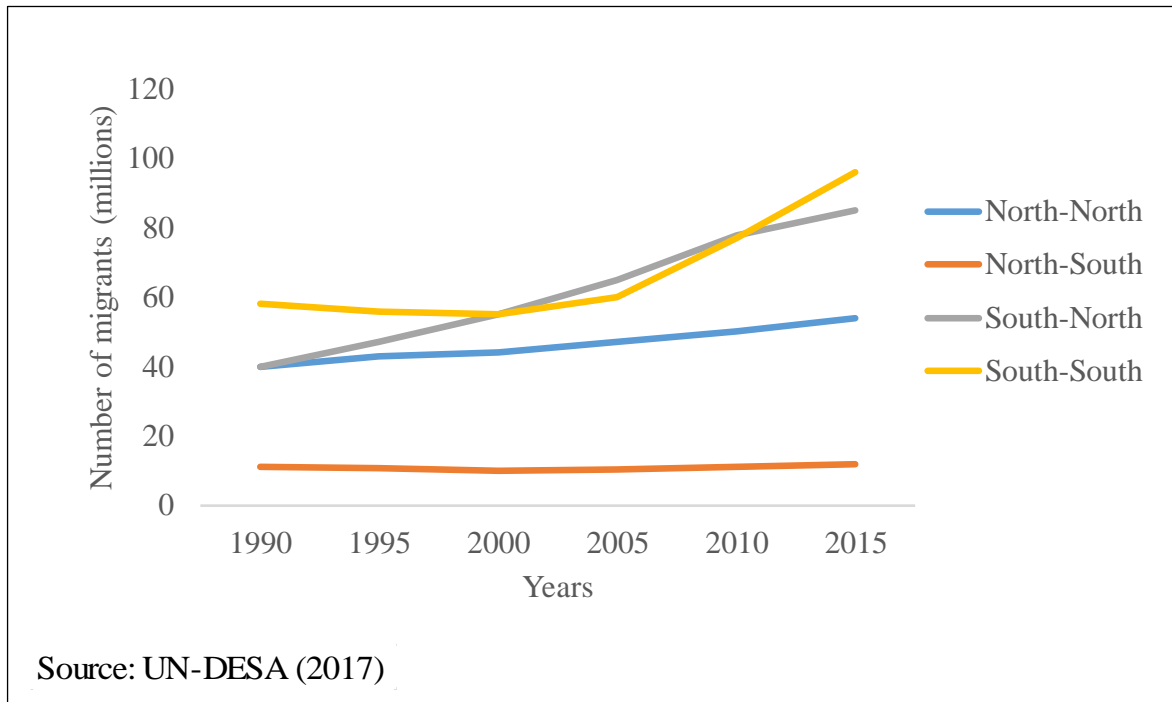
To conclude, one can infer that although migration of skilled individuals from the South to the North is supposed to bring intangible benefits of experience and knowledge and tangible benefits of influx of remittances, yet the theories of relative deprivation and economic dependency outweigh these benefits. The next section of the thesis will present the quantifiable data of migration to highlight the migration flow from developing countries to the developed countries.

### 2.1.2 Global trends in migration

In 2017, 258 million international migrants were recorded (UN-DESA, 2017). Among these, the developed countries of the global North hosted 57% of migrants whereas 43% of these migrants were reported in the developing countries of the South (Figure 1) (ibid.). The number of international migrants living in the South increased from 2010 to 2017 at an average annual rate of 3.2 percent (ibid.). This rate of change has surpassed the rate of international migrants residing in the North, as majority of the international migration reflected movement from South to South (Figure 2). However, this increase is due to the increase in the number of international migrants born in the South.



**Figure 1:** International migrants as a percentage of total population 2017



**Figure 2:** Origin and destination of international migrants by development group, 1990 – 2017 (millions)

Skilled migration constitutes a major portion of total migration. UN-DESA report of 2017 illustrates that the main developing countries who lost a significant population particularly in terms of migrant workforce in proportion to labor force from 2000 to 2015 are India, Philippines, China, Bangladesh and Mexico. Usually the workers from these countries settled in the United States of America, Canada and United Kingdom which have strong relationship ties with many of these developing countries (UN-DESA, 2017).

In short, the global trend of migration shows that there is an increased reliance on developed countries as a destination of migrant workers. The attraction of developed countries for the people of developing countries has been discussed later in this thesis. In the light of above discussion, the following section will now analyze the importance given to this migration phenomenon in the global development goals of 2030.

### 2.1.3 Migration in SDGs

This migration development debate is currently being addressed under the umbrella of Sustainable Development Goals (SDGs). Unlike Millennium Development Goals (MDGs), which left out the goal of sustainable migration, SDGs cater to it. The SDG 8 calls for promotion of “sustained,



inclusive and sustainable economic growth, full productive employment and decent work for all”. Thus, it emphasizes on the importance of migrant workers for economic growth (Piper, 2017). Suliman (2017), also argues that SDGs have been more inclusive in their approach of defining migrant rights and positive impact on the economy and this positivity has somehow depoliticized the phenomenon of migration.

Although SDGs have been more vocal about migration issues, yet there is a lack of deep understanding of migration. De Haas (2012) postulates that migration is the “outcome of unequal development”. This de-politicization of migration is an essential strategy, but the immigrant perspective of development is still missing in the post 2030 agenda (Suliman, 2017).

The SDG 8 characterizes migrant worker as an economic tool, ready to generate remittances and increase the value of his labor, however, this narrow view rejects the very idea of development of world economy. As Weber (2014) states:

When development goals are to be realized in terms of market access, their proponents simultaneously dispense with political debates on securing fundamental entitlements and institute a highly contentious political project. The post-2015 development agenda displays strong ideological commitments to deepening the instruments of neoliberal governance, framed in the language of ‘leaving no one behind’. (Weber, 2014, pp. 134 –135)

In summation, on one hand the scholars appreciate the inclusion of migration and migrant workers’ rights in SDGs, on the other, they criticize the narrow focus of SDGs treating migration as an economic tool and ignoring the underlying socio-economic deprivation themes within.

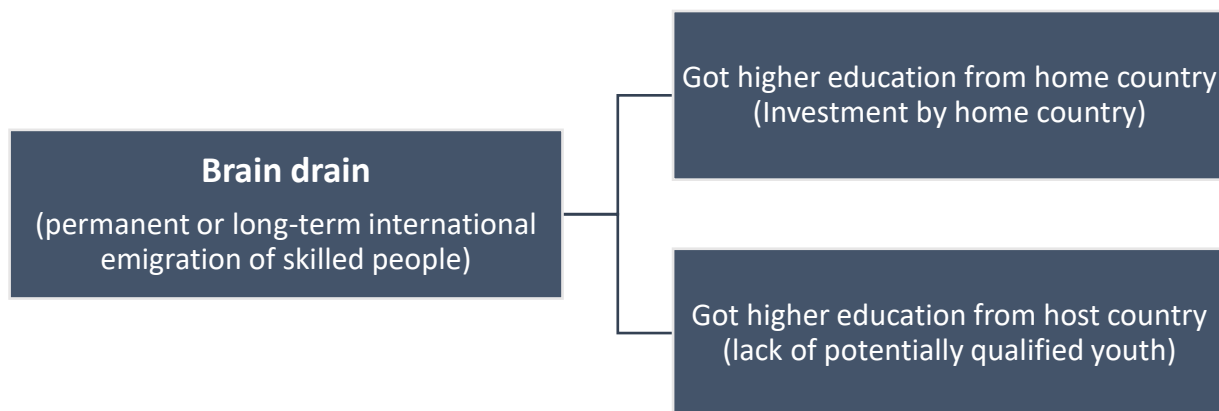
## **2.2 Overview of brain drain**

This section will give a detailed overview of the phenomenon of brain drain. For the clarity of purpose, this section is further subdivided into four subsections. Starting with defining the concept of brain drain, next subsection will give a brief historical summary of the brain drain controversy. After that, the determinants of brain drain highlighting the role of both the developing and developed states in creating the outflow of migrants is explained. In order to clarify the difference between brain drain and various terminologies used for high skilled migration, the next section will provide almost all the possible definitions of high skilled migration. The last subsection will

cover the major category of brain drain which is migrant students seeking higher education, which have been emphasized in this thesis.

### 2.2.1 What is ‘Brain Drain’?

The term brain drain dominates the popular discourse of high skilled migration (Gibson & McKenzie, 2011). This term was first devised by British Royal Society after the massive emigration of high skilled scientists and technological professionals from United Kingdom to United States of America and Canada during the 1950’s and 1960’s (Cervantes & Guellec, 2002). According to Beine et al (2007), brain drain refers to the phenomenon of migration of foreign-born workers with higher education or professional training irrespective of the fact that either their higher education was attained in native country or abroad. One can argue that according to this definition, since the migrant’s age and level of education is not taken into account while looking at the dilemma of brain drain, this whole concept might be overstated. Therefore, for the sake of simplicity we can divide the brain drain definitions into two different categories as follow:



**Figure 3:** Categories of brain drain and their impact on developing countries

The Figure 3 above describes the existence of two scenarios of brain drain. In the first scenario, the people who leave the home country have got their higher education from their home country

and have moved to a host country in search of better professional opportunities. In this way, the home country suffers because of the investment in higher education of those professionals. In the second scenario, the migrants get their higher education from the host country they are migrating to and decide to stay permanently in the host country. In this case, home country suffers because of loss of potential human capital which can later become part of its economic growth. Overall, as summarized by Jałowiecki and Gorzelak (2004), brain drain describes a phenomenon in which the development of a country suffers major loss due to massive outflow of well-educated elites. Hence, it proves that the home country suffers in both the cases.

In order to explain the consequences of high skilled migration, Jałowiecki and Gorzelak (2004) give a historical example of Russian czar, Ivan the Terrible. He sent 17 young students to study abroad and in return expected them to bring wisdom and prosperity to Russia. However, to his dismay, none of them returned back. On the other hand, in the 18<sup>th</sup> century, Peter the Great did the same thing and sent 50 people abroad. Fortunately, they returned back and emerged as notable scientists and engineers (Nekipelova et al., 1994). Both of these examples give opposing views of high skilled migration as brain drain and brain gain respectively.

Wickramasekara (2002) gives a holistic picture of brain drain as “the permanent or long-term international emigration of skilled people who have been the subject of considerable educational investment by their own societies” (p.3). Given the important role of human resources in the growth of a country, this migration of high skilled people results into a grave loss (ibid.). The higher education in developing countries is usually subsidized, hence, when the individuals leave after long term investment by the government, it creates an immense economic loss for the developing countries (Bhagwati and Hamada, 1974; Lucas, 1988; Piketty, 1997).

International organizations like the United Nations Development Program (UNDP), the International Labour Organization (Lowell & Findlay, 2001), Organization for Economic Cooperation and Development (OECD) have also commented on the consequences of brain drain (Rizvi, 2005). OECD has derived a term *HRST – Human Resources in Science and Technology*, which refers to a wide variety of skills ranging from medical professionals to scientists, engineers, business, social sciences and life sciences students (Auriol and Sexton, 2002).

One thing that should be noted while studying this concept is that brain drain is not limited to developing countries or the South in general. It is happening all over the world at different levels.

As Auriol and Sexton (2002) point out, there is extensive literature on the brain drain from Canada to USA. Similarly, Europe has been losing its skilled workers to USA. However, for the limitation of topic, this thesis has only focused on brain drain from developing countries to developed countries of the students who migrate to get their higher education from abroad and decide to permanently settle down there.

### 2.2.2 Three generations of brain drain controversy

Docquier and Rapoport (2009) report that there have been three generations of research focusing on the phenomenon of brain drain. The first-generation research identified the benefits of brain drain to the world economy (Berry and Soligo, 1969; Grubel and Scott, 1966). The second wave of brain drain research had a more realistic approach and argued against the negative effects of brain drain on the home country (Bhagwati and Hamada, 1974; Bhagwati and Rodriguez, 1975; Hamada and Bhagwati 1975). These effects included labor market rigidity in the source country, fiscal externalities and other issues (Bhagwati and Hamada 1974; McCulloch and Yellen 1977). Miyagiwa (1991) and Haque and Kim (1995) highlighted the hazards of brain drain from an international perspective. They posited that brain drain is a major contributor to global inequality by making rich countries wealthier at the cost of poor countries. Mountford (1997), Stark et al. (1997, 1998, 2009a, 2009b) and Beine et al. (2001, 2008) were the significant third generation researchers of brain drain. They argued that under certain circumstances, brain drain can be beneficial for the source country as it creates positive externalities for the rest of the population. This generation of research continues today, providing a more balanced approach of the consequences of brain drain.

In essence, the brief history of brain drain is loaded with both the positive and negative impacts of it. Since, there are both positive and negative impacts, the real implications are ambiguous at this point in time. Thus, the next section will reveal the major determinants of brain drain. Rather, by presenting the one sided story of the North or the South, it will give a comprehensive view about how both the developed and developing countries get involved in creating the push and pull factors for brain drain.

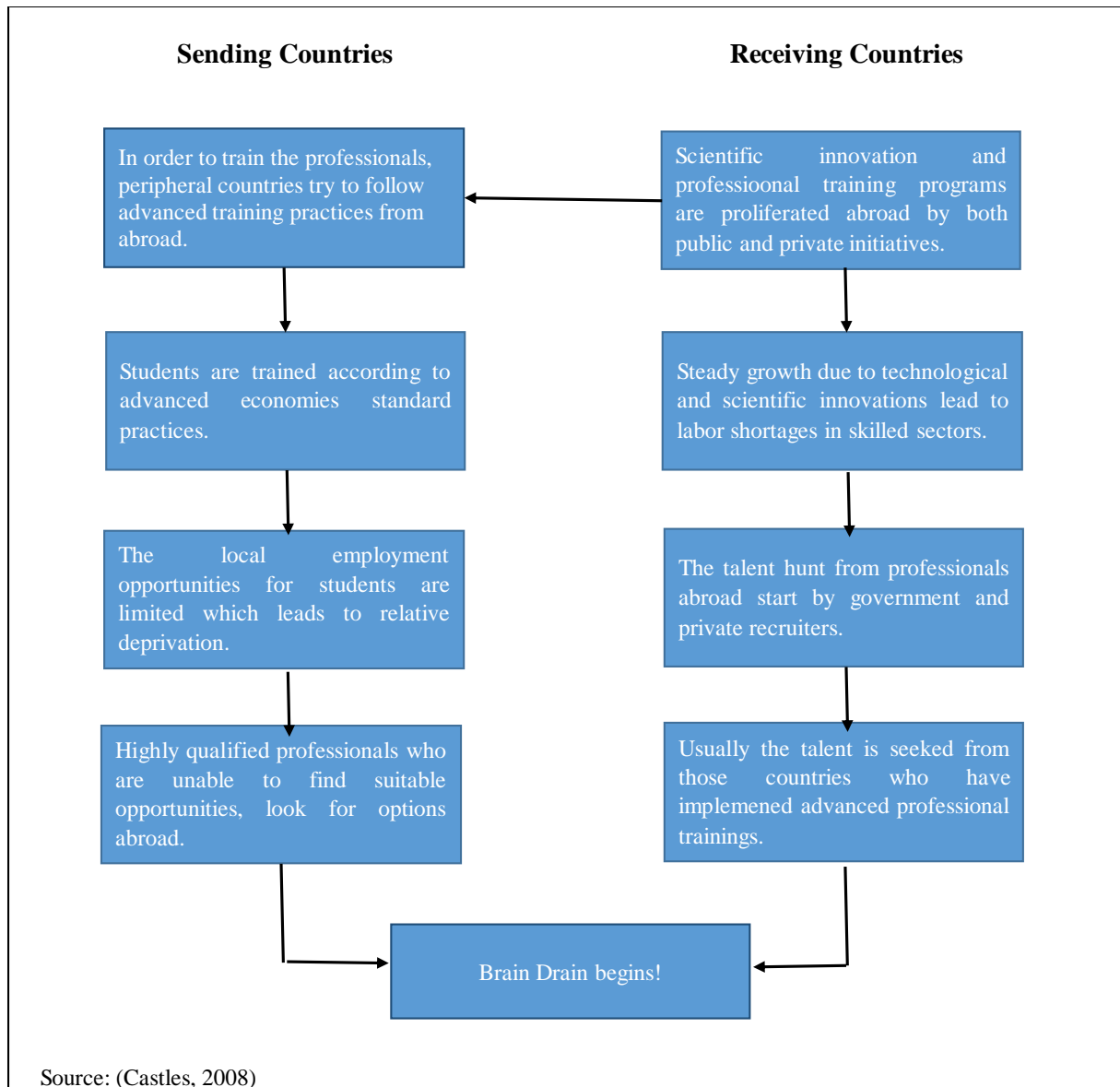
### 2.2.3 Determinants of brain drain

Portes (1976), refers to relative deprivation of the people who are unable to migrate. He argues that their deprivation is compared to the two categories of professionals; the first category is of the

highly qualified, well-suited professionals at their home country. Whereas, the second deprivation is compared to the trained professionals migrated abroad (ibid.). The professionals belonging to first category are classified in the middle-class position in their home country. The relative deprivation arises when people are unable to meet this relatively better standard of living and hence, migration occurs. Thus, one can argue that although attractive wages are a great source of inspiration to migrate to the developed world, yet the urge of having a better lifestyle plays a bigger role in the case of brain drain.

In the case of second group of people working abroad, the relative deprivation is again about the better quality of life and self-grooming rather than income differential. Portes and Walton (1981) infer this situation as the unequal development of the world in terms of periphery-core relationship. They argue that the technological innovations and western professional training from the core countries become so diffused in the periphery that they try to imitate that, ignoring whether this is essential for the country's development or not (ibid).

This shows how the high skilled professionals are trained by the developing countries in the advanced and most scientific way but the conditions to practice these skills are rare or sometimes entirely absent in the peripheral countries. Therefore, the developing countries invest a lot of their scarce resources in the education and training of their people, who at the end are unable to find their future to practice those skills in their home country. This whole dynamics of brain drain is explained by Portes and Ross (1976) as 'modernization for emigration'. The following Figure 4 explains it in detail.



**Figure 4:** Determinants of brain drain

#### 2.2.4 Other related terminologies for high skilled migration

High skilled migration is not always detrimental for the developing countries. For instance, if the migrants return to their home country or if they somehow provide useful expertise to the diaspora back to their home country, it is considered beneficial. Thus, it would be misleading to term all types of high skilled migration as brain drain. The following are some terminologies used to describe different types of migrant outflows related to brain drain.

#### *2.2.4.1 High skilled mobility*

High skilled mobility refers to migration of tertiary educated individuals having 16 years of education in total (Lowell & Findlay, 2001). The migration pattern can be recurrent, one time or permanent stay in foreign country (Lowell & Findlay, 2001).

#### *2.2.4.2 Optimal brain drain*

According to some economists, the optimal level of brain drain reaches when there is not too much or too little migration of skilled workers. This optimal level of migration would benefit the economy of the home country as the higher wages in the host country would incentivize other people (non-migrants) in the home country to educate themselves (Lowell & Findlay, 2001).

#### *2.2.4.3 Brain circulation*

When the return of highly skilled migrants to the home country encourages other students to migrate and return with polished skills, it creates a cycle of brain circulation (Lowell & Findlay, 2001). This results into an increase in the overall productivity of the natives of sending countries.

#### *2.2.4.4 Brain waste*

When the economies are unable to provide proper jobs to highly qualified migrant workers, this results into brain waste (Lowell & Findlay, 2001). For instance, when scientists or doctors end up becoming cab drivers in the migrant countries. This happens mostly when there is a recession in the global economy or when there is a language barrier.

#### *2.2.4.5 Brain exchange*

Brain exchange occurs when the loss of highly qualified migrants from the sending country is compensated by an inflow of highly qualified foreign migrants from any foreign country (Lowell & Findlay, 2001).

#### *2.2.4.6 Brain globalization*

In this era of globalization and international trade, some amount of high skilled mobility is necessary for efficient operation. This is usually practiced by multinational organizations to enhance their global trade by high skilled mobility (Lowell & Findlay, 2001).

#### *2.2.4.7 Brain export*

Sometimes, developing countries send their highly qualified individuals abroad either through bilateral programs or individual migration to increase their productivity (Lowell & Findlay, 2001).

The purpose is to enhance knowledge, technological transfers and remittances. In this way the developing countries earn foreign exchange for their economic growth (Rizvi, 2005).

In a nutshell, all these terms present a different view of high skilled migration and its impact on the developing countries and emigrants. As explained in the literature review above, one category of brain drain involves the migration of students to other countries for higher education. Since this thesis is focusing on them as a case of brain drain, the next section will dig into the detailed analysis of international students in developed countries.

### 2.2.5 International students as skilled migrants

Since last few decades, higher education has been regarded as a fundamental building block for promoting economic development. International students are considered an integral part of the economy; they are a source of financial capital for universities and if involved in research and development or teaching, they are a source of intellectual capital (Ziguras & Law, 2006). Thus, developed countries try to enhance the integration of international students in the economy in order to benefit from the skills of these immigrants. Many advanced countries like Australia, US, Canada, UK, France and Germany have started skills-based migration programs for this ulterior motive (Ziguras & Law, 2006).

Hawthorne (2008) mentions in his study that international students are considered to be a priority human capital by international organizations because of several associated benefits. He states that firstly, they are young and ready to become part of workforce. Secondly, his study revealed that they have acquired relevant skills and knowledge and their credentials are readily acceptable. Thirdly, they are expected, and also have the ability, to learn the local language of the host country according to his research. Lastly he found that they have funded themselves for getting the degree and polished themselves as a potential human capital for recruiters.

Ziguras and Law (2006) argue that immigration of migrant workers is of crucial importance in the economies where birth rate is low and ageing population is increasing. This is because, as compared to the developed economies, the developing economies are facing population growth at an alarming rate. This ageing population of developed economies depicts that in the long run, the economic benefits of tuition fees and living costs of international immigrants will outweigh the benefits of including them in the workforce (ibid.).



With the passage of time, the number of international students in the universities across the world has grown at an exponential rate. In 1975, there were only around 600,000 enrolled in international universities for higher education, whereas in 2005, the number grew to 2.7 million, which is again expected to rise to 7.2 million by 2025 (Hawthorne, 2008). It is an economically lucrative opportunity for the OECD countries as they are the most popular destinations of hosting international immigrant students. It was reported that the OECD countries generated 32.9 billion dollars in revenues in 2005 as a result of international students' intake (Hawthorne, 2008).

Critically analyzing the influx of students pursuing higher education in the developed economies, one can find both the push and pull factors behind it. However, the analysis shows that developed countries are in dire need of international students to become part of their local workforce and permanently settle there because of their increasing ageing population and decreasing young and energetic force work. However, the next section shows that rather than valuing those international students, who would become a part of the workforce, the labor market actually discriminates against those immigrant workers from the developing countries.

### **2.3 Native-migrant workers wage differential**

As has been established from the literature above that the immigrant workers tend to migrate to developed countries, we would now move on to explore how the labor market of the host country reacts to this brain drain. Gheasi et al., (2017) report that there is a variation in migrant workers' skills and productivity due to their different geographical backgrounds. This variation is sometimes translated in terms of lower wages by the labor market of their respective host countries (ibid.).

In addition to that, Chiswick (1978) explains that while analyzing the wage differences, it would be misleading to not take into account the vast differences of human capital between native and immigrant workers. Some immigrants obtain their degrees in their home countries, while some get higher education in the host country, but a majority of them get a combination of foreign and domestic education and skills (ibid.). Thus, if we do not take into account these differences in human capital, the results of wage differential would be biased.

The wage differential between native and immigrant workers has been observed throughout the developed countries. The literature shows that this wage gap is mainly found in the United States (Borjas, 1985; Chiswick, 1978; Lessem and Sanders, 2013), Canada (Ferrer et al., 2006), the

United Kingdom (Bell, 1997; Chiswick, 1980; Denny et al., 2012; Miranda and Zhu, 2013), Germany (Aldashev et al., 2012; Bartolucci, 2014; Dustmann, 1993; Pischke, 1992), and Australia (Beggs and Chapman, 1988; Chiswick and Miller, 1985; McDonald and Worswick, 1999).

It has been investigated that although the developed countries are in desperate need of highly qualified immigrant labor force due to increasing proportion of growing age population, but the immigrants and even further generation of immigrants are facing discrepancies in terms of income and employment opportunities (Gheasi et al., 2017).

Himmer and Jackle (2017) argue that it is important to know whether these wage gaps are due to employers' discrimination or due to a lack of qualification or experience in immigrant workers' case. They state that one of the major reasons of this wage differential could be the native language proficiency which is an important determinant of employment (ibid.). Chiswick (2016) also supplement this argument especially in the case of Europe: "The economic success of migrants depends heavily on how well and quickly they learn the language of their new country." (p.31)

The analysis of wage differential with respect to the number of years the migrants have lived in the host country shows a decline. The immigrants tend to develop specific skills and language proficiency after spending a certain number of years in the host country. Therefore, as their labor market productivity increases with the passage of time, the wage difference relative to native citizens also decreases (Borjas, 1985; Chiswick; 1978; Friedberg, 2000).

Summarizing the wage differential between the native and migrant workers, the literature shows that it exists across the globe in major developed regions. The reasons vary from lack of sufficient labor market skills to language barrier. However, all the researches point to the fact that with the passage of time, when the migrant workers stay longer in the developed countries, this difference tends to decrease. Since, this thesis has taken Finland as a case study of brain drain destination, the next section will elaborate the status of migrants and economy in this part of the developed world.

## **2.4 Case of Finland**

The above sections have laid down a basic and generalized understanding of brain drain and wage differential around the globe with respect to different theories. However, in order to study the practical implication of these phenomena and see the actual impact on the immigrants, there is a

need to investigate the case study of a selective country with real data. Since this thesis is focusing on Finland, the following section will dig into the literature of Finland labor market and the need of international migrants there.

#### 2.5.1 Need for immigrants in the Finnish labor market

While analyzing the need of immigrants in Finnish labor market, Heikkilä (2017) states that there is a desperate need of labor in Finland, as the number of ageing population exiting the labor market (60-64) is higher than the number of young population (20-24) entering the labor force. According to the statistics of Finland, this need of labor will increase in the long run as it is estimated that by 2030, the working age population will decrease by 59% (ibid.). This difference between ageing population and young workers can only be compensated through migrant labor force.

The report published by Interior Ministry of Finland (2018) states that the labor shortage will be experienced in almost all the major sectors of Finnish economy in the long run. For instance, in the software sector, the expected shortage of workers is 15,000 skilled workers in 2020.

The report states that the advantages of Finland in attracting the skilled migrant workforce and to prolong their stay include: “a secure and stable society, well-functioning public services, including our globally known and recognized education system, accessible and versatile cultural services as well as children’s day care, healthcare and social welfare” (Ministry of the Interior Finland, 2018, p. 21).

In short, Finland is in dire need for international migrants in the labor market due to growing ageing population. Further, it is one of the most developed countries in the world, so this accounts for a major pull factor for brain drain. For the sake of this thesis, the next section will focus on brain drain of international students in Finland and observe their trend.

#### 2.5.2 International degree students in Finland

As explained in section 2.2.5 of this thesis, the global trend of international students’ migration is increasing day by day. Batalova (2007) mentions that due to the arrival of the Balaguna process, the mobility of international students in Finland also increased. The Balaguna process was launched in 1999 by the Ministers of Education and the university leaders of 29 European countries in order to enhance the higher education system in Europe (ibid.). Batalova (2007) refers to this process as a means of ‘brain gain’ in Europe.

Laine (2016) reports in her book that the international students' statistics showed a sharp rise in Finland, from 8,442 in 2004 to 19,138 in 2012. The main nationalities of international students were Chinese and Russian in 2012. Table 1 depicts that many new developing countries like Vietnam, Pakistan, Bangladesh and Nepal have played a significant role in the international student mobility in 2012.

**Table 1:** Top ten nationalities of international students studying in Finland in 2004, 2008 and 2012

2004	Abs.	%	2008	Abs.	%	2012	Abs.	%
China	1,382	16	China	1,988	16	Russia	2500	13
Russia	1,127	13	Russia	1,378	11	China	2,177	11
Estonia	599	7	Estonia	684	5	Vietnam	1,162	6
Sweden	538	6	Nigeria	629	5	Nepal	1,14	6
Germany	322	4	Sweden	495	4	Nigeria	844	4
Kenya	246	3	Nepal	451	4	Estonia	790	4
UK	191	2	Germany	446	4	Pakistan	691	4
USA	187	2	Ethiopia	428	3	India	639	3
India	165	2	Ghana	370	3	Germany	607	3
France	146	2	Kenya	347	3	Bangladesh	577	3
Total	8,442	100	Total	12,596	100	Total	19,138	100

Source: (Statistics Finland database, 2014)

The most popular field of study of international students in Finland was 'technology and traffic', where 39% of the students were enrolled (Laine, 2016). Similarly, when the Finnish Ministry of Education and Culture conducted a survey to know the expected turnout of the students in 2020 in different fields, the result showed a significant increase of 20% in technology and traffic (ibid.).

Hence, here it has been established that Finland has been attracting more and more migrants from the developing countries especially in terms of international students and the brain drain has been increasing. Within the international migrant students, the most famous field is Information & Communications Technology (ICT). Now, the next section will investigate the integration of these international students in the Finnish labor market.

### 2.5.3 International students in Finland's labor market

The research conducted by several scholars and institutes concludes that most of the international degree students prefer to stay in Finland after their graduation as they foresee a better quality of life there (CIMO, 2014; Laine, 2016). Laine (2017) reports that according to the statistics of 2009, fifty-one percent of all the international graduates were working in Finland within one year of their graduation, 48% were working within three years, while 44% within five years after their graduation. Laine (2017) believes that the financial crisis of 2008 has deteriorated the employment opportunities for graduates, both national and international previously, however, with the passage of time, the situation has been improving. According to the statistics of 2014, the number of unemployed graduates was 4,772, which rose to 4,911 in 2015 and further increased to 5,206 in 2016 (ibid.). However, according to 2017 figures, the number has decreased to 4,722 (ibid.).

Further, Laine (2017) explores that finding a proper job is difficult for international students as compared to Finnish students because of two reasons. Firstly, the language barrier is the major factor in limiting the opportunities for international students. Secondly, the unavailability of contacts of international migrant students becomes a hindrance in finding good opportunity. With only two years of exposure of studying in Finland, they are unable to increase their network (ibid.).

In a nutshell, there is bright future for international students in the Finnish labor market, however, they struggle to find appropriate opportunities owing to different limiting factors. ICT being the most popular major among the international graduate students in Finland, this thesis would narrow the focus down on the ICT and provide details of the ICT sector in the Finnish labor market.

### 2.5.4 ICT sector in Finland

Hirvonen (2004), describes that the Information and Communication Technology (ICT) sector of Finland has been the leading sector of the economy despite recession during the 1990s. He further claims that without the stronghold of the ICT sector, Finland would not have been able to overcome the financial recession. Also, ICT contributes to a major chunk of GDP share in Finland's economy. All in all, this sector has a strong base in Finland.

The demand for ICT specialist in Finland has risen steadily over the past few years. Figure 5 shows that the demand for IT specialist in almost all the OECD countries is above 3% (OECD, 2015). Whereas, Finland has the highest ICT employment percentage compared to the ICT employment in all other OECD countries in both the years, 2011 and 2014 (ibid.).



**Figure 5:** Employment of ICT specialists in OECD countries 2011 and 2014

In summation, Finland is one of the attractive destinations for international students and migrant workers, especially in the ICT related fields. This sector had been the blooming sector even during the major financial crises and globally also, Finland has a well-established reputation in this sector.

## 2.5 Case of Pakistan

According to World Bank (2017), Pakistan is ranked as a middle-income country (Figure 6) with an unemployment rate of 5.2%. This exceptionally high unemployment rate in an overpopulated country like Pakistan indicates the sheer lack of career opportunities in the country and oversupply of qualified labor. Due to this alarming situation of unemployment in Pakistan, the high-skilled people like doctors, engineers, IT professionals, students, teachers, accountants, other professionals, and especially freshly graduated students are moving abroad to secure better future (Doghri, et al. 2006). Ahmad (2018) reports that from 2013 to 2018, almost 2.7 million left Pakistan to seek better opportunities. It is a very worrisome problem for Pakistan as human capital is considered to be one of the most important assets and a middle-income country like Pakistan cannot afford to lose it at this alarming rate.

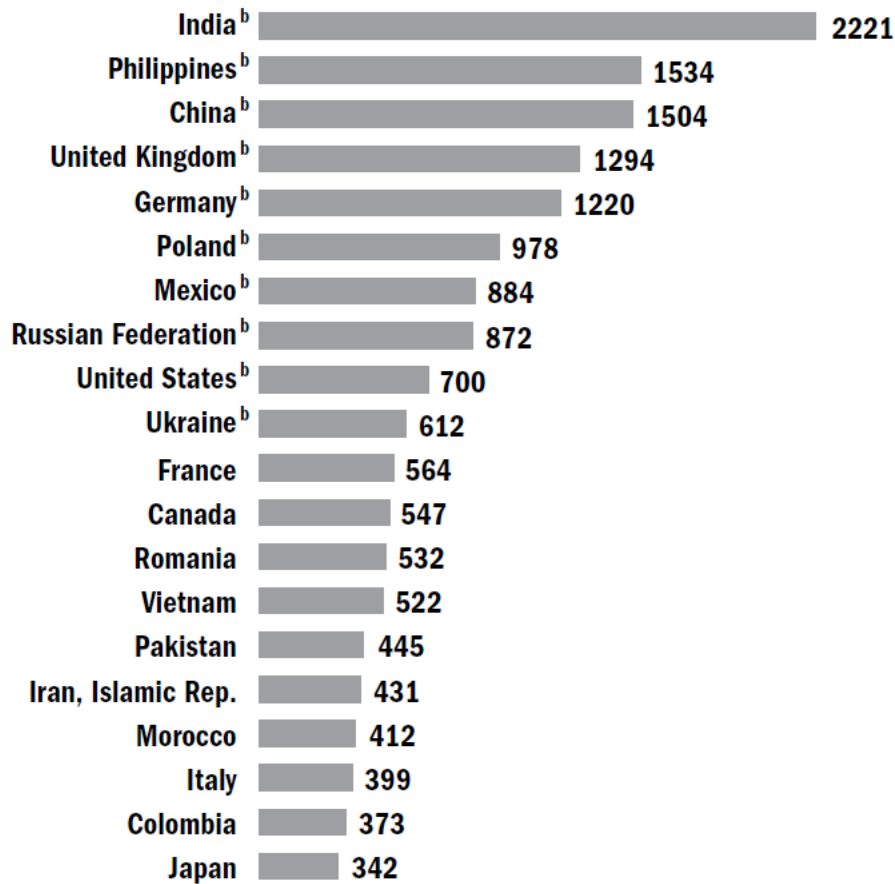
According to World Bank (2016) statistics, the tertiary-educated people of Pakistan as a percentage of total emigrants in OECD countries in 2011 was 36.1%, which is quite a huge percentage of highly qualified people.

## Pakistan

	MIDDLE INCOME
Population (millions, 2014)	185.0
Population growth (avg. annual %, 2005–14)	2.1
Population density (people per sq km, 2014)	240.0
Labor force (millions, 2014)	65.4
Unemployment rate (% of labor force, 2014)	5.2
Urban population (% of pop., 2014)	38.3
Surface area (thousands of sq km, 2014)	796.1
GNI, Atlas method (current US\$ billions, 2014)	258.3
GNI per capita, Atlas method (current US\$, 2014)	1,400.0
GDP growth (avg. annual %, 2011–14)	3.8
Poverty headcount ratio at national poverty line (% of pop., 2005)	22.3
Age dependency ratio (% of working-age pop., 2014)	65.8
Account at a formal financial institution (% age 15+, 2014)	8.7
Mobile cellular subscriptions (per 100 people, 2014)	73.3
Internet users (per 100 people, 2014)	13.8

**Figure 6:** General and economic statistics of Pakistan (World Bank, 2016)

According to World Bank's dataset in Migration and Remittances Factbook 2016, in overall ranking, Pakistan has been ranked third in South Asia (after India and Bangladesh) and sixth in the World (after India, Mexico, Russia, China, and Bangladesh) for human capital migration. The Figure 7 will give a detailed overview of the migration of highly educated people from Pakistan.



**Figure 7:** Top emigration countries of tertiary educated, 2010 –11 (stock of migrants, thousands) (OECD, 2014)

Overall, the country has been suffering from a grave situation of brain drain. The determinants of this high skilled mobility are evident that this mobility is directly related to high unemployment rate, low growth rate and excess supply of qualified labor in the country. In order to stop this migration from occurring and to protect the country from human capital loss, the country needs to create demand of labor through socioeconomic incentives, which is challenging to achieve in the short term.



## Chapter 3

### 3. THEORETICAL BACKGROUND

This Chapter will lay the basis of theoretical framework to support the arguments presented in the previous sections. In order to analyze the theoretical background of brain drain and labor market discrimination, this chapter will give an overview of the relevant theories. The neo Marxist theories formulated by Frank (1980) and Wallerstein (1974) known as dependency theory and world system theory respectively, explain brain drain as a by-product of capitalist development. On the other hand, neoliberal globalization categorizes the high skilled migration as forced migration due to lack of opportunities. The last section of this chapter will give a new perspective of dependency theory in terms of human capital resources.

#### 3.1 Dependency theory

The unequal socioeconomic and political development of the world is proposed by Frank (1980) in the form of dependency theory. He argues that the capitalist system has divided the world into two circles: the rich developed economies are called ‘center’ and the poor countries ‘peripheries’. This unbalanced scenario perpetuates the ‘underdevelopment’ of the peripheral countries and increases their dependence on the central countries (ibid.).

The development of Europe and US was based on the underdevelopment of the rest of the world. This claim has been made in the dependency theory of Marxist school of thought (Peet and Hartwick, 2015). The authors of dependency theory argue that the development of Europe was based on colonial control and conquests which deprived the local people from their resources, profits and people (ibid). To support this argument, they explain that rather than rational modernization, Europe achieved success due to these brutal conquests. The result of these atrocities came in the form of dependence of European First World “center” and non-European Third World “peripheries.” ((Peet and Hartwick, 2015, p. 188). This means that the development of dominated economies was limited and dependent on the development of dominant economies.

The incorporation of Latin America in the world economy is the perfect example to explain dependency theory. Instead of taking into account the demands of the local people, Latin America was pushed towards capitalist economic system through colonization by Spain and Portugal, disguised in the form of trade (Peet and Hartwick, 2015). This dependence controlled by the center

resulted into enormous fraction in the society - there was a small, massively rich elite group and a large population of poor peasants (ibid.). This elite or the ruling group was responsible for earning large profits by exporting goods and services. However, the actual power was in the control of dominating central countries.

The study of dependency theory enables one to examine the issue of brain drain and migration on a macro level, of both the skilled and the unskilled labor. However, it explains more elaborately, the dependence of the rich economies on the cheap migrant labor force from the developing countries, which creates unequal opportunities. The developing countries are in return dependent on the remittances provided by the labor migrants. Now, the world system theory, explained in the next section, digs more into the issue of how unequal world development leads to migration, especially of skilled labor.

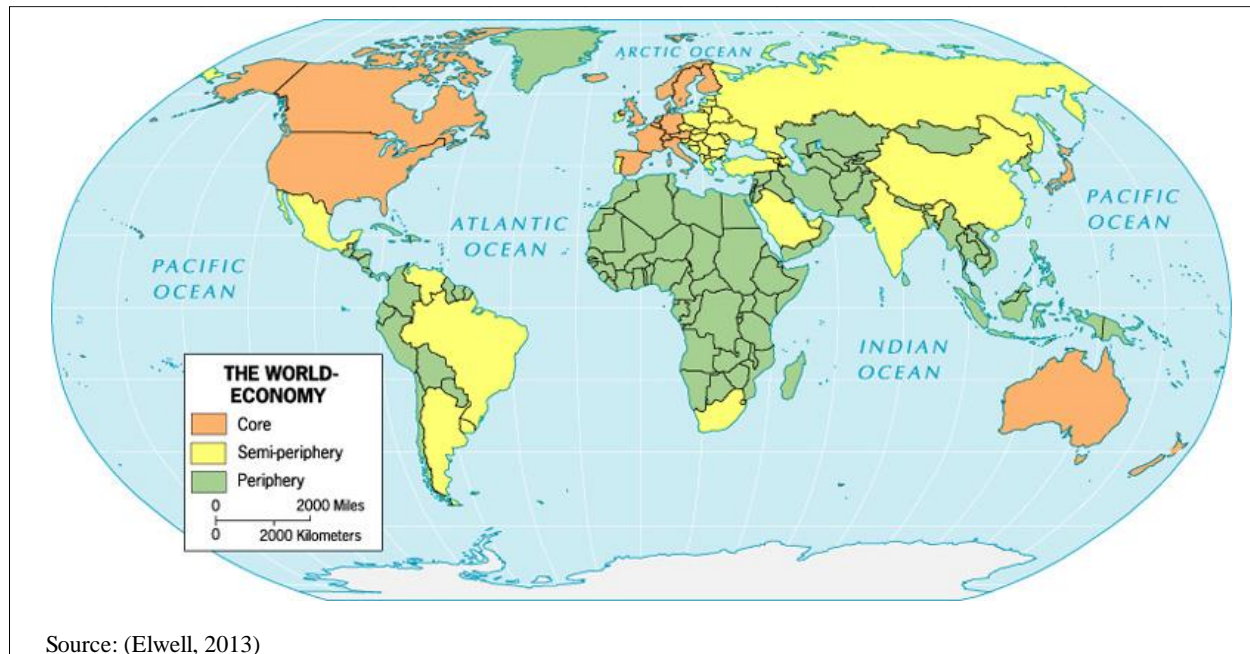
### **3.2 World system theory**

The World System theory has an obvious connection with the dependency theory, as both talk about the center and periphery relationship (Peet and Hartwick, 2015). According to Wallerstein (1974), capitalism and the world economy are the two sides of the same coin. Explaining the development of sixteenth century Europe, he argues that it was entirely a result of the capitalistic world economy in which the development of the rich economies happened due to underdevelopment of poor economies. Hence, it was the origin of the world capitalist order (Peet and Hartwick, 2015).

Faist (2010) explains the world system theory as a mechanism in which resources are redistributed from the periphery towards the core. In this exchange of resources, the division of labor is characterized in such a way that the core has the technological advancement and manufactures complex products, whereas, the periphery supplies the raw material and cheap labor to the core. Wallerstein (1983) further delves into this unbalanced relationship between the core and the periphery, in which the periphery has to sell its products or raw materials to the core at low prices, whereas, the core charges a lot to the periphery for its finished products.

According to Wallerstein (1974), this capitalist system gave rise to hierarchal structures. In short, he categorized the world system into three classes; core, periphery and semi-periphery (Figure 8). The core consists of industrialized countries, especially colonial powers. The periphery, on the

other hand, comprises of poor countries that supply cheap labor and raw materials to its former colonial powers and is controlled by them. The most interesting category of semi-periphery encompasses those countries that are in the transition from periphery to core due to their economic growth and technological development (Chaichian, 2011).



**Figure 8:** The world economy

Rizvi (2005) describes the phenomenon of brain drain in the light of the world system theory. He refers to the fact that this system of capitalist world order, creates pull factors for migration to core for the high skilled people residing in the periphery or semi periphery. Consequently, this outflow of human capital further reinstates the capitalist structure by strengthening the core. In short, according to the world system theory, brain drain is a result of capitalist world order and further encourages global inequalities.

### 3.3 Neoliberal globalization

For a deeper understanding of migration and immigrant workforce, the new imperialism dominated by neoliberal globalization is essential to study. Neoliberal capitalism is associated with the accumulation of wealth and provision of cheap labor. Thus, nowadays, it is providing the platform for global reserve army of labor through labor arbitrage and forced migration of high skilled

individuals. Delgado R (2013) argues that “a covert proletarianization of highly qualified scientific and technological workers has taken place” (p. 28) under the banner of neoliberal globalization.

### 3.3.1 Global reserve army of labor

The ever-increasing global supply of labor, particularly from the South has led the corporations, backed by the government policies, to lower the cost of labor. Delgado R (2013) argues that with the emergence of peripheral countries of China and India and the “freeing” of labor through structural adjustment programs in the South, the supply of labor has increased. He contends that this oversupply supports the possibility of labor exploitation. Foster et al. (2011) further refer to this condition of increased supply of labor as “global reserve army of labor”. They posit that this reserved army of labor comprises of 57 to 63 percent of total global labor force. This disproportionately large supply of labor results into inappropriate employment conditions, particularly low wages and absence of decent working opportunities. Thus, the labor is left with no choice but to migrate.

### 3.3.2 International labor arbitrage

Stephen Roach of Morgan Stanley coined the term of ‘labor arbitrage’ to define the unequal trend in the world economy through which corporations get surplus profits by paying low wages to the international labor force (Foster et al., 2011). Hence, the actual phenomenon taking place behind the labor arbitrage can be found in Marx’s explanation of capitalist ideology of accumulation of wealth by exploitation of labor. The new imperialism of the twenty-first century is thus dominated by the accumulation of wealth from the top and by exploitation of global reserve army of labor from the bottom (ibid.).

### 3.3.3 Forced migration of labor

In the wake of the neoliberal era, migration is looked at with a different dimension and lens in the globalized world. The unequal development of world economies has given rise to migration of marginalized people from peripheral countries to relatively progressive and industrialized economies. Moreover, high skilled people are compelled to migrate due to lack of lucrative employment opportunities. This migration due to lack of opportunities, and over qualification is one of the categories of ‘forced migration’(Delgado R, 2013).

According to Delgado R (2013), forced migration takes place at both at the national and international level, forcing massive migration from peripheral to core areas. In terms of labor, this

forced displacement creates oversupply of cheap labor, which allows organizations to exploit labor. This exploitation is done through cheap wages and inappropriate working conditions. Thus, the labor exportation from developing countries gives rise to disguised labor exploitation of both skilled and unskilled workers.

In a nutshell, the theoretical perspective establishes that migration of skilled workers from periphery to core countries is a result of unequal development of the world system. Also, the oversupply of labor from developing countries encourages the exploitation of labor in terms of low wages. Thus, while considering the human capital in terms of core of the developing countries, their migration results into a major loss of core for them. And when this core human capital migrates to the core countries of world system, it gets discriminated in terms of wage gap between them and the natives of developed countries. All in all, this high skilled migration is amplifying the misery of developing countries and their migrants.

### **3.3 Human capital dependence**

This section will analyze the dependency theory explained above through the lens of human capital flow instead of financial capital flow. The global reserve army of labor establishes the fact that there is oversupply of labor in the developing countries, whereas, the lack of demand or absence of opportunities forces the labor, especially high skilled labor, to migrate to developed countries. This forced migration is a result of unequal development in the world economy, where rich and developed countries with relatively lesser number of skilled workers and more financial capital benefit from the skills, knowledge and experience of high skilled migrants. On the other hand, due to abundance of labor from the developing countries, the employers in the developed countries get room to exploit the labor through labor market mechanisms.

In the following Figure 9, the green circle shows the world, inside which there is a division between core countries and peripheral countries depicted as the global North and the global South, respectively. The human capital of the core and peripheral countries has been further divided into sub-categories of high skilled human capital demonstrated as core human capital or CHC, and the other category is of low skilled human capital or peripheral human capital, PHC.

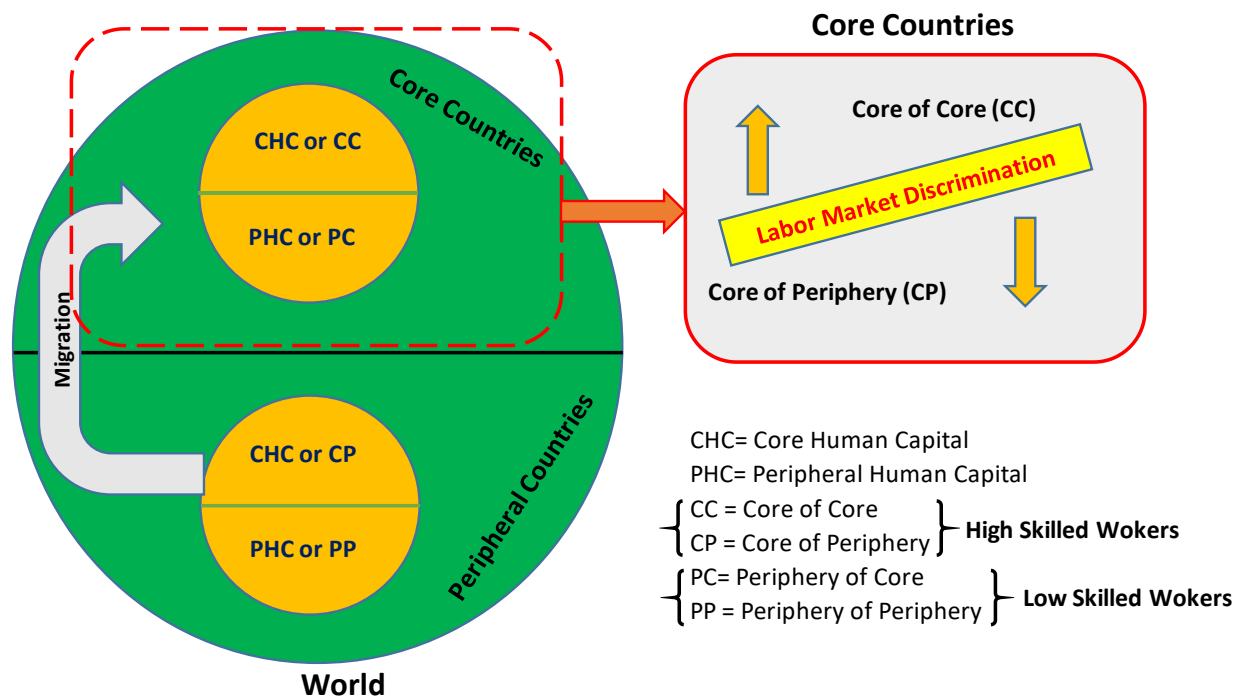
Core countries:

- a. Core human capital – high skilled human capital – core of core - CC

- b. Peripheral human capital – low skilled human capital – periphery of core - PC

Peripheral countries:

- a. Core human capital – high skilled human capital – core of periphery - CP  
b. Peripheral human capital – low skilled human capital – periphery of periphery - PP



**Figure 9:** Overview of dependency theory in relation to high skilled migration and native-migrant discrimination

The lack of opportunities in the peripheral countries forces their high skilled human capital – CP to move to advanced core countries. However, when we analyze the situation of these high skilled workers in the developed country, we see, as in the grey box (Figure 9) that as compared to the high skilled human capital of the core countries – CC, the equally qualified labor from developing country is being discriminated in terms of employment conditions.

In a nutshell, as mentioned in the literature review also, almost all the major developed countries discriminate between the wages of migrant workers and their equally qualified native counterparts which is the most prominent form of labor market discrimination. As human capital is an asset of

economic growth of a nation, this discrimination verifies the dependence of low-income countries (peripheral countries) on the developed countries (core countries) in terms of better and appropriate opportunities for highly skilled human capital. This thesis will elaborate the above-mentioned theoretical representation of human capital dependence through data analysis and findings in the subsequent sections.

## **Chapter 4**

### **4. METHODOLOGY**

In this Chapter, the methodological approach adopted to answer the research questions has been described comprehensively. The subsections of the Chapter will give an overview of the rationale of choosing the case study method and within that, interviews as the qualitative method. Further, the process of the research involves methods of data accumulation and the background of the research participants. Subsequent sections will briefly prove the validity, reliability and generalizability of the data collected. The last section of this Chapter will reveal the challenges encountered in the overall process of data collection.

#### **4.1 Case study method**

The choice to use case study as a method of research is dependent on the research questions which one adopts. According to Yin (2003), case study helps to find out the “in depth” examination of complex social phenomenon or behavior. By selecting a “case”, researchers are able to study the holistic view of the underlying research problem (ibid.). It is a method which enables one to find ‘specific rather than the general - a choice of depth over breadth’ (Burton, Brundrett, & Jones, 2008).

Since the research paper is going to find out the phenomenon of brain drain and social inequality in terms of income, case study has been chosen as a methodological approach. The case study is migration of high skilled workforce from Pakistan to Finland. The investigation of wage differential of white-collar migrant workers of Information Technology sector in Finland is the main theme of the case study. Access to data has been very easy because of easy availability of and access to the participants in the chosen field of study.

##### **4.1.1 Why Finland and Pakistan chosen as cases?**

World Bank (2018) classifies the country into four categories according to their economic status. These are low, lower-middle, upper-middle, and high income. According to fiscal year 2018 database of World Bank, Finland comes under the category of High-Income Economies (\$12,056 or more), whereas, Pakistan is categorized as a Lower-Middle-Income Economies (\$996 to \$3,895). High income countries are often known as developed or advanced economies. While as



the category indicates, Pakistan is a developing country according to the classification of World Bank (2018).

Although these two countries are not representative of the categories developed and developing countries, however, due to their classification within the respective groups they were chosen because of their ideal positioning in the research setting. As mentioned earlier, Finland is not the ideal country of destination of brain drain, yet due to the increased emphasis on the attraction of international students in the labor market, the country was chosen to be studied as a case. On the other hand, Pakistan is suffering from the grave situation of brain drain in all the high skilled professions and being a developing country it suffers from major loss of engines of economic growth, thus it was chosen as a source country of brain drain.

## **4.2 Interviews as qualitative method**

In order to investigate the research questions in the case study method, the thesis has relied on qualitative research method. As Ritchie & Lewis (2003) explain in their book, qualitative research emphasizes on the “understanding” of the social and historical context of the problem through researcher’s interpretation and living experiences of people, this approach has been used to gather answers for the research questions. Observation, interviews, focus groups narratives and analysis of documents are some of the tools for data collection in the qualitative method (ibid). In this thesis, interviews have been used as the main tool for data collection.

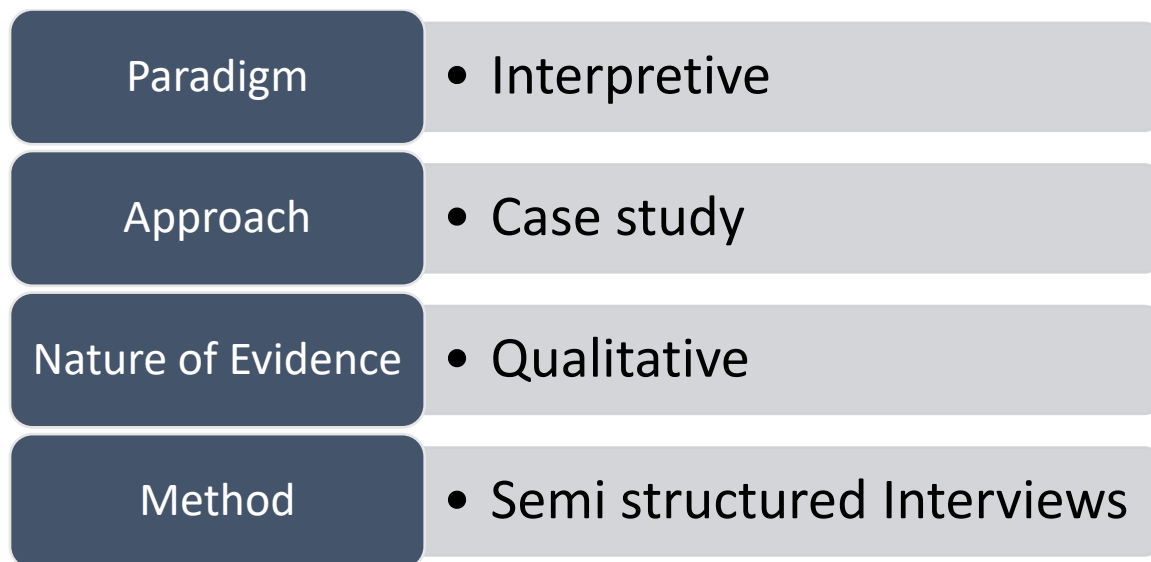
For a detailed coverage of the subject matter, in depth individual interviews are widely used (Ritchie & Lewis, 2003). Semi-structured in-depth interviews with seven (7) migrant workers, aged between 25-35, posted on entry level positions (like full Stack developers, mobile developers, back-end or front-end developers), having less than two years of experience from Pakistan and working in private sector IT companies in Finland, have been conducted for this purpose.

Semi-structured interviews have given more flexibility to get to know the thoughts of the interviewees. According to Wills (2006), semi-structured interviews follow certain themes but give respondents the room to develop their responses. Similarly, quite a few themes like brain drain, wage differential, language barrier, taxation, remittances and macroeconomic dependency (Table 2) have been used within the interviews and the questions were framed within those themes (Appendix).

**Table 2:** Themes of interview

No.	Themes of the Interview
1	Personal background
2	Journey from last academic qualification to current job placement
3	Wage differential
4	Working life
5	Language barrier
6	Relations back home
7	Future plans
8	Remittances
9	Taxation and social services
10	Brain drain overview

In summation, the method of qualitative research adopted in order to answer the specific research questions was semi-structured interviews under the case study approach. The paradigm chosen to analyze this sort of qualitative data was interpretive (Figure 10).

**Figure 10:** Overview of research method (adapted from Burton et al 2008, p.65)

### **4.3 Research participants and research process**

Since the researcher's husband was a part of the migrant workforce, she applied snowballing technique to recruit the interviewees. It is a recruitment method for potential interviewees in which one contact informs you of his/her network and through his/her contacts, you get to know about other contacts and so on (Willis, 2006). However, as recommended by Willis (2006), she made sure about the diversity of the interviewees in terms of their degree programs, their city (origin) from Pakistan and companies they were working in (Table 3).

Initially, eight (8) interviewees were targeted, however, due to some challenges, only seven (7) people were interviewed in the end. The appointment or the time slots for the interview with all the seven interviewees were decided prior to conducting interviews. This was done in order to avoid the issue of interviewees contacting each other and discussing the structure of the interview or giving feedback to each other before actually experiencing it.

The consent along with the time slot of the interview was done in the month of August 2018. All the seven (7) interviews took place in the month of September 2018, from 3<sup>rd</sup> September to 28<sup>th</sup> September 2018. The scheduling of the interviews was done on both the weekends and the weekdays. Each interview lasted between 30 to 60 minutes (Table 3). The variation in time indicates the experiences of the interviewees, as some of the interviewees struggled longer to find a job than the others. Hence, their narrative was longer than the rest.

The place of the interview depended on the convenience of interviewee. Since it was about wages, the workplace setting was not preferred while conducting interviews of these migrant workers. The timings to conduct the interviews also fitted more to the schedule of interviewees.

**Table 3:** Overview of data collected for analysis

#	Age	Time of Interview	Higher Education	Company	Years of stay in Finland	Position	Origin
I 1	27	41 minutes	Masters in Factory Automation	Ericsson	3	Software Developer	Lahore
I 2	29	60 minutes	Data Engineering and Machine	Liaison Technologies	3	Software Engineer	Rawalpindi
I 3	26	31minutes	Masters in Factory Automation	Nokia	3	R&D Engineer	Lahore
I 4	28	40 minutes	Masters in Factory Automation	Digia	3	Software Developer	Lahore
I 5	26	30 minutes	Masters Information Technology	E send	3	Software Developer	Lahore
I 6	26	50 minutes	Masters in Factory Automation	Taiqa Digital Oy	4	JavaScript Developer	Multan
I 7	29	45 minutes	Masters in Software Engineering	Smarp Oy	4	Software Engineer	Karachi

In order to frame the questions more appropriately, the interviews have followed the rule suggested by Willis (2006) which forbids to start the interview with sensitive and complicated questions. Thus, the questions were framed in a way that more factual questions were asked in the start, followed by open ended questions (Appendix), and at the end, the opportunity to ask questions from the interviewer was provided.

As Sanjek (1990) points out, it is advisable to have proper and detailed field notes of the interview or observation. Therefore, while taking the notes of the interviews, the researcher has maintained a chronological sequence of the events. Moreover, the researcher has also tried to maintain her own journal and diary during the interviews. The diary has helped her jot down the challenges that she faced during the course of her research. Also, the journal has helped her remember the persons and places she visited for collecting the data.

#### **4.5 Validity, reliability and generalizability**

The qualitative research is usually intended in a small-scale setting of a specific interest (Burton et al., 2008). Similarly, this research has been limited to a certain specific small-scale setting of international migrants from Pakistan in Finland, who have got their higher education from Finland

and are working at the entry level positions in the ICT sector of Finland. Thus, limited number of participants and a deeper view of their experiences and thoughts give a unique research setting for this qualitative research. This indicates that generalizability has almost been negligible in this research setting and recurrence of similar results is also unlikely.

On the same lines, the research data presents consistency within the category it has been observed and recorded, in a sense that if other researchers will gather the information on different occasions within the same research setting, they will get similar results.

Since the researcher is also a student in a specific research setting, the observations and insights might have different understanding and would be free from subjectivity and biases. Thus, the detail of the challenges to deal with subjectivity have already been mentioned under the ethical considerations heading. The aim of the research at this initial stage is to create awareness about the social inequality in the labor market. Burton et al. (2008) also claim that the responses of the participants will determine the trustworthiness of the data, therefore, the validity of the data is dependent on the method of collection of the data and its truthful execution.

#### **4.6 Challenges encountered in data collection**

The major challenge that has been encountered during data collection has been gender diversity. All the interviewees are male (Table 3), and the data lacks the perspective of a female migrant worker from Pakistan working in the ICT sector. The primary reason for this challenge is that the global female ratio in this sector is very low. In addition to that, the females who usually migrate from Pakistan to get higher education from Finland tend to return back to their home country as soon as they complete their degrees. Furthermore, those Pakistani females who do enter the ICT labor market in Finland have not received their higher education from Finland and hence, do not qualify for the purpose of this research.

Apart from that, another difficulty arose in finding the existence of wage differential between the native and the foreign workers in Finland. Maybe, to answer this elaborated research question, the data could have the perspective of the natives and the companies (private or public) to get a full grasp and to avoid any biases in the research.

Furthermore, for the accuracy of the data results, the positionality as a researcher was challenging. Although it was stated neutrally but being herself a part of brain drain could have revealed the assumptions of the interview to the participants.

Overall, although some of these challenges were manageable while some were not, yet the data tend to present a deeper rather than broader overview of the problem being discussed.

## Chapter 5

### 5. DATA ANALYSIS

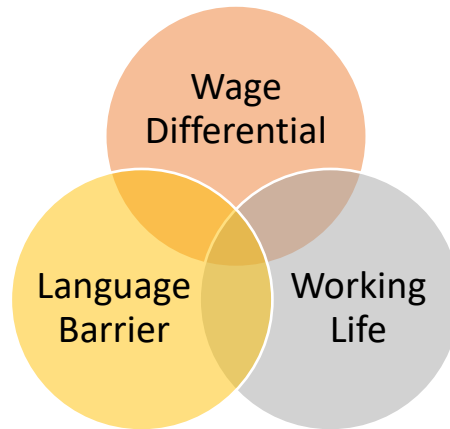
The researcher transcribed the interviews to get a clear picture of underlying and emerging themes and patterns. The methodology adopted to analyze the data has been iterative. Iteration process of data analysis “is a reflexive process in which the researcher visits and revisits the data, connects them to emerging insights, and progressively refines his/her focus and understanding” (Srivastava & Hopwood 2009, p.77). The data has been segmented according to thematic criteria of qualitative data analysis.

Thematic analysis is a process which enables the researcher to categorize the data into smaller segments called codes and larger segments called themes (Clarke and Bruan, 2017). However, the aim of the thematic analysis is more than just categorization of data, it is a method which provides refined analysis of the data as well (ibid.). It is a method which helps to identify the behavior of the interviewee by examining their lived experiences within and across data (ibid.). Overall, this method of thematic analysis helps to identify both explicit and underlying meanings of the data.

Both hard and soft copies of the interview data were used for transcription. The whole transcription was read several times in order to draw connections, and the meaningful experiences to be included in the discussion were noted thoroughly. The irrelevant pieces of information were separated. Then overlapping themes and content were clustered. The emerging themes were distinguished and were placed under one category and finally, the focus was put on finding the answers of the research questions from the relevant data.

#### 5.1 Overlapping themes

The first phase of the data analysis consisted of skillful handling of the data in terms of rigorous interpretation of overlapping themes. The themes which looked similar to each other were combined together during the transcription phase. For instance, the Figure 11 shows how the answers within a few themes overlapped with each other.



*Figure 11:* Overlapping themes of data

## 5.2 New themes

The data was revisited again and again to find the emerging themes within the data. The identification of emerging themes allowed the researcher to have a more comprehensive view of the data. The new themes were then separated and have been analyzed in a separate section of the next chapter.

## 5.3 Revisiting the literature

The analysis of data included the task of finding the data which affirms or nullifies the data gathered through secondary resources of the literature review. Since the research questions within the themes were designed in accordance with the literature being studied, it was easier to connect the answers to the existing literature of brain drain.

## 5.4 Categorization with research questions

Finally, the data was analyzed through the lens of research questions being studied. The interpretation of the experiences and reflections of the participants in the light of research questions was a difficult task. However, the author tried to connect the dots with the literature and data while answering the research questions in the Chapter 7 of the thesis.

## 5.5 Ethical considerations

Informed consent is a procedure followed by researchers in which permission is taken from the potential interviewee and the subject under study is duly informed about the implications of the



research (Mikkelsen, 2005). Thus, before conducting the interviews, the researcher took informed consent from the target group. Moreover, the researcher also informed them about the prospects of publication of her thesis and prospective audience who would have access to her data.

To ensure the ethical boundaries, the researcher needs to be aware of his/her data collection boundaries (Mikkelsen, 2005). Hence, while designing the interview questions, the researcher did take into account how much and how hard she could push her interviewees to get her required information. Additionally, for the sake of anonymity of the interviewees, each participant has been labeled as Interviewee 1, Interviewee 2, Interviewee 3, etc. to keep their identities anonymous.

During the transcription of the interviews, an honest approach has been adopted to avoid any misinformation and/or misunderstanding. Especially, it was made sure that the experiences of the participants were interpreted without any biases.

## Chapter 6

### 6. FINDINGS AND DISCUSSION

This Chapter of the thesis will present the findings of the research conducted through semi structured interviews and provides wholesome analysis of the findings in the form of discussion. The basic aim is to provide a comprehensive view of the data in relation to the research questions being examined for the purpose of the thesis. Overall, a connection is developed between the experiences and thoughts of the interviewees and the research questions. In the first section of this Chapter, the most important findings of the data analysis are stated, while in the second section, the data will be analyzed in the light of literature review.

#### 6.1 Findings

This section will cover the main findings of the interviews within the specified themes. These findings are provided within the thematic overview of data analysis with a proper flow and structure. The direct quotations from the interviewees are also included with ‘Interviewee number’, indicating the information of the participant and number indicating the respective participant.

##### 6.1.1 Language barrier

The interviews with the seven individuals from Pakistan in the ICT sector of Finland revealed that language is one of the biggest challenges that they face living in Finland. However, they also agreed that currently the ICT sector of Finland was the only field which had not restricted the working language to Finnish, otherwise it would have been difficult for them to find the jobs that they were doing then. Moreover, the participants expressed that the language was a hindrance in the recruitment and selection process of various reputable companies.

While talking about the possession of relevant skills versus the language proficiency, one of the interviewees stated:

I wanted to apply to big firms but the companies like IBM, Elisa and Nokia required Finnish language proficiency. I was so frustrated at that time because my skills usually matched with the job requirement, but I was getting rejections, and I was fully surprised that how could this happen to me? CGI and Microsoft explicitly rejected me on the basis of language skills. This language barrier caused me to apply to Sweden in 2016. As compared to Finland, I got good

response from Swedish companies as there was no language restriction. I would like to move to Canada in the future, language problem kills me here! (Interviewee 2)

Analyzing his experience, one can infer that the inability to secure a deserved position in the labor market, despite having relevant skills, created a bias in the Finnish labor market for migrant individuals. Similarly, another interviewee expressed his experience of facing the language barrier in the recruitment process of ICT sector in the following way:

I struggled a lot in finding a job. I almost gave around 15-17 interviewees to different firms. Language was the major barrier in finding a job. Abloy (company) rejected me bluntly on the basis of language barrier. (Interviewee, 5)

It shows that the recruitment process for these individuals from Pakistan, having their higher education from Finland, was not smooth at all. As compared to their native counterparts, they did have to struggle a lot to find a job placement and some even had to change their field of preference as expressed below:

I was fond of finding a job in automation industry, however, those jobs required mandatory Finnish skills. That's why I had to switch to software development despite it not being my first preference... I believe that language will be a major issue in getting higher positions of team lead. I have not seen anyone in the team lead who does not know Finnish. So, you can say there will be glass ceilings for me if I do not learn Finnish anytime soon. (Interviewee 4)

The reflection by this individual (Interviewee 4) depicts the very nature of discrimination in the labor market without language proficiency in Finland. His stance on future promotion and getting up the professional ladder in the career seems bleak without language proficiency. The market does not seem to differentiate the new incumbents, however, their prospects of getting better positions in future are difficult or negligible. Moreover, the companies are also not providing any language training programs or courses for the employees to overcome the language problem.

#### 6.1.2 Finland as a destination country

In order to find out the reason for moving abroad and choosing Finland as a destination country, the interviewees expressed more or less similar views. All of them stated that they were frustrated by the working conditions and lack of opportunities in Pakistan. The gruesome working environment and the pressure of work without proper pay forced them to look for some options in

the developed world. Since, their bachelor's degree could not be recognized in the labor market of the developed world, they opted for a master's degree. As one of them stated:

My main motivation of applying to Finland was lack of opportunities in Pakistan. I believed that a master's degree would make you technically sound. I wanted to apply to Germany but could not find any master's program of my choice there, therefore I applied to Finland. (Interviewee, 4)

Furthermore, there was another reason for choosing Europe or more specifically Finland as a destination country. The reason was absence of tuition fees for students across the globe back in 2016. Most of them wanted to go to Germany as a first choice because of that reason, however, due to unavailability of choice of field or other personal reasons, they could not do so and ended up in Finland. One of the interviewees put his experience in this way:

My parents wanted me to go abroad for more chances of success, they wanted a better future for me. Finland was not my first choice, I wanted to come to Europe. I looked for some European countries which offered free higher education for non-EU students. I applied to Germany, my visa was not processed timely by the German embassy at that time, so I decided to move to Finland. (Interviewee, 1)

While analyzing the above quotes from the interviews, one can also infer that developed countries like Finland are considered ideal destinations due to better quality of life and economic opportunities.

### 6.1.3 Working life

It was necessary to examine the perspective of Pakistani expats on the quality of working life in Finland as compared to their own country. This question of comparison was asked on the basis of their own work experience. The following Table 4 will give an overview of the work experience of the interviewees:

**Table 4:** Overview of work experience of interviewees

<b>No.</b>	<b>Work Experience in Pakistan</b>
Interviewee 1	18 months
Interviewee 2	23 months
Interviewee 3	0
Interviewee 4	18 months
Interviewee 5	9 months
Interviewee 6	0
Interviewee 7	25 months

This shows that almost 5 out of the 7 interviewees had a work experience in Pakistan between 1-2 years. The analysis of this theme of working life opened new arenas of information regarding the poor working conditions and grilling office atmosphere back in their home country. All the participants appreciated the employee benefits and work life balance in Finland, which was totally missing in the Pakistani organizations that they had previously worked in. Therefore, most of them considered themselves in a more desirable and financially admirable position as compared to their peers in Pakistan. The following quote from one of the interviews will give a clearer picture:

I have peace of mind here which my peers might not have in my home country. Considering the standard of life, job security, social benefits and overall day to day life, I am better off as compared to them. (Interviewee, 1)

Similarly, all the interviewees also mentioned that the behavior of employers and colleagues is so different in Finland. They expressed that due to high burden of work in Pakistan, the vices like jealousy, office politics and leg pulling prevailed in their working environments as explained below:

Well, there is no comparison between the working life here and in Pakistan. Here it is a stress-free environment, friendly atmosphere and employees support each other. There is a work life balance. While in Pakistan, one has no defined working hours, one has to work night and day to secure a good impression of the supervisors. (Interviewee, 2)

This indicates that work life balance plays a major role in providing peace of mind to individuals and as mentioned above, the main reason for these migrants to leave Pakistan was the upsetting culture, and they got frustrated. Also, one of the participants directs our attention to the proper learning and development of employees in a developed country like Finland. He says:

In Pakistani firms, you work like donkeys. It is so different here; employers in Finland give you time and proper training, and there is a learning curve here. Apart from that, the behavior of the employees is so good. (Interviewee, 5)

#### 6.1.4 Salary structure/wage gap

An interesting set of information was gathered from the participants as a response to indirect and some direct questions regarding the salary structure and wage gap between them and their equally qualified native counterparts. Few of them were satisfied with the wages that were offered to them initially; some of them compromised after the rigorous struggle in the recruitment process, while a couple of them were dissatisfied with the salary they were offered. The dissatisfied lot somehow felt that their status as students having residence permit B (temporary residence permit for nonnatives) without a residence permit A (continuous resident permit for nonnatives) has been exploited.

While talking to one of the candidates, a different perspective on wage differential in the ICT sector was revealed. He expressed in the following way:

Wage discrimination is actually related to the labor Union in a sense that if your company belongs to a Union, salary structure is defined by the Union without any discrimination. Otherwise, if a company has no Union connection like my previous company which was a startup, it will discriminate the employees based on wages. In my previous job, I was getting 25% less than the market value. But at that time, whatever they were offering, I accepted with a heavy heart. (Interviewee, 1)

This excerpt from the interview indicates that Union plays an important role in creating wage equality among employees having the same skill but belonging to different backgrounds. Union defines wage limits for the employees according to their qualification and area of expertise. Unlike developing countries, labor Unions in Finland have a major role to play in protection of the rights of the employees. None of the participant belonged to a labor Union yet because they were students

when they started a job and were on Residence Permit B and in order to become part of the Union, they needed residence permit A. However, they had plans to become a member in near future as they did recognize the role of Unions in the protection of workers' rights. In a nutshell, Unions play a major role in the awareness of employees even if the company they are working in does not belong to any Union. The employees can get firsthand knowledge about recent statistics of their deserved wages. The following Table 5 extracted from the publicly available information of salaries by field of study (2017), given by a Finnish Union of Academic Engineers and Architects in Finland known as TEK, presents a detailed overview of the type of information one can get through Unions.

**Table 5:** Labour Market Research 2017: MSc (Tech), MSc (Arch) and MSc degree programmes Monthly salary (€/month) in October 2017, primary employment of regular hours, open-ended contract

Year of graduation	Years of experience	N	Mean	10 %	25 %	Median	75 %	90 %
<b>All MSc (Tech/Eng) degree programmes</b>								
-1992	≥25	1445	6 449	4 239	5 000	5 900	7 200	9 100
1993-1997	20-24	828	6 083	4 100	4 750	5 592	6 804	8 654
1998-2002	15-19	939	5 767	4 000	4 478	5 220	6 494	8 065
2003-2007	10-14	1103	5 021	3 700	4 120	4 740	5 550	6 620
2008-2012	5-9	1385	4 449	3 455	3 808	4 220	4 865	5 620
2013-2014	3-4	509	3 904	3 130	3 461	3 820	4 236	4 800
2015-2016	1-2	496	3 598	3 020	3 285	3 514	3 810	4 216
2017	<1	155	3 449	3 000	3 120	3 370	3 565	4 006

In order to examine whether nationality and other attributes not related to qualification or experience played some role in determining the salary of the workers, the data was able to capture few examples. Some of the participants reported few incidents after which they felt that if there was a Finnish citizen at their place, the employer would have been fair to them. For instance, the following interviewee reported:

I believe that I have been a target of that. My company gave me a verbal confirmation that when I would graduate, they would increase my salary. I graduated, but my contract was not renewed; I negotiated a lot but in vain. They gave me a lot of excuses. I can explicitly say that they exploited my student position and gave me less salary and if there was a Finnish, they would not have dared to do this with him. (Interviewee, 2)

Amidst some incidents depicting bad experience in terms of salary, the majority of the participants agreed that Finland is a more equal society to them and it is hard that employers can differentiate here between the natives and the migrants. One of the participants explained this in the following way:

I do not think that employers in Finland can discriminate based on wages. It can happen in small companies like startups but not in big companies. (Interviewee, 5)

This reiterates the argument which Interviewee 1 had quoted above about startups not related to Union can differentiate, but big companies, which follow the market salary, cannot. On the other hand, if one deeply analyzes, the problem still exists in a sense that as it has been mentioned above, it is hard to get placement in big companies because of the language barrier, therefore, most of the migrant workers end up joining the startups where they have to face wage discrimination in one way or another. As one of the participants put it in this way:

I demanded more salary initially. They gave me the reason that they were a startup and their profit margin was low, so I compromised. (Interviewee, 6)

This illustrates that the profit margin of the startups is low that is why they cannot afford market salary and thus the employees feel discriminated. However, still it is not confirmed if startups differentiate between natives and nonnatives in terms of their salary structure or not. Considering the possibility that if these Pakistani employees did find out authentically that this wage discrimination existed between natives and nonnatives, in that case their response was not to return back to their home country.

Hypothetically speaking, if this wage discrimination exists, I will not go back to my own country, rather, I will move to any other economically sound country. (Interviewee, 7)

#### 6.1.5 Relations back home

Interviews also encompassed the question about the relations of Pakistani migrants with their families and friends in order to get some insight about the debate of whether the migrants are looked as 'heroes of development' (Castles, 2008) or not. The qualitative data collected through interviews revealed that usually the families supported these individuals in their decision of migration. However, as all of interviewees are male and culturally in the Pakistani society, parents depend on their sons emotionally and financially in their old age. Therefore, emotionally they do



want their children to get back but financially, they are happy that their children are getting paid better and have good lifestyles. Likewise, the friends and peers of these participants appreciate the advantages these migrants are getting by living and working in Finland.

My family always sees my migration as a positive move. It is an attractive thing for them.

Especially my peers in Pakistan envy the quality of life and wages in Finland. (Interviewee, 3)

Although migration is usually appreciated as a positive move by peers and family, yet, they fail to recognize the compromises and efforts one has to go through as a migrant. The following excerpt from an interview will highlight this argument more appropriately:

All of my university fellows in Pakistan think I am better off here, however, there is a stereotype too. They think life is easy in Finland because they have not experienced it. Living without your family, in a nation which has a totally different culture, harsh weather, language barrier and a lifestyle that is poles apart is not easy. As students, almost all of us (Pakistani students in Finland) have done odd jobs to meet our expenses, it was not easy, not at all! On the other hand, my parents want me to come back to Pakistan, I am the only son and they miss me so much. (Interviewee, 6)

#### 6.1.6 New emerged themes from data

The semi-structured interviews with open ended questions gave the flexibility to the participants to reveal their experiences in the most candid way possible. This comfortable arrangement of interviews allowed the researcher to gather some information which was not directly relevant to the research questions. Nevertheless, it gave a possibility to have some migrant perspective on indirectly related issues of high skilled migration from developing to developed countries or more specifically from Pakistan to Finland.

##### 6.1.6.1 *Sector specific opportunities for migrants*

The interviewees expressed unanimously that ICT sector is the only field or sector in Finland which has job opportunities for nonnatives. Although language is a barrier here yet there is some ray of hope that a prospective nonnative candidate will find a job in this sector. Moreover, all of the participants mentioned that if they would have to recommend Finland as a destination country for migration to someone in their home country, they would only suggest it in case of ICT sector aspirants. They stated that no other profession is more open and diverse for migrants and it will be

useless to expect some good opportunities without language proficiency in the non-ICT professions.

#### *6.1.6.2 Taxation*

Since four out of five interviewees were unmarried, they voiced their displeasure against the taxes. According to them, taxes are unjustified for bachelor migrants as they do not avail any major social benefits provided by the Government of Finland. As their health insurance is also covered privately by the companies that they are working in, they are quite dissatisfied by the method of taxation. Unlike the bachelors, the married interviewees considered taxes justified because of the social benefits provided by the state in terms of childcare, maternity benefits, education and health services.

This perspective of participants can be assessed in the light of OECD (2014) report findings of labor market and economy. The report mentions that “migrants contribute more in taxes and social contributions than they receive in benefits” (OECD, 2014, p.2). However, this relation of migrant’s contribution in the economy thorough taxes can be further analyzed in the future research.

#### *6.1.6.3 Passion to contribute to home country*

While responding to the questions asked about the future plans, all the participants expressed their desire to contribute to their home country in one way or another. Some of them talked about starting a software company or a tech business in the future which will help to train the Pakistani aspirants through international expertise and knowledge transfer. Apart from sharing international knowledge and experiences, the participants expressed to introduce Finnish inspired working culture in Pakistan. Overall, there seems to be a passion to contribute something to the home country only in the long term. It is to be noted that the researcher observed no resentment in the inability to contribute something concrete in the short term among her participants.

## **6.2 Discussion**

This section of the thesis will discuss the findings of the qualitative data in light of the literature review explained in Chapter 2 of the thesis. The purpose is to justify the results of the interviews with respect to the general literature of the high skilled migration. In short, this sub-section of the research will serve as a connection between practical and theoretical knowledge on the subject being studied.

### 6.2.1 Native - migrant wage gap a myth in Finland?

Since the literature review revealed that native migrant wage differential is the most visible form of labor market discrimination and it exists in almost all the developed states of the world, the case study of Finland in the ICT sector failed to support this argument in its entirety. The data suggested that this wage discrimination cannot be done by the big companies operating in Finland, however, startups do have the potential to discriminate. It is because of the fact that big companies are reluctant to hire international candidates if the native candidates fit the required open vacancy. This gives the room to small companies like startups to hire international employees in bulk and exploit their unawareness of the market salary.

Moreover, as described by Himmer & Jackle (2017) and Chiswick (2016) in their studies that language proficiency does play an important role in creating this wage differential, the findings of this research work also supported that. It was not easy to determine the explicit wage differential between native and migrant due to language, however, the reflections on barriers to entry in the ICT labor market and glass ceilings can back the argument.

In addition to that, since the literature review elaborated that ICT sector is the most attractive sector for international workers employment (OECD, 2015), the wage differential is not visible there. However, the following Table 6 provided by the Statistics of Finland gives an overview of all the high skilled employment sectors of Finland:

**Table 6:** Mean of total earnings (euro per month) for residents and non-residents by NACE group in 2015

Source: Statistics Finland, Structure of earnings statistics

No.	Sector	Residents	Non-residents
1	Manufacturing	3,533	3,479
2	Electricity, gas, steam and air conditioning supply	4,020	3,667
3	Water supply; sewerage, waste management and remediation activities	3,288	2,815
4	Construction	3,354	2,694
5	Wholesale and retail trade; repair of motor vehicles and motorcycles	3,224	2,803
6	Transportation and storage	3,168	3,142
7	Accommodation and food service activities	2,444	2,245
8	Information and communication	4,237	4,316
9	Financial and insurance activities	4,160	4,613
10	Real estate activities	3,463	2,665
11	Professional, scientific and technical activities	3,823	3,740
12	Administrative and support service activities	2,686	2,121
13	Public administration and defence; compulsory social security	3,570	2,621
14	Education	3,567	3,232
15	Human health and social work activities	2,952	3,156
16	Arts, entertainment and recreation	2,944	3,036
17	Other service activities	2,989	2,247

The information provided above gives a detailed overview of the mean wage differences between natives and nonnatives in Finland. The data shows that out 17 professions/sectors mentioned in the Table, only 4 of them (highlighted yellow) are those where nonnatives earn slightly better than the natives. It is evident that these four sectors are the most promising sectors of the Finland in terms of employment.

In summation, whether the native migrant workers' wage discrimination in Finland is a myth or not cannot be justified with the scope of this thesis. However, it is still arguable that discrimination does exist in terms of recruitment, selection, retention and promotion.

### 6.2.2 Recognition of prior work experience

As mentioned above, almost 70% of the participants interviewed for this study had previous work experience in between one to two years. However, this work experience did not help them secure

experienced positions in the Finnish labor market. The quote from the interview below will manifest the whole situation:

Experience of Pakistan counts when you are looking for a job in Finland after graduating from a Finnish university, but once the employers decide to hire you, they do not count the work experience in terms of giving salaries adjusted to work experience. It is such a pitiful situation! (Interviewee, 5)

According to the above excerpt from the interview, it is revealed that the developing country work experience of high skilled migrants is not recognized in terms of wages. This shows that a discrimination does exist in the Finnish labor market in terms of salaries. As Chiswick (1978) has mentioned that wage discrimination exists due to the difference in human capital in terms of qualification and experience, this argument becomes invalid in this case study of Finnish ICT labor market. The reason for invalidation is the attainment of higher education from Finland along with some work experience from Pakistan. The combination of this skill set makes the human capital of the participants studied in this interview more favorable for the employers. Irrespective of that, employers in Finland do consider the work experience from developing countries as an asset for recruitment but fail to recognize the third world work experience in terms of deciding the salaries.

### 6.2.3 Role of finances in migration

While analyzing the impact of migration on development, a theory of ‘relative deprivation’ (Castles, 2008) has been touched upon. The data collected in this research has proved the argument that only financially well-off people of the society are able to migrate, creating a feeling of deprivation among those who want to migrate but are unable to do so financially. One of the interviewees expressed this in the following way:

A few of my friends have also moved to Dubai and Singapore for better future. But some of them are still in Pakistan and they envy us. I am sure that they also want to migrate from Pakistan, but finances do play a major role in migration, especially in choosing the destination country. (Interviewee, 2)

Since only economically better off people are able to migrate from developing to developed countries, this shows that the migration creates a negative impact on the development. The feeling

of envy which causes relative deprivation among the people who cannot afford to migrate highlights the inequality in the society where rich can afford better future but the poor cannot.

#### 6.2.4 Major reason for brain drain

The determinants of brain drain or high skilled migration have been studied in an extensive way in the literature review. However, when the interviewees of this research thesis were asked about the major determinant of brain drain in terms of both push and pull factors of migration, all of them emphasized a lot on the role of quality of life and work life balance.

If I had to rate my reasons for moving abroad I would rate better quality of life first, then comes work life balance or for me, it is more like peace of mind, then comes safe environment as compared to Pakistan, then not to forget the handsome salaries, last but not the least I would say would be the job security in Finland or else I am eligible for unemployment benefits. (Interviewee, 1)

This explains that although wages do matter, nonetheless, there are various other reasons because of which high skilled people from developing countries would like to move to some developed country. The collected data suggested that the opportunities provided by a developed country like Finland, comprising health, education, public transport, human rights, better governance, security, as well as better environmental and physical conditions (Ministry of the Interior Finland, 2018) - make a superior quality of life for these migrants. It is a despair that developing countries struggle a lot to provide the basic necessities of life to their inhabitants.

This draws our attention to macroeconomic dependence in a sense that it is difficult for the developing countries to stop this outflow of high skilled workers or students without improving the economic conditions, yet they really need their core human capital to help them build their economy.

#### 6.2.5 Role of remittances in development

As stated in the literature review, development proponents emphasize that remittances play a positive role in the development migration nexus (Lowell and Findlay, 2001; Stark et al., 1997), however, the data analysis has revealed that remittances are sent quite infrequently and usually as gifts. One of the reasons of this infrequent outflow of capital in the case of participants is the migration of economically better off people. Since mostly the well-off people of the peripheral

countries migrate to the core countries, the participants are not obliged to send any money to their families back home. Their financial dependents are also economically stable. However, one cannot generalize the findings of these seven participants to negate the role of remittances in development. Thus, to investigate the connection between role of remittances and brain drain, a detailed study with a comprehensive data can be analyzed in future.

#### 6.2.6 Macroeconomic dependence of human capital

Continuing the discussion of despair of developing countries due to the loss of human capital resources, one can infer through data that remittances do not compensate for that loss. However, as discussed in the literature review, this loss could be turned into a gain if those ‘best and the brightest’ (Ellerman, 2003) individuals from developing countries return back to their home country after gaining experience and skills. In this way, they could contribute a lot in the economic development of their home country through their international exposure. In contrast, the data collected in this research thesis suggests that the high skilled migrants do not want to return to their home country even if they get a clear idea that they are being slightly discriminated in terms of wages that they get in Finland.

When asked about the possibility of being discriminated in terms of wages, all the seven participants of the research disagreed that this can happen in Finland. Likewise, when they were asked about the hypothetical situation in which the employers had a room to differentiate them on the basis of wages from their native counterparts, the answers were surprising again. They talked about two possibilities that if the wage discrimination was authentically revealed to them, they would either move to some other developed country or they would stay in Finland and look for better opportunities. Thus, none of them wanted to return to his home country even if this social inequality in terms of wages proved to exist.

This explains that developing countries are dependent on developed countries for their human capital also. The best human capital of developing countries moves to developed countries to secure better future and even if they are discriminated there in terms of financial capital (wages), they do not want to return to their home country because they are still better off in developed countries in terms of quality of life and other social benefits.

## Chapter 7

### 7. CONCLUSION

This is the final chapter of the thesis which summarizes all the literature review examined, data collected and analyzed, and results obtained in the light of the research questions studied. In other words, this final part of the thesis reiterates the thought-provoking analysis of the thesis by providing an overall summary of the thesis. Moreover, the limitations of the scope of research and future recommendations for research work have also been mentioned in this Chapter.

#### 7.1 Revisiting the research questions

The sub section of the thesis will dig into the answers of the research questions mentioned in the beginning in the light of theory and data analysis. The first question was:

- I. How does the phenomenon of brain drain affect the labor market dynamics in the developing and developed countries? What are the implications of brain drain on the developed and developing countries?

The high skilled migration from the developing countries to the developed countries portrays an outflow of human capital resources from the peripheral countries to the core (industrialized) countries. This outflow of highly qualified and highly skilled manpower becomes detrimental for the long-term economic growth of the developing countries.

The data collected from seven participants revealed that both the push and pull factors played a major role in their migration. Apart from the attractive income opportunities and work life balance, social benefits, standard of living, and personal and professional security are considered as important determinants of high skilled migration from Pakistan to Finland. These opportunities are missing in an average developing country and therefore, potentially qualified people tend to migrate. In other words, the more underdeveloped a country is economically, the more brain drain takes place from that country, overall benefitting the advanced economies with intellectual capital. This highlights that the unequal development of the world is causing the human capital outflow from the poor to the rich states, in short causing macroeconomic dependency.

Moreover, the data analysis reinstates the literature review in light of relative deprivation phenomenon. The high skilled migration of economically better off people in the developing



country causes a sense of relative deprivation among those individuals who could not afford to secure better future through migration. In this way, the brain drain from developing countries aggravates the inequality in the country, as only rich people are able to migrate, leaving the poor in a pool of unemployment and lack of lucrative career opportunities. In summation, this unequal access to better opportunities in the developing country and across the global world reinforces macroeconomic dependence of the poor states on the rich states.

Another aspect which supports the economic dependence of peripheral states on the core countries of the world is that the outflow of highly skilled individuals is for good; they never want to return back to their home country even if they face any socioeconomic discrimination. Also, the data revealed that these individuals do not feel guilty about the possibility of being unable to contribute to their home country in the short term. In essence, one can argue that even the possibility of slight wage discrimination between the Pakistan migrants and their native counterparts will not force them to return to Pakistan, rather they would choose to live in any other developed country or stay within Finland as they will still be relatively better off than working in their home country.

In summation, the determinants of brain drain from developing countries to developed countries are majorly due to better employment and living conditions. However, despite of the labor market discrimination for these brain drain migrants in the developed countries, they do not want to return back to their home country which implicates the dependence of developing countries on the developed countries in terms of human capital. In addition to that, the loss of human capital and aggravation of relative deprivation in the developing country due to brain drain phenomenon implicates the despair of developing countries. To conclude, the first research question has been aptly answered during the course of the thesis. Now, the next question was:

- II. What are the barriers to entry for the high skilled migrants, who have completed their higher education in the recipient country? What are the mechanisms of labor market discrimination for these migrants?

The literature review suggested that when high skilled people migrate from developing countries to the developed country in search of better employment conditions, they get lower wages initially as compared to the residents of the developed country. This phenomenon of native migrant wage difference exists in almost all the developed countries of the world which is the most visible form of labor market discrimination. Unlike that, in this case study of Pakistani migrants in Finland, the

income inequality has not been proved explicitly due to the limited scope of the thesis and wages being a confidential information. However, other mechanisms of discrimination have been duly noted during the study which tend to contribute to socioeconomic discrimination with the ICT employees of Pakistan working in Finland.

The data collected through semi-structured interviews revealed that the Pakistani born participants who migrated to Finland to attain higher studies and then ended up in the ICT labor market do experience discrimination in terms of certain employment conditions. It starts with the prevalence of language barrier in recruitment and selection, as the findings have explained almost all the participants had to face language discrimination even though their skillset and experience matched the job requirements. Some of the companies bluntly rejected the participants, while some participants had to switch their work preference because of language restrictions, whereas some even applied for employment opportunities in other countries due to language issue. Similarly, this language restriction is also a barrier in the retention and promotion of the nonnative employees in Finland, as the team-lead or managerial positions are usually possessed by the individuals who are proficient in Finnish language.

The reason for highlighting the language barrier causing discrimination is that the subjects under study got their higher education from Finland. Considering the fact that the country (Finland) is in dire need of high skilled labor force, especially in the ICT sector, and still the opportunities for non-Finnish graduates are very few, reiterates the social inequality in terms of employment conditions in the society.

Moreover, the work experience gathered from developing countries is not counted in terms of wages, however, the recruiters do prefer the employees having some work experience while recruiting. This contradictory recognition of prior work experience from developing countries also voices the presence of some employment inequality for the migrants.

Finally, the role of companies is very important to highlight while studying the issue of labor market discrimination. According to the findings of the data, big ICT companies prefer to hire a native if there are both native and non-native candidates for a job opportunity. However, since the native workforce is unable to meet the demand of labor in the ICT sector, the big companies also have to hire non-natives on certain positions. On the other hand, small companies like startups, are left with mostly nonnatives to be hired, in that case they sometimes do exploit the unawareness of

international candidates in terms of job market salary. However, these small companies cannot afford to do this exploitation with natives.

In a nutshell, the barriers to entry in the labor market and limited prospects of career growth due to lack of native language proficiency are some forms of labor market discrimination in the ICT sector of Finland for the high skilled migrants, who have completed their higher education in Finland. Moreover, the other mechanisms of labor market discrimination include, the non-recognition of previous work experience and the potential of small private companies to discriminate between brain drain migrants and their native counterparts in terms of lower wages.

## **7.2 Dependency theory verifies human capital dependence**

The dependency theory explained through the lens of human capital in section 3.3 of this thesis has already established the argument of unequal development in the world causing the rich countries to get richer through human capital resources and poor countries to become poorer due to human capital loss which is the engine of economic growth of any country. As studied in the case study of high skilled migration from Pakistan to Finland, the determinants of migration constitute both the pull and push factors. Push factors include higher unemployment rate causing excess supply of labor due to lack of opportunities and the improper working conditions in Pakistan. Whereas, the pull factors in a developed country like Finland are related to other socioeconomic factors like standard of living, social benefits, education and health facilities and, professional and physical security.

Furthermore, the interviews highlighted the fact that the participants are so attracted by the overall career opportunities and quality of life in Finland that even if they face slight discrimination in their wages as compared to their native counterparts, they will not opt to go back to Pakistan. On the other hand, the literature emphasizes the desperate need of high skilled labor force in a country like Finland where the ageing population is growing. This situation indicates a macroeconomic inequality in the world where there is oversupply of labor from developing countries allowing the rich countries to exploit the labor. High skilled human capital from peripheral countries is willing to accept lower wages or discriminatory employment conditions because of the fact that whatever they will earn in the rich country will be relatively better than the income that they would earn in their home country. Thus, the data has aptly summarized the dependence of peripheral countries like Pakistan on the developed country like Finland in terms of human capital.

### **7.3 Limitations of research**

The aim of this research thesis was to explore the existence of native migrant wage differential in Finnish ICT sector through the experiences of the Pakistani employees who got their higher education in Finland and then became a part of the ICT workforce. Therefore, the perspective of these employees, although rich in information, was limited to these Pakistani students as employees only. Their stories told one sided perspective on wage discrimination, as they were not aware of the wages of the natives. Thus, the wage discrimination and social inequality in terms of employment conditions are only evident from the feelings of the interviewees, which are subjective and cannot verify the assumptions. Also, the confidential data of wages was not easy to collect through any other means to verify this slight discrimination. It can be argued that the collected responses were unique to individual participants and since it was a case study, the findings were limited to a certain setting of migrants from Pakistan to Finland only in the ICT sector.

### **7.4 Future prospects of research**

Although there were limitations in data, yet the analysis of data opened new avenues for future research work. In order to find out the visible native migrant wage discrimination in the ICT labor market, an English speaking developed country can be chosen in future. However, there are certain themes which can be explored within Finnish labor market of high skilled workers. Firstly, the linguistic difficulty for high skilled migrants can be further studied in detail. Secondly, as the participants gave a different perspective about the role of remittances, this theme can be further analyzed. On the same lines, the perspective of taxation from the standpoint of immigrant workers can be explored.

Overall, the research will serve as a tool to assess the brain drain phenomenon from a macroeconomic dependence approach. The results of this multidisciplinary research could serve as a basis of finding any other social, cultural, political or economic disparity in the assimilation of brain drain from the South to the North. For instance, the relationship between social capital accumulations by the global North while human capital transfer can be studied further. Lastly, the glass ceilings for South Asian workers in Europe can be investigated.

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## 9. APPENDIX

### INTERVIEW QUESTIONS

#### **a. Personal background**

Interview number:

Time of interview:

Date:

Name:

Age:

Qualification:

Company:

Origin:

RP status:

Designation:

Finland Stay:

#### **b. Journey from your last academic qualification to your current job placement**

1. For how long have you been to Finland? What was the major reason of moving abroad and choosing Finland as your destination country?
2. Where do you work? On what position? How did you apply and describe the recruitment process (Open, fair, any discrimination, language restriction)?
3. Was it easy to find a job? Transition from student to workers? Role of networks? Finish employment services role? Union role?
4. Application process

#### **c. Wage differential**

2. Were you satisfied with the salary offered to you? Did you negotiate? Do you think you deserve more?
3. Do you think that your Finnish peers earn more than you? If so, what made you think that?
4. Hypothetically speaking, if it turns out that there is a wage gap between you and an equally qualified Finnish professional at your position, having the same experience and qualification, will you prefer to go back to your own country?

#### **d. Working Life**

5. How do you describe the working environment in Finland? As compared to your own country, explain the differences and similarities? Quality of working life, working condition? Are they happy with company atmosphere?
6. Challenges in general? Not only salary.

e. **Language Barrier**

7. Knowledge about language. How they feel about? How they manage at work? Impact on future plan.

f. **Relations back home**

8. In what ways you think you are better off than your peers back in home country?

8.1 Do your family members, peers or prior colleagues consider your migration as a positive move?

8.2 Would you recommend your network in home country to move to Finland? Why?

g. **Future Plans**

9. What do you think about your decision of moving abroad? Have you ever been skeptical about it?

10. Planning to stay/ Go back why or why not?

h. **Remittances**

12. How often and why, to whom?

i. **Quality of life in Finland**

11. What do you think about the life quality, living standard and general feeling about life in Finland as an Expat?

j. **Taxation and Social Services**

12. What do you think about taxation, justified by social services? Do you want to raise your voice against it?

k. **Brain Drain**

13. In your opinion, what could be the push and pull factors of high skilled migration?

14. How can you contribute to your home country by living here?