Trends in Student Mobility from Turkey to Germany

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Abstract

This article investigates the literature of highly skilled migration framed within the concepts of brain drain, brain gain or brain circulation. It argues that students are a subset of highly skilled migrants with semi-finished human and social capital. Considering the lack of studies about students from Turkey in Germany, despite 50 years of migration experience, this article is designed to fill this gap in the literature. First, it explores the German higher education context: international students in Germany and particularly those from Turkey. Next, it concentrates on students leaving Turkey to be educated abroad, and subsequently it focuses on the stay or return intentions of international PhD students from Turkey enrolled at two graduate schools in Germany.

Keywords

International student mobility, Germany, Turkey, higher education, highly skilled migration.

Introduction

We live today in a world characterized by migration phenomenon. International migration has become a continuing aspect of the political, social and economic landscape in every country in one way or another. Nowadays, it is much more difficult to find individuals who do not have some sort of migration experience either themselves or in their extended families and friendship circles. In Turkey, when migration is discussed, be it in everyday life, in academia or in media, the first country that comes into almost everyone's mind is Germany, based on 50 years of migration experience. In comparison to other overseas countries where Turkish emigration takes place, such as the U.S. and Australia, immigrants from Turkey and those of Turkish ancestry are much more populous in Europe and particularly in Germany, Belgium, France and the Netherlands. Germany has the highest numbers with around 2.5 million individuals with migration background from Turkey in 2009, which makes them the biggest migrant group in

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the country,[1] constituting approximately 3% of the whole population of Germany. Therefore this article concentrates on the migration experience of Turkish persons in Germany, although with a different focus.

Industrialized countries have decided to embrace students with the purpose of gaining the 'best brains' in this global competition.

There is an abundance of studies in the literature concerning migration from Turkey to Germany. Origins, reasons and consequences of labour migration and the guest-worker scheme[2] are among the most popular issues in the literature. In her latest book Abadan-Unat gives a comprehensive overview of Turkish migration to various destinations from different and critical angles such as debates of citizenship, educational dilemmas of the second generation in the receiving country, experiences of the migrants, their exploitation and frequent encounters with racism.[3] Lastly, she introduces discussion of transnationalism and the interconnectedness of migrants.

Still another interlinked topic of interest is social integration,[4] which has been a much discussed topic in the literature. Integration covers broadly cultural, social and economic aspects of the relationship between the migrants and the receiving society. In the German context, Turkish migrants were frequently analysed. For instance, after his analysis of labour market integration of migrants from Turkey, Özcan looks at the determinants of economic and socio-cultural integration of first and second generations. [5] In conclusion, he argues that migrants from Turkey illustrate positive developments over time in many respects, such as in the socio-cultural area, which incorporates the issues of language and identity.[6] However, in comparison to the host society and some of the other immigrant groups, lower levels of schooling qualifications of second generation Turkish migrants result in difficulties in entering the labour market. The debate over integration is a huge topic and goes beyond the scope of this article. Another important area of investigation in the literature concerns migrants' organizations. For instance, Amelina and Faist study religious, political and business organizations whose members were migrants from Turkey.[7] They look at the political practices of those associations and at the interplay of transnational networks and integration pressure of the host country. Although there is a vast literature on the mobility experiences of individuals from Turkey in Germany from different aspects, student mobility has not been deeply investigated.

Contributing to migration literature, this article concentrates on mobility

of students from Turkey to Germany. The research conducted by Baláž and Williams emphasizes the neglect in migration theory of student mobility which provides the "seeds" for future international skilled labour migration.[8] In other words, it is significant to study the movements of degree-seeking university students who, as semi-finished social and human capital, have an exceptional value which should not be allowed to be ignored, since they are considered likely to stay and take positions in the highly skilled labour market of the country of education upon their graduation.[9] Given the contemporary trends of increased employment and change in the residence permit for international students based on their abilities in language, educational and socio-cultural issues, in addition to the time spent in the country of education, they would seem to be the perfect candidates for integration into the receiving society.[10] Against this backdrop, industrialized countries have decided to embrace students with the purpose of gaining the 'best brains' in this global competition. Furthermore, if science has served as a kind of bridge between nations and a means of communication that can transcend boundaries, then, exchange of students among countries is thought to be a form of international relations at the individual and organizational levels, and even a foreign policy component. First, this article examines the conceptual framework used in the literature to analyse such mobility, namely the debates of brain drain, gain and circulation. Second, it describes the context of German higher education with reference to students from Turkey. Third, it focuses on the experiences of Turkish PhD students in Germany and their subsequent migration intentions. Lastly, it concludes by discussing the major findings.

Conceptual Framework

International migration of highly skilled persons has grown in significance lately, indicating the effects of globalization, namely development in the information and transportation technologies along with the growth in the world economy. A certain number of developed countries relaxed their entry policies for the admittance of highly skilled migrant labour to meet the demands of their growing economies. However, the issue becomes problematic when this demand is mainly satisfied by developing countries, causing flight of their professionals and technicians with intellectual and technical resources, which is termed "brain drain". According to Kwok and Leland, brain drain "refers to skilled professionals who leave their native lands in order to seek more promising opportunities elsewhere."[11]

In the 1960s the term "brain drain" was used in order to describe the

immigration patterns of first-ranked scientists, professionals or highly skilled individuals from Europe, particularly the United Kingdom, Germany,[12] Canada and the Soviet Union, to the United States.[13] There are numerous terms in the literature other than "brain drain", such as "brain migration", "brain emigration", "brain export", "exodus of talent" or "brain exodus", and "brain export" which all mainly address the flight of "brain power" or "loss of human capital."[14]

The early international debate about the causes and consequences of brain drain highlighted the sending (poorer) countries' losses when highly skilled persons emigrate to developed countries or remain there after completion of their studies. Therefore, the term implied a one-way, definitive and permanent migration with a negative meaning due to loss of essential assets in the developing countries.[15] Serious discussions led by the concerns include return policies for students by sending countries or immigrant taxes on developed receiving countries and/or tax on the incomes of professional emigrants from developing countries.[16]

Particularly in the beginning of the 1970s, studies of highly skilled or professional migration or "brain drain" from developing countries to the United States focused on the dichotomy between the loss of developing sending countries on the one hand and the corresponding profits of receiving developed countries on the other. In other words, brain drain at that time was governed by political and economic asymmetries in the world.[17] In the early literature, the U.S. was the main developed receiving country and it is sometimes "accused of deliberately draining other countries of their professionals. Professionals are expensive to produce and the United States saves vast amounts of money by not training these people themselves."[18] However, another argument was avoiding the "brain waste" which would occur if the highly skilled had not migrated and could not use their skills properly.[19]

During the 1980s, even though the movement of highly skilled persons from developing to developed countries continued, the initial concerns disappeared and were rarely heard until the late 1990s. The concern in the developed countries was about low skilled migration and family reunification, whereas developing countries' considerations were related to economic developmental challenges, such as the change from import substitution to free market economy, infrastructure improvement, strengthening the financial sphere and institution building. During those years there was some debate on admittance of medical personnel and nurses; however little specific attention was paid to highly qualified persons by the policy makers.[20] The primary conclusions of the early literature on brain drain were

the contribution of highly qualified migration to augmented international inequality, with 'the rich countries getting even richer at the expense of the poorer ones.'[21]

Contemporarily, the debate over whether the "brain drain" is really a negative phenomenon for the sending countries as stated in the early research has gone through some alterations. While scholars of brain drain argue that migration of highly skilled persons is a zero-sum game, where sending countries lose their best and the brightest to the developed world, there is a general acknowledgement that this type of migration may not be all that detrimental for the sending developing countries, and the term "brain gain" has been coined.[22] To put it differently, "more recently, however, the idea has been gaining momentum among scholars, decision makers and journalists that policy makers should characterise the issue in terms of a "circulation" of skills and manpower."[23] Such a change in paradigms has significant implications for public and migration policies, namely that the mobility of the highly skilled should not be decreased, but rather has to seen as a normal process.

Recent debates highlighted the gains for developing countries from this type of migration, which might be in the form of remittances and technology transfers together with raised awareness for non-migrants in developing countries, as in the form of continuing their education and investing in their human capital.[24] When the case of India is considered, it is clear that an increasing number of professional emigrants overseas might contribute to their homeland institutions through resources, ideas and investments.[25] Similarly, China could also reverse the negative effects of brain drain into a gain through knowledge networks or transnational communities promoting transfers of technology and skill.[26] Likewise, economic ties of emigrants from South Korea and Taiwan and their home countries go beyond their economic remittances and can be found in the form of entrepreneurship and upgrading. It has been argued that those highly-skilled emigrants either return to their countries of origin or join knowledge networks which sustain essential ties between the sending and the receiving countries.[27]

> The underlying idea in this paradigm shift is that migration of the highly-skilled should not be seen as a loss to the country but as an asset that can be mobilized.

Nowadays, this concept is referred as "brain circulation" which implies a potential return to the home country after a cycle of study and work abroad and enjoyment of the promising

employment possibilities.[28] However, it is a matter of not only the physical return of emigrants but also the return of skills, technology, ideas and resources through transnational networks. It is considered as having multi-directions rather than being a permanent move and a win-win situation where all parties involved have some sort of a gain in the long run due to the circulation of highly skilled individuals and their skills. The underlying idea in this paradigm shift is that migration of the highly-skilled "should not be seen as a loss to the country but as an asset that can be mobilized."[29]

All these debates have mostly economic perspectives at the macro level. The literature concerning especially the earlier debates on brain drain was heavily influenced by scholars with backgrounds in economics, who tried to put many variables into equations to calculate the results of such mobility at a macro level with merely economic determinants. Some of the variables included individualistic cost and benefit analysis with neo-classical economy theories. Nevertheless, many of the economic theories were contradicted by the evidence that migrants are not from the poorest countries, but rather belong to the middle class of developing countries, and that not everyone with the same means migrates. Moreover, there are also differences both in motivations and probability of migration within those countries.[30] This situation displays the shortcomings of only taking into account economic theories. In other words, those studies fail to include social, cultural and political aspects of migration over and above economic reasons.

Second, in this line of literature there is no consensus among scholars and countries as to who is a skilled and who is a highly skilled migrant, although the attention paid to this type of migration is great. Most of the time skills are related to education and/or position in the labour market. Some efforts have been made to standardize the categories by OECD through the 1995 OECD Canberra Manual on the Measurement of Human Resources Devoted to Science and Technology[31] and the 2002 Frascati Manual on Proposed Standard Practice for Surveys of Research and Experimental Development.[32] Both manuals identify four ways of classification of science and technology workers: by qualification, by activity, by sector and by occupation.

> "While educational and activity-based classifications have long been in use, these are now joined by efforts to systematically collect and analyse data on where science and technology personnel are employed by occupation or sector."[33]

Moreover, when students are considered as a subset of highly skilled persons, then there are also other institutional drivers of student mobility next to explanations of economics, such as universities' concerns and policies of internationalization that eventually contribute both to the

demand and supply of international students. As higher education became much more international in many European countries, student populations at universities are becoming much more diversified. Meanwhile foreign students have transformed into immigrants or have the motivation to be immigrants.[34] To put it differently, many students perceive having an international education as providing possibilities for better careers and life chances in addition to "their ticket to migration".[35]

Germany is the first country after English-speaking countries to be able to attract high numbers of international students.

While the recent literature takes into account the developmental acts of migrants themselves and their networks, it often overemphasizes the "developmental effects". Moreover, while the literature concerning the developmental effects of highly skilled migrants concentrates on their networks, those networks are usually meant metaphorically and not methodologically, since they do not conduct any social network analysis. Against this backdrop, discussions from the perspectives of economic and human resources analyses in combination with developmental issues are very common in studying highly skilled migration. The contribution of this article, however, will be rather on social aspects from a sociological point of view. Social aspects of highly skilled migration are significant to study, since they enable us to understand better this particular population and their migration intentions. Thus, the focus of this article is on international students' experiences, enriched with empirical field research in Germany.

The case of Germany is interesting and chosen for a number of reasons. First, Germany ranks quite high as a destination for international students world-wide. But, more importantly, it is the first country after English-speaking countries to be able to attract such high numbers of international students. This fact actually makes the country, its policies and reforms very interesting to study. Second, since the literature is dominated by research about attraction of the best and brightest by the English-speaking world, it is significant to look at other powerful newcomers. Germany is seen as a newcomer since its policies and their implementation in internationalisation of higher education have been taking place only fairly recently. Germany shows that, although introduction of English programs is important in terms of internationalisation, it is not the only reason for students to choose a country of education. Among other reasons, having two different languages as the medium of instruction adds to the diversity of incoming students, and this diverse environment makes the country even more interesting to study. Thus, the next

section will shed light on the dynamics of Germany's higher education.

German Higher Education Context

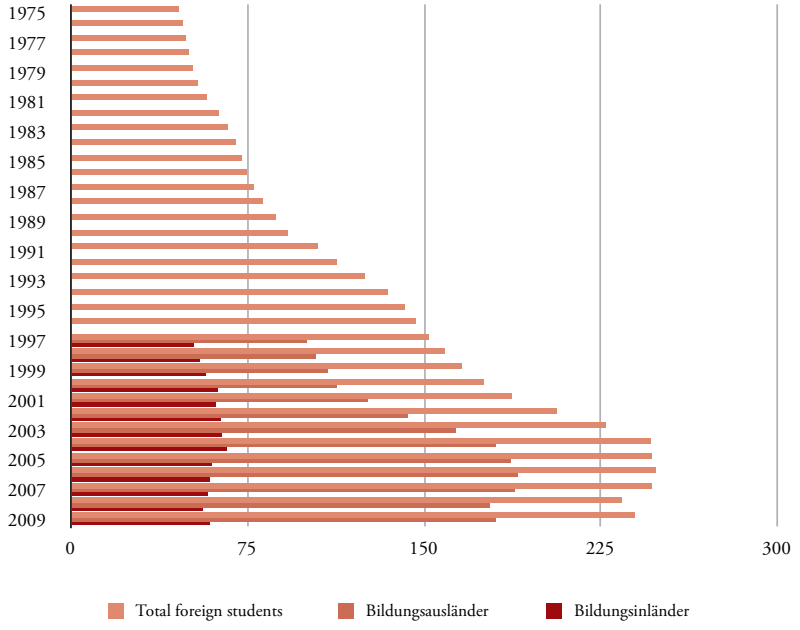
German higher education institutions function in the same dynamic international context and they come across similar matters. Institutions in different sectors respond to the challenges and opportunities posed by the changing world context in various ways through different levels of policies, and higher education is not an exception. The response to increasing internationalization and globalization has mainly been driven by the government and federal states rather than only by higher education institutions themselves in Germany. Nevertheless, the duty of universities to be proactive in recruiting international students and developing international opportunities according to their own strategies, economic position and priorities, is in the process of being established.

Higher education policies on internationalization in Germany are characterized by attaining economic profits.

For many decades, internationalization of German higher education institutions was substantially portrayed by free interchange of knowledge within the scientific community. After the Second World War, the main point of internationalization changed by incorporating students into the scientific exchange (e.g. the American Fulbright program to fund German students' studies abroad), Moreover, profound educational courses at German universities in order to assist developing countries in the 1970s were introduced. Educational aid was framed to upgrade the university systems of less developed countries. The main political aims were avoiding brain drain, together with encouraging the reintegration of returnees. However, those objectives have been in transformation, particularly during the last decades. The humanitarian objectives of mobility schemes had to occupy an inferior position during the intense discussions on the economic competitiveness of Germany in the globalizing world. The need for intensification of the function of Germany as a scientific research centre is perceived to be the major mechanism for boosting its economy. Therefore, higher education policies on internationalization in Germany are characterized by attaining economic profits. While brain gain is thought of as a benefit for Germany, entailing brain drain for other countries is perceived as an unavoidable repercussion of the competition.[36]

In Germany, holding foreign citizenship is the main criterion for identifying foreign students. In other words, those who were born and educated in Germany without German citizenship are considered as foreign students, as well as those international students coming only for education purposes, who are put in the category of 'international student'. This situation is also reflected in the statistics of Germany after 1997 as indicated in Figure 1 below. This distinction is significant for the purposes of this study, since it only takes into account those students who entered into the country in order to be educated. Thus, the students who were born or previously educated in Germany are not in the scope of the study. The term Bildungsinlaender (non-mobile foreign students) refers to those foreign students who have grown up and been educated in the country of study, while the term Bildungsauslaender (mobile foreign students) means international students who hold another country's citizenship, and have a visa for Germany in relation to their studies. In the relevant data sources, this dichotomy is used after 1997; prior to 1997 there was no such indication, and all students were put into one category of foreign students.

Figure 1: Total foreign students in Germany from 1975 to 2009



Source: Adapted from Wissenschaft Weltoffen,
available at: http://www.wissenschaft-weltoffen.de/daten/1/1/2?lang=en, [last visited 20 May 2012].

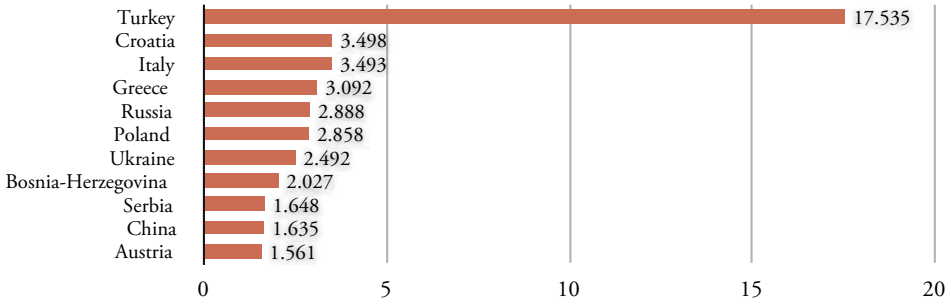
A steady increase in the numbers of mobile foreign students continued from 1975 until 2004 in Germany and a stagnation period is observed between 2004 and 2007 with a considerable decrease in 2008, which is illustrated in Figure 1 above. After 2004, fluctuations were observed which led to a considerable decrease of both mobile and non-mobile foreign students' numbers. In 2008, the percentage of this total decrease was 6%, whereas the number of non-mobile foreign students decreased only by 4%. If one looks at the numbers of foreign graduates, they are still on the rise in 2009; however, the absolute numbers are still lower than in 2004. In 2009 there were a total of 239,143 foreign students enrolled at German higher education institutions, 5,537 more than the previous year. Despite the fluctuations the total number of foreign students exceeds the number in 2000 by 33%. In 2008, for instance, foreign students accounted for 12% of all students enrolled at German higher education institutions.

The decrease in the number of foreign students is valid for both mobile and non-mobile foreign students. While the number of mobile foreign students dropped by 6% in 2007, the numbers of non-mobile foreign students decreased by 4%. In 2008, the proportion of non-mobile foreign students remained constant at 2.9%, whereas the proportion of mobile foreign students decreased by 0.3% points to 9.2%.

In 2009, according to the same statistical data, two-thirds of all foreign students were enrolled at universities. Over the past four years, the trend of enrolment in universities of applied sciences has been seen to make up one fourth of total foreign student enrolments. The top subjects of studies at universities are German studies and other European language and cultural studies, social sciences (economics, law and political science), and mathematics and natural sciences (computer science, biology and chemistry). The most popular fields of study at universities of applied sciences are engineering, economics and computer science.

In the winter semester of 2009/10, a total of 245,000 students were enrolled at German higher education institutions holding foreign citizenship, those being mobile students. Non-mobile foreign students constitute only 3% of the total of university students in Germany, which is a relatively low number when it is taken into account that 19% of the German population has a migration background. Furthermore, it is not possible to capture those students with migration background but who have German citizenship, such as most of the second generation migrants from Turkey.

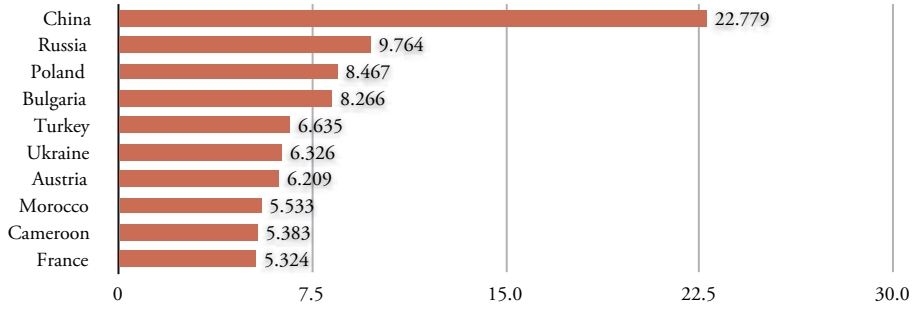
Figure 2: Non-mobile foreign students in Winter semester 2009/10



Source: Christiane Krüger-Hemmer, "Kapitel 3 Bildung, Auszug aus dem Datenreport 2011", Statistisches Bundesamt Deutschland, at: http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Navigation/Publikationen/Querschnittsveroeffentlichungen/Datenreport__downloads.psml [last visited 12 May 2012].

The biggest group of non-mobile students comes from Turkey, far more than from other countries, followed by Croatia. The above figure illustrates that those non-mobile foreign students are mostly those from Europe, and China is listed as the only Asian country. The third country of origin is Italy, whose numbers are almost identical to those of Croatia.

Figure 3: Mobile foreign students in Winter semester 2009/10



Source: Christiane Krüger-Hemmer, "Kapitel 3 Bildung, Auszug aus dem Datenreport 2011", Statistisches Bundesamt Deutschland, at: http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Navigation/Publikationen/Querschnittsveroeffentlichungen/Datenreport__downloads.psml [last visited 20 May 2012].

In the winter semester of 2009/10 around 189,500 mobile foreign students were enrolled at German higher education institutions. They represent around 9% of all tertiary level students. As the above figure on mobile students indicate, most of those mobile foreign students come from China, around 22,800, followed by Russia, Poland, Bulgaria and Turkey. Mobile foreign students from Turkey make up less than half of those non-mobile foreign students from Turkey. Therefore, students from Turkey enrolled at higher education institutions in Germany predominantly belong to the second generation of immigrants; however, the existence of those coming from Turkey to Germany only for study reasons cannot be ignored. The next section will illustrate the experiences and motivations of Turkish PhD students in Germany.

Experiences of Turkish PhD Students at German Universities

By the second half of the 1950s, migration of highly skilled personnel from Turkey began to be observed. According to the few available research studies during the first half of the 1960s, the numbers of highly skilled emigrants originating from Turkey was quite high. Migration of medical doctors and engineers paved the way later on for scientists and academics, mostly to Europe and the U.S.[37] The statistics for such movements are not easy to get, and the data is far from being perfect. However, according to the secondary data available, in the early 1960s, 830 highly qualified persons migrated from Turkey to the U.S., Canada and France.[38] There are several studies concerning Turkish doctoral students overseas, particularly in the U.S. The first one was conducted by Oğuzkan in 1975, when the total of 217 PhD students abroad made up 18% of the total number of PhDs earned in Turkey between 1933 and 1968.[39] The study was based on 150 questionnaires analyzing the direction, nature and causes of student mobility, with the goal of understanding the features and motivations of those student migrants and of using the information in order to regulate the brain drain from Turkey. The respondents were residing in the U.S. (71%), Canada (10%) and Germany (8%) and in other countries such as England and France. Another study was conducted by Tansel and Güngör focusing on return intentions of Turkish students studying in the United States.[40] In the same study, it was indicated that there were 21,570 students studying abroad with their own financial means in mid-2001, where two-thirds had chosen to be educated in Western Europe and North America. Moreover, 90% of government financed students from Turkey were studying in the United States and Great Britain.

Highly skilled persons with Turkish migration background in Germany leave the country and return to Turkey.

According to the report of Yükseköğretim Kurulu (the Council of Higher Education in Turkey),[41] there is no statistical data available about the students from Turkey who go abroad to pursue their education, particularly at the graduate level. This report shows an overall trend of students abroad from Turkey based on data from the Ministry of Education and TÜBITAK (The Scientific and Technological Research Council of Turkey). In other words, students who were only sponsored by those institutions were taken into account, leaving out students who either went by their own means or were financed by the country of education. This report also found exposure in the media by highlighting that there were 19,209 students studying abroad, composed of 13,489 at BA level, 3,617 at MA level and 2,103 at PhD level.[42] It has been stated that the U.S. and Germany are the most popular countries for students from Turkey. Although those two countries are the leading ones, in terms of attracting Turkish students, most of the studies are only taking into account the U.S.

Another related study is conducted by Aydın where he argues that highly skilled persons with Turkish migration background in Germany leave the country and return to Turkey.[43] The study mentions that in 2006, 10% of the total 1.74 million migrants living in Germany and holding Turkish citizenship had academic degrees. The study conducted in the framework of European Migrationnetwork identified 23,908 highly qualified Turkish citizens living in Germany, who constitute around 5% of all working Turkish migrants.[44] Another study worth mentioning here is the TASD study, which identified the numbers of Turkish academics and students in Germany as between 45,000 and 70,000.[45] The online study focuses on whether they identify themselves with Germany or Turkey. The main conclusion of the study is that the majority of academics would like to leave Germany due to unsatisfactory situations they are experiencing in Germany, such as unfavourable job prospects, missing home country, and feelings of being disadvantaged and discriminated against. Aydin adds to the TASD study by also incorporating social cultural networks of Turkish academics and students and the high economic growth that Turkey has been recently achieving as the pull factors of Turkey.[46]

Design of the Study

The empirical component of this article is composed of extensive semi-

structured interviews with international doctoral students at two universities in Germany. Thirty-five PhD students studying at two graduate schools funded under the 'Initiative of Excellence' were interviewed between January and July in 2009. This government-led initiative aims "to promote top-level research and to improve the quality of German universities and research institutions in general, thus making Germany a more attractive research location, making it more internationally competitive and focusing attention on the outstanding achievements of German universities and the German scientific community."[47] Since the reason of this initiative is to create an Ivy League in Germany and to attract the best brains in the global competition for knowledge, those international students enrolled in those excellent programs are the potential highly skilled migrants for Germany.

My first step in accessing the field was contacting some of the students from graduate school B and I used a snowballing technique. I thought it was a good idea to go directly to students. However, later I realized that I might be missing some potential participants. Therefore, at the same time, I contacted the administration of graduate school A, who were incredibly helpful and sent me a list of all their international doctoral and post-doctoral students. The administrator also wrote an e-mail about me and my project to all who are on the list. After I contacted all of them I was able to do interviews with all except one student who was living in another city and did not have time for an interview. In contrast, graduate school B refused to give such a list since, according to their opinion, it would be a violation of personal rights. Therefore, I continuously checked their students' website and had to use the snowball method. In the end, I was able to find all international doctoral students enrolled at graduate school B and interview all of them. The interviews were recorded and most of them took around an hour, but I usually had an opportunity to talk informally both before and after the interview, sometimes for hours. I had the chance to go out, socialize and talk deeper with those students. In some cases I continued to discuss issues relevant to my study by e-mail, Skype, or phone, enabling me to clarify some points and acquire additional and subsequent details.

In terms of their demographic distribution in the total of 35 interviews, 21 were female and 14 were male. They represent a whole range of ethnic and religious backgrounds. The respondents were from Belarus (1), Benin (1), Bulgaria (1), China (4), India (2), Israel (1), Jamaica (1), Japan (1), Kazakhstan (1), Kyrgyzstan (2), Macedonia (2), Malawi (1), Mexico (4), the Netherlands (2), Nigeria (1), the Philippines (1), Russia (3), Taiwan (2), Turkey (3) and Ukraine (1). So, it is a highly diverse

group in terms of nationality. The sample is made up of a total of twenty different nationalities. In terms of national category, the biggest groups are from China and Mexico, followed by Russia and Turkey. The third biggest groups are from India, Kyrgyzstan, Macedonia, the Netherlands and Taiwan. Furthermore, other dimensions of heterogeneity of the sample included educational background of their previous study, age, marital status, religious conviction and the amount of semesters attended, therefore the length of stay in Germany. Even though no individual can display a whole culture, culture obviously has a characterizing impact on the individual's configuration.[48] By the same token, three of the interviewees from Turkey, one male and two female completed their master degrees in Turkey. The number of interviews used in this study is low because this is a qualitative exploratory article and does not necessarily represent the entire international doctoral student original population in Germany. The purposeful selection of respondents in this qualitative study does not aim for statistical generalizations about populations and does not claim representativeness; rather it has a goal of analytical generalization to theory, and it will serve as a starting point for making this type of mobility visible and understanding its dynamics.

The respondents were usually quite open about their experiences in Germany, as well as their previous experiences (abroad in most cases for a master's degree), career goals and life plans, and their social networks, providing me incredibly rich narratives. The experiences of international doctoral students underline their advancement as a result of having an international education, which provides an understanding of global inter-connectedness and aids in developing transnational friendship networks that could enable them to imagine, create and maintain more productive professional and cultural lives, helping them to become successful actors in a globally networked economy and society. Each interview produced, on average, twenty pages of single spaced text. Accordingly, around 700 pages of raw transcripts were coded and analysed for this study. The goal of both data collection and analysis were to understand international doctoral students' experiences, their perceptions of the country of education, future career plans and their intentions of migration in as accurate as possible a manner, to produce a rich and valid interpretation of their experiences. By coding each sentence, the major ideas were developed and a further detailed analysis of the meaning units facilitated the emergence or strengthening of the applications.[49] The next section will illustrate the migration intentions of the international students coming from Turkey.

Contradictions: Settlement in Germany or Return to Turkey?

During the interviews the issue of permanent settlement repeatedly came up. According to several studies, there are strong links between initial temporary and eventual permanent settlement.[50] Even though the policy implications of this transition are great, there are not many extensive studies about the issue. Some studies found by analyzing the migration behaviour of former international students that those having an international experience during their studies are more likely to find employment in a foreign country.[51] Understanding the behaviour of international students is significant if one wants to both attract and retain them in a specific country or institution. The question of what international doctoral students do after they finish their studies remains unclear. In the statistics, there is so far an overall trend of increasing numbers of international students over the last decades. Numbers of students from some particular sending countries have grown in a consistent manner; some are stable, some are not. We can analyse gender differences and which subjects are studied. Even so, it would be great to have some data about what happens upon their graduation; what per cent actually stays and enters into the German labour force remains still a big question mark. From an immigration and state perspective, this is of course an essential question, yet its importance is not well recognized.

The model proposed by Ajzen and Fisbein to predict social behaviour is one of the most intact ones in understanding the relation between intentions and behaviour.[52] According to their theory of reasoned action, "intention is the immediate determinant of behaviour, and when an appropriate measure of intention is obtained it will provide the most accurate prediction of behaviour."[53] In other words, if one wants to predict behaviour, s/he has to know the intentions of the related person. Thus, this present article is based on the intentions for subsequent migration behaviour found in the narratives of international doctoral students from Turkey while bearing in mind that the actual forms and rates of mobility patterns cannot be fully foreseen only by causal models. Nevertheless, they would allow us to have insights into those factors students examine critically for their judgments and acts. Moreover, this article also incorporates the actual behaviour of the students, since they are also asked about their future plans at the end phase of their studies, and actually give a more concrete picture about what happens when they graduate.

In light of the interviews, three main intentions were identified: to stay in Germany, to return Turkey and to

move on to another country. Those intentions were shaped by the time spent in Germany along with social, cultural, personal, familial, economic and occupational reasons. However, those three types cannot be separated, and there were no such clear cut choices as in a survey study. For instance, Ali [pseudonym], who had been in Germany for one and a half years when we had the interview, was quite puzzled about what to do when he graduated. In his own words:

> My ideas change day by day. Well, it is like that now: first, my return depends on the position I will find there [Turkey]. I would like to return, if there is a good opportunity I would like to return; for example I do not want to return to a university with a Turkish medium of instruction. Why? It has really nothing to do with the Turkish language, but because of the quality of education. I have been educated in XX University [public university with Turkish as its medium of instruction] and YY University [public university with English as its medium of instruction]. From my perspective YY University is also not the best but when it is compared it has an international outlook, a bridge, a door, and of course when I come from there to here I saw and understood how science should be conducted. I do not want to go back there in the academic sense because here the circumstances are much better, society is richer, not only economically but also culturally, I mean the academic culture.

His words actually confirm prior studies conducted in the U.S. mentioned above that job opportunities are heavily influencing the decisions of PhD students in addition to factors in Turkey, such as 'the quality of education', especially at the private universities, seen as a good place to return and take up employment as indicated by the respondent. As is also indicated by other studies, "development of private universities in the country serves as an interesting case of return of highly skilled Turkish emigrants: since the mid-1980s, private universities in the country with their very competitive facilities have attracted many Turkish scholars, scientists, and university graduates living abroad back to the country."[54] Thus, the decision to return to the country of origin is dependent on the employment prospects there.

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Moreover, there are also factors such as personal relations and their importance in an individual's life. As Ali further indicates, social life and opportunities of creating friendships in Germany are seen to be crucial, indicated through making comparisons of their social life both in the country of education and origin. He also mentions employment prospects after his graduation as an important decision factor.

> But there are other reasons that make me consider to go back, for example I don't know how I can live talking a foreign language until the end of my life. Here, life is different than in Turkey, in Turkey I

> have friends and more compared to here and I can talk my native language. Here, life is very individualistic, I am alone most of the time, it can be a bit problematic.[...] It also depends on the job opportunities I can get, if I can find in England or in the Netherlands, I might go and settle there. I might also get married soon, but I can stay in Germany. I am in a contradictory position.

Another example is Ayşe [pseudonym] who was quite determined to return to Turkey after her graduation during our interview. Her initial reasons to come to Germany were not only career aspirations but also to learn the German way to conduct research, and after gaining experience she was planning to return. In her own words:

> Why I wanted to come to Germany? Because I really wanted to learn how to conduct research, I wanted to learn the academic culture here, it is not only about the job related issues but also how to be a good academic, this tradition of research, this tradition of strong methodology. [...] In addition to my career, I have a husband, my personal life, when put all the positive and negative things in my mind, Germany was the best choice for me where it is closer to Turkey [...] Once I learn, become experienced and publish articles here, I want to return to Turkey to a university with a good position where I can apply what I learn here.

One year later we met again when her husband came to Germany and lived with her almost one year, although he had a job in Turkey and no prior language ability. Later on in early 2011, I had another chance to talk to her when I was informed that she returned to Turkey due to familial reasons at the end phase of her doctoral studies. Family issue can be a factor in staying for those who form families during their studies, but also a factor of return. Among all respondents there is a strong sense of family -both their spouses and parents- connections. However, for some of them having family still living in their home countries and satisfying them are the main reasons for return. As she intended she returned to Turkey, and proved that intentions can actually signal the reality. However, we do not know fully if she returned due to the reasons she gave in the first interview, or whether something got into the way. Further studies should have a more encompassing longitudinal analysis which would result in more concrete findings.

Lastly, Fatma [pseudonym] was very sceptical during the interview about what to do next and often mentioned that her legal status as a student entails temporariness. She often responded that she has to concentrate on finishing her thesis at that point of time rather than speculating about what would happen afterwards. Nevertheless, she indicated that she would like to stay either in Germany or somewhere else in Europe when she finds a job since the physical proximity to Turkey and her family was important for her. Moreover, she indicated that her qualifications would fit the need of the European labour markets and she would not go through a lot of bureaucracy such as degree

recognition or equivalency. Later in 2011, when we could talk, she was at the final stage of her dissertation and found a job in Germany and mentioned that she is quite comfortable to stay in Germany. Although she was not so sure during her initial semesters in Germany, having career prospects in the country at this point of time, she decided to start off her professional career here at least for the next years. However, again, this might be only one aspect of her staying in Germany along with other reasons, be they personal, political, social or cultural.

Conclusion

Highly skilled mobility is a reality of today's world and it is a complex phenomenon including various actors and systems at different levels, and international student mobility is a subset of such mobility. This article is an explanatory one giving an overall idea about the concepts and terminology evolved in the literature. It then focused on the Germany-Turkey case in terms of international student mobility. After describing general trends and statistics of foreign students in Germany, it concentrated on those international students from Turkey. Next, it concentrated on Turkey in reference to prior studies. After looking at the relevant literature, it illustrated experiences and migration intentions of mobile foreign students from Turkey in Germany after their graduation.

The numbers of students with migration background from Turkey is quite high in Germany, which is not surprising given the migration history between those two countries. Although the number of mobile foreign students from Turkey is less than half of those non-mobile foreign students from Turkey, they are still in the top five of incoming student populations. Moreover, their perspectives are significant to be studied since they are classified under the targeted category of 'the best and the brightest'. Moreover, this study had a qualitative methodology in order to reach the students' personal histories with the expectation to illustrate their case and be an inspiration for further policy preparations. Although it did not have an aim to generalize as to population and representativeness of those interviewed, further research can take off from those points.

> Immigration and education policies along with visa and labour market regulations will have an ever increasing role in the process of students' decision making for their future.

The emphasis of the article is on the need to rework ideas on highly skilled migration and the long-lasting debate about brain drain. Research illustrates changing patterns of labelling certain

phenomena over time among various disciplines, and this article has a sociological point of view. It is important to include not only the perspectives of governments, universities and international administrative agencies, but also migrants' experiences, their communities and networks, in order to understand their subsequent intentions and therefore (re)formulate the policies accordingly. Experiences of international students during their studies in Germany are conducive of their decisions about the place of future settlement. The experiences of international students particularly pinpoint the opportunities and structures both in the sending country and in the receiving country. When opportunities and structures change in a positive way in the country of origin, be it employment contingencies or political or social ones, then students would return while they are still at the age of labour force participation. Another pre-conditions are the opportunities and structures in the receiving country, Germany in that case.

The findings presented in this article provide some suggestive and indicative evidence of how the mobility intentions of international doctoral students can vary and therefore lead to different results. Even though further research is necessary in order to understand better how these motivations actually realize, preferably by longitudinal data, the findings raise important questions about the extent to which migration intentions can serve as a proxy for migration behaviour, and they demonstrate very clearly that along with state policies, effects of language, occupational motivations, personal reasons and family issues in both sending and receiving contexts are critical aspects of mobility decisions of international doctoral students upon graduation. It further shows the relationship between global change of labour markets, opportunity structures, migration and personal aspirations. It sheds light on the complexity and diversity of migration decision and mobility experience. In addition, research indicates that immigration and education policies along with visa and labour market regulations will have an ever increasing role in the process of students' decision making for their future. Thus, those countries which have conducive education and immigration policies as well as lucrative employment initiatives will be likely to benefit from this type of mobility and have a competitive edge.

Experiences of international students during their studies in Germany are conducive of their decisions about the place of future settlement.

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