AMERICAN UNIVERSITY OF ARMENIA

MIGRATION PATTERNS OF RETURNED MIGRANTS: THE ROLE OF EDUCATION

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MIGRATION PATTERNS OF RETURNED MIGRANTS:

THE ROLE OF EDUCATION

Chapter 1: Introduction

Background and Statement of the Problem

Migration has always been a topic of debate among many countries. Armenia is not an exception. During the recent years number of migrants moving to various destination countries increased dramatically. People migrated from Armenia either permanently or temporary. Many researches show that the main reasons behind the decision to migrate were related to the unemployment problem. People migrated either because of not having a job or having a low paid job or a job that did not correspond to their professional level (International Labor Organization, 2009). Another research study conducted by Grigoryan (2013) describes migration as a consequence of socio-economic, demographic and political reactions. Moreover, he comes to the conclusion that there is a mass migration in Armenia, which includes both labor migrants and skilled workers with higher education.

However, the number of returned migrants over a period of time is not small either. People come back to their countries of origin for different reasons. Reasons that may explain return migration include problems like integration with destination countries, preferences for individual's home country, saving objectives achieved abroad and new employment opportunities in the countries of origin. It was observed that economic situation of both host country and country of origin may affect migrant's decision to return back (Organization for Economic Co-operation and Development, 2008).

Another problem that countries face is brain drain. Brain drain is one of the characteristics that may well explain the relationship between the developing and developed

worlds. In some cases brain drain becomes a brain gain but most of the time it becomes a loss of human capital. Highly skilled workers are the main potential for developing a knowledge-based economy. Therefore, destination countries make efforts to attract these immigrants and countries of origin try to encourage them to come back (Docquier, 2006; Pungas et. al., 2012). The large body of literature examines the short-term and long-term negative consequences of brain drain. In the short run international migration may cause unemployment of educated people, over-education and brain drain. Migration reduces the number of educated people, which in its turn reduces the average income of the country. Most developing countries cannot provide jobs to the educated part of the population. That is why unemployment rate of educated people rises, which follows by their migration. As Gillis et al. (1996), Mathew (1997) and Boudarbat (2004) observed, in developing countries like Sri Lanka, India and Marocco, unemployment rate of educated people is even higher from the unemployment rate of people without education or little education. They found a negative correlation between unemployment rate and educational attainment (Stark & Fun, 2007; Gillis et al., 1996; Mathew, 1997; Boudarbat, 2004).

Various studies have been developed in order to find out the relationship between migrants education and their intentions to return. However, studies indicate that education itself have a little influence on migrants decision to return. Only over-education may affect migrants' decision to come back when migrant works below his/her educational level in the destination country. The same results could be seen while examining returned migrants intentions to migrate and reasons behind it. Education level may influence migrants' decision to migrate only in line with other factors that influence the decision to come back (International Labor Organization, 2009; Rosenzweig, 2007).

Currently the number of returned migrants is high in Armenia. Among them the number of educated people is also significant. However, most of the returned migrants are

intended to migrate from their country of origin again. If the skilled returned migrants also have intentions to migrant, Armenia will face brain drain. On the other hand if returned skilled migrants decide to stay in their home countries and contribute to the development of their country, Armenia will have a brain gain.

Currently migration is a vital problem for Armenia. Moreover, for a country without rich reserves of natural resources human capital is the main force for the development. Therefore, loss of its educated and skilled part of the population should be a topic of concern and steps should be done to solve the problem. In order to solve any problem, the main causes of the problem should be observed. As the study conducted by International Labor Organization (2009) shows, there is a disparity between demand and supply of the labor force in Armenia. Armenian labor market cannot function effectively since there are too many people with the same educational background (economists, lawyers, etc.). Moreover, graduates from educational institutions of Soviet period are not competitive anymore. Young graduates of secondary specialized education do not have the necessary skills for nowadays labor market also. In contrast, there is a high demand and low supply of skilled professionals in the field of construction and information technologies. A significant number of educated migrants are with these educational backgrounds (International Labor Organization, 2009). Currently many skilled workers are leaving Armenia for finding jobs and living in other countries. Moreover, many programs support people to continue their education abroad. These give people a chance to improve their professional skills. After returning back to their home country skilled people contribute to the brain gain in Armenia. However, many of them cannot find jobs corresponding to their educational level. The main reason behind their intentions to migrate is not only their educational level, but also inability to find jobs.

Within the scope of this research study both causes and consequences of migration will be observed. Special focus will be given to the role of education in order to see how education may affect returned migrants decision to emigrate again.

Theoretical Framework

The study of migration can be viewed within the theory of neoclassical migration. As Harris and Todaro (1970) state, migration is an attempt to maximize utility of individuals by moving to places where there are more opportunities to be productive. In their view, migration is an investment in human capital. Migrants choose to move to places where they can have highest economic returns on their human resources. Successful integration of migrants will be more productive than moving to the country of origin. In this case there is no need to return to their countries of origin. In contrast, if migrants cannot improve their lives while living abroad and cannot find jobs, possibility of returning back to the country of origin is high (Harris & Todaro, 1970; de Haas & Fokkema, 2011; Sjaastad, 1962; Bauer and Zimmermann 1998). As with Armenian returned migrants, they moved mostly for finding jobs. Those who increased their living standards abroad, have intentions to stay there, but those who did not succeed, mostly returned back. However, theory can mainly apply to labor migration.

In contradiction, new economics theory states that after earning enough assets and knowledge migrants are ready to invest in their countries of origin by forming the return migration (de Haas et al., 2009). As for the educated part of the returned migrants, after gaining enough skills they return home. Since the main aim of the research is to find out the relations between education level and returned migrants' intentions to migrate again, new economics theory is more applicable. Moreover, migration theories may be divided into two main strands: first, focusing on return migrants as investors of financial capital and second,

migrants as innovators. This differentiation is associated with Bourdieu's understanding of "economic capital" (first strand) and "cultural capital" (second strand). Cultural capital includes knowledge and qualifications that returnees gained while being abroad (Bourdieu, 1983; Klagge & Klein-Hitpab, 2009). As for this research study, Bourdieu's notion of economic and cultural capital is also applicable, since educated migrants either invest in different sectors of their countries of origin as innovators, or bring financial capital in terms of both remittances and financial resources they brought with them to their countries.

Purpose and Importance of the Study

Migration of skilled workers or brain drain has been a problem for many countries. It has its causes and consequences. The problem is especially significant in developing countries, where skilled workers are the main driving force for the development. In order to overcome the problem many countries found the main factors that caused migration of skilled workers. After that the development and implementation of particular policies did have positive effects on the decrease of the emigration rate and increase of the return rate of skilled workers.

Currently not only labor migration rate is high, but also skilled workers' migration. However, many of them return to their home countries. This research is an effort to investigate returned migrants' patterns to migrate and see weather education level influences the decision to migrate or not. Moreover, the research will find out what other factors in line with educational level may force returned migrants to plan to migrate again. The observed factors will help to identify the main areas of concern for further development of policies that will decrease the migration rate. In addition to this, this research will show if there is a brain drain in Armenia or not, and if there are any fears of having brain drain in the future.

This research might be useful for studies connected to returned migration, brain drain and the role of education level in them. Moreover, findings of the study may be useful for developing policies or undertake some steps that may promote skilled returned migrants not to leave their country.

Research Questions and Hypotheses

Research Questions

RQ₁: What are the main factors that affect educated people's decision to migrate?

RQ₂: What factors may force migrants to return to their countries of origin?

RQ₃: To what extent can education level of migrants influence them to migrate?

RQ₄: What other factors in line with education level may force educated returned migrants to migrate abroad again?

RQ₅: What are the general needs of returned skilled workers for staying in the country of origin?

RQ₆: Are the skilled returned migrants more inclined to leave Armenia than less skilled migrants?

RQ₇: What is the best way to prevent Armenia from brain drain?

Hypotheses

H1: Low wages are the most important factor affecting skilled migrants' decision to migrate.

H2: Correspondence of the education level to the job position affects migrant's decision to migrate.

H3: Returned migrants with higher education level are more inclined to migrate.

- H4. Returned migrants, who have a higher education and a current job, are less inclined to migrate.
 - H5: There is a brain drain in Armenia.
- H6: Creation of workplaces is the best way to keep skilled workers and encourage skilled migrants to return back.

Scope of the Study

The main instrument that is used within this research was the survey data on return migration collected by the European Training Foundation (ETF) and the Caucasus Research Resource Center (CRRC). Survey was conducted throughout Armenia and involved 1395 returned migrants.

Chapter 2: Literature Review

Concepts of Return migration, Brain Drain and Brain Gain

Return migration of skilled people is related with the concepts of brain drain and brain gain. Therefore, the observation of return migration, brain drain and brain gain requires at first to define these concepts.

Even though many countries consider migration as a big problem, most of the time little attention has been paid to another important phenomenon: return migration. While a steady flow of people immigrate to more prosperous destination countries, there is an increasing group of people who return from the destination countries by establishing their residence back home (Kilic, et al., 2009; Labrianidis & Hatziprokopiou, 2006). United Nations Statistics Division (1998) defined returning migrants as "persons returning to their country of citizenship after having been international migrants (whether short-term or long-term) in another country and who are intending to stay in their own country for at least a year" (Organization for Economic Cooperation and Development, 2008, p. 164). Martin and Radu (2012) stated that migration is mostly not the move of people from one destination to another for a long period of time or permanently. It is mostly about short term stays abroad for several different reasons including a search for a better life, education opportunities or a new job. Moreover, political and economic changes, crises and wars may also force people to migrate. If the migrants are returning back to their countries of origin, a phenomenon called return migration follows. Return migration can take different forms which include seasonal migration (for jobs related to the agricultural and services sector), repeat migration (repeated moves between the home country and destination countries) and return migration when the period abroad is followed by the permanent resettlement in the home country (Martin & Radu, 2012; Klagge & Klein-Hitpab, 2009).

Brain drain applies to "the international transfer of human resources". It mainly reflects the migration of people with higher education from source countries to different destination countries where they can find better opportunities. In most of the cases brain drain could be explained as the skilled migration from developing countries to the developed countries (Docquier & Rapoport, 2006; Stark et al., 1997; Kwok & Leland, 1982). Brain drain causes significant losses for the people who are left in their countries and becomes a reason of inequalities between different countries (Kwok & Leland, 1982; Erdogan, 2003). Skilled migration or brain drain leads to a lower level of human capital formation and decreased social welfare (Lien & Wang, 2003; Beine et al., 2001). Moreover, in the short run migration may lead to an "educated unemployment" and over-education followed by brain drain. Brain drain leads to the decrease in the stock of skilled workers which in its turn reduces the average income of developing countries. There is a small number of skilled people in less developed regions, since they want to achieve a high profitability which cannot be provided by these countries. Therefore, human capital decreases by decreasing the productivity of these countries. Brain gain can be small if the proportion of educated people in the country is also small (Fan & Stark, 2007, Straubhaar, 2000, Lucas, 1990).

In contrast to brain drain, if migration is about studying abroad, and there are expectations that people who migrated for getting a better education, will return, the source country will have a brain gain (Docquier & Rapoport, 2006). When brain drain increases the productivity and equality of the source country, the phenomenon of brain gain occurs in that country (Fan & Yakita, 2010; Mountford, 1997; Schiff, 2005; Beine et al. 2008; Stark et al., 1997). Moreover, brain gain may occur, if skilled workers migrate to different destination countries. In this case there will be a brain gain for the destination country, and a brain drain for the source country. Prospects of migration may lead people to do additional investments in human capital even if they do not end up migrating. In this sense, comparison of migrants

with non-migrants shows that source countries are having brain gain as non-migrants also invested in human capital (Gibson & McKenzie, 2012; Vidal, 1998; Mountford, 1997; Stark et al., 1997).

The Main Causes of Skilled Migration

The fast-growing body of literature provides an analysis of migration of educated people. Migration has been a serious decision for many people. However, many factors forced people to make the decision to migrate (Niedomysl, 2009; Steahr & Brown, 1980). Each country's economic development is also based on its ability to provide attractive working and living conditions. This way it is possible to keep its educated and qualified people, since they are the key determinants of the economic growth and development of that country. If one country fails to ensure these conditions, the same qualified and educated part of the population migrates to countries where they can be provided with the necessary conditions for studying, working and living (Erdogan, 2003; Foadi, 2006, Tessema, 2009; Shumba & Mawere, 2012; Straubhaar, 2000). Moreover, studies, conducted by Tessema (2009) in Eritrea which is considered as a least developed country, and Shumba & Mawere (2012) in Zimbabwe shows that the main cause of migration are economic conditions, which include both living and working conditions of skilled people. Another study, conducted in sub-Saharan African countries by Docquier (2006) also shows that low living and working conditions played an important role and forced skilled people to migrate and caused a brain drain in these countries.

Another factor that contributes to the brain drain is oversupply of professionals. In this case either these professionals find jobs that are not paid according to their qualifications, or they do not find any job at all. This forces them to migrate to the countries where they find

jobs that fit their qualifications and professional needs (Erdogan, 2003; Stark, 2003; Beine et al., 2001; Foadi, 2006; Docquier, 2006). Oversupply of professionals was among the main causes of brain drain in countries like Italy and Turkey. Research studies conducted by Foadi (2006) in Italy and Erdogan (2003) in Turkey found a significant correlation between the intentions to migrate and oversupply of professionals. Moreover, within the scope of the research study on the causes of brain drain in Turkey Erdogan (2003) found out that political situation, not proper planning of labor force, working conditions, conscious policies, research opportunities and colonial roots are also factors that affect educated people's decision to migrate.

Furthermore, developing and underdeveloped countries fail to provide opportunities for qualified education to its talented and prosperous students. As a consequence most students are inclined to migrate to other countries for getting a better education (Tessema, 2009; Gibson & Mckenzie, 2012). Gibson and Mckenzie (2012) conducted a research study in Tonga and Micronesia, where "brain drain" rate is the highest. They found out that all of migrants, who represented their sample, got their Bachelor's and even higher degrees abroad, because of limited education options in their countries. In addition to this, many scholars found out that migration with purposes of getting better education may have its positive consequences if these migrants return to their countries of origin after the completion of their education (Gibson & Mckenzie, 2012; Oosterbeek & Webbink, 2009; Horvat, 2004; Tung & Lazarova, 2006; Tessema, 2009; Shumba & Mawere, 2012; Chang, 1992). Oosterbeek and Webbink (2009) in their research "Does Studying Abroad Induce a Brain Drain?" examined the migration intentions of outstanding students of Dutch universities. They found out that those who got scholarships to study abroad are more inclined to stay and live abroad after the completion of their education than those who did not get scholarships. Moreover, Tung and Lazarova (2006) also found out from their research done in Eastern and Central European

countries that students who got scholarships for studying abroad, had a requirement to go back to their countries of origin and live there for a certain period of time. After completion of that requirement, most of them expressed their willingness to migrate abroad. These was another example that showed that better education opportunities abroad and low quality education institutions at home could also be a cause of brain drain or skilled migration. Deteriorating economic conditions are also one of the causes of brain drain. Developing countries fail to allocate its resources efficiently in all spheres of the society. As a consequence, many skilled workers either are being left without jobs or get a lower salary compared to their qualifications. As a consequence, most of them migrate, especially to the West and European developed countries, with the aims of finding higher salaries and better working conditions. As many studies show, one of the main factors that prevent educated migrants from working in their countries is the gap between the wages in source and recipient countries (Foadi, 2006; Tessema, 2009; Shumba & Mawere, 2012; Erdogan, 2003; Docquier, 2007).

Another contributor to the brain drain is the poor governance. In most developing countries government does not work as effectively as it should be. Moreover, some of the countries are even characterized by being a single-party, single-governor or military. Some governors try to stay in power by even using compulsory ways. The analysis of political administration in developing countries showed that in countries where there is a single party or a dominating party, public servants are forced to do their orders. If they fail to do that they will be fired from their job, be imprisoned or banished. So in reality the professionals fail to work effectively and use their qualified skills. As a consequence of poor governance political corruption, disrespect toward professionals, violence of human rights and undemocratic governance exist which lead qualified professionals to migrate. Governments are also inclined to imprison or harm their opponents who are mostly educated and have different

political views. As a consequence, in order to secure their lives and property, educated people are inclined to migrate (Tessema, 2009; Beine et. al., 2008; Gibson & Mckenzie, 2012; Foadi, 2006). Study conducted by Docquier et al. (2007) shows that in average rates of migration of skilled workers are higher in countries where there is a political instability. Among these countries are sub-Saharan African countries. Shumba and Mawere (2012) and Tessema (2009) also found a strong correlation between the political instability and regime types and skilled migrants' intentions to migrate with the examples of Zimbabwe and Eritrea.

Another important factor that also contributes to the brain drain is the lack of peace and stability. In countries where there is a political conflict and economic instability, skilled individuals are more inclined to migrate. The main determinant of instability is the authoritarian rule. The last is followed by political pressures, unstable political environment, violence, protests and corruption. Moreover, conflict in the field of religion and ethnic inequality also force people to migrate. All of the factors demotivate people to work in civil service of that kind of countries. Wars and political instability lead to the increase of the rates of migration. All these were found in most sub-Saharan African countries and in countries that are in war or internal or external conflict (Tessema, 2009; Chang, 1992; Horvat, 2004).

The Causes of Return Migration and its Importance

As many studies indicate migration is a response to social and economic conditions (Niedomysl, 2009; Steahr & Brown, 1980). While policymakers are thinking about preventing migration there is a fast growing body of literature that stresses the importance of temporary and return migration for the countries of origin and examines the behavior of these migrants while abroad. For various reasons people return to their country of origin. Gmelch (1982) separates three types of return migrants: returnees who were a part of temporary

migration and returned back after achieving their main objectives abroad; returnees who were part of the permanent migration but were forced to return because of the emergence of external factors; and returnees who preferred permanent migration but returned because of such factors as failure to adjust or homesickness.

Many research studies have proved that especially highly skilled return migrants support knowledge-based economic growth of countries of origin because of their new professional skills and mindset gained abroad (Klagge & Klein-Hitpab, 2009; Martin & Radu, 2012; Wang, 2013; Kilic et. al., 2009). For instance, Klagge & Klein-Hitpab (2009) found out that brain drain in Poland was followed by a brain gain because of return migration of skilled workers, which supported the transformation process of the economy of Poland. Another study conducted by Wang (2013) showed that return migrants from China also contributed to the development of the Chinese economy. He found that Chines migrants' contribution was in form of scientific development. Taiwan's brain gain examined by Chang (1992) also shows that return skilled migrants are the main contributors to the economic growth. Examples of these and many other countries also show that for the returned migrants the opportunities in labor market is the main factor that motivates skilled migrants to return to their countries of origin. Moreover, employment was more important for returned migrants than earnings (Klagge & Klein-Hitpab, 2009; Mara & Landesmann, 2013).

Work experience abroad may turn the emigration loss or brain drain into a brain gain for the country of origin. This happened in Central and Eastern European countries, China, Taiwan, India, etc. Moreover, socio-economic and political development may affect the flows of return migrants' more than economic fluctuations of the countries of origin. Moreover, studies conducted in these countries also showed that financial incentives or government programs for attracting migrants are weaker predictors of return (Klagge & Klein-Hitpab, 2009; Martin & Radu, 2012; Hunt, 2004; Wang, 2013).

Kilic et. al. (2009) in their study on return migration and Albanian business sector development argue that out-migration is the consequence of having less developed private sector and unsuccessful government policies that creates jobs only for keeping up with the excess labor supply. They proved their statement by the example of Albania where the number of migrants is high.

Another reason of return migration is the economic conditions of the hosting country. Hernandez-Alvarez (1967) found out in his research that migrants from Puerto Rico returned back from the USA because of being displaced by automation and mechanization (Gmelch, 1980; Hernandez-Alvarez, 1967). Moreover, migrants from Germany also returned because economic fluctuations in the fields of factory and construction, where they worked most (Rhoades, 1979; Kayser, 1972; King, 1977). However, most studies indicate noneconomic reasons for return migration. Among these reasons are strong family ties and willingness to live close to relatives and friends (Gmelch, 1980; Niedomysl, 2009; Clark and Huang, 2004). Clark and Huang (2004) used British survey data and found out that the second motive that forces people to return is the family change. Niedomysl (2009) also found out from the study done in Sweden that for Swedish return migrants the main motive to return after employment opportunities was the willingness to be close to the family.

However, many studies also observed that skilled returned migrants are mostly having difficulties in their countries as they do not get the opportunity to use their skills developed abroad properly and effectively. Moreover, because of the time spent abroad, they are not familiar with the local and regional actors who could help to develop new enterprises. In addition to these, sometimes returned skilled migrants are not supported by powerful regional actors, which prevent them from developing in their own countries. These are the main factors that may increase migration intentions of already returned migrants (Klagge & Klein-

Hitpab, 2010; Cerase, 1974; King et al., 1986; Gmelch, 1980; Organization for Economic Cooperation and Development, 2008).

Education and Skilled Workers Migration

Contribution of highly skilled migrants to the economic development is very valuable. Therefore, both destination countries and countries of origin use different methods for attracting these migrants. Many researches have been conducted in order to find out migration intentions of highly skilled migrants. The main variable for measuring skills was considered the education. Previous researches were mainly focused on the relationship between migration and education (Pungas et al., 2012; Docquier & Marfouk, 2005; Williams, 2005; Regets, 2001; Rodriguez-Pose & Vilalta-Bufi, 2004).

Researches on migration and skills found different results concerning the relationship between migration and education. Studies conducted in Sweden and Denmark showed that migrants who have higher level of education are more inclined to come back to their countries of origin (Pungas et al., 2012; Nekby, 2006; Jensen & Pedersen, 2007). In contrast, migrants who lived in Germany and had a lower level of education were more inclined to return to their countries of origin (Dustmann and Glitz, 1996; Pungas et al., 2012).

Moreover, it was observed that the ability to find a job corresponding to the educational level of migrants may affect migrants' decisions to migrate (Trevena, 2011; Drinkwater et al,. 2009; Schwartz, 1976; De Jong et al., 1986). In addition to these, Rodriguez-Pose & Vilalta-Bufi (2004) found out that many catching up regions attract educated migrants by providing them jobs. Even though youth unemployment rate is still high in these countries, percentage of workers with job-related education is also high. As a consequence educated people are inclined to migrate to places where they can find jobs related to their education.

Considering the weak relationship between the education level and intentions to migrate, many scholars also examined such variables as funding for higher education and the quality of education in the home country. As Regets (2001) found out through analyzing 1993 National Survey of College Graduates, more than one third of college graduates in the USA got their bachelor's and higher education outside the USA and their education was also funded outside the US. Williams (2005) and King (2002) also stresses the importance of funding of research studies, availability of scholarships and exchange schemes and distribution of centers of excellence. These factors also affect skilled migrants' decision to migrate. De Jong et al. (1986) in their study on migration intentions in rural Philippine province used several factors for analyzing the relationship between migration intentions and migrants' behavior. According to their results the main factor that affect migrant's decision to migrate, was the family pressure. Next variables that also had significant impact were the status of single and money for moving. Variables like prior migration experience, number of households living out of rural province, relatives and friends in destination countries followed these results. Year of schooling, however, did not play a significant role while examining migration intentions. Moreover, those with more schooling years were more inclined to migrate from rural province.

In addition to the above mentioned variables that explain the migration of people with higher education, Whisler et al. (2008) emphasized the role of the area where educated people are living. Cost of living, high crime rates, poor recreational amenities of the living area also affect educated people's decision to migrate. However, they found out that the possibility of not leaving metropolitan areas rises with the growth of human capital in that area.

As Pungas et al. (2012) suggest another important variable that should be observed in line with education level and migration intentions is the over-education when migrants accept jobs below their education level and qualifications. This may be a reason for migration of

educated people. Research done in Estonia and Finland also found out that education level itself does not significantly affect migrants' migration decisions while over-education was associated with migration intentions.

Skilled Workers Migration in Armenia

In Armenian labor market there was always a mismatch between the supply and demand of labor supply. In many cases Armenian labor market is unable to absorb the existing labor supply. The reasons for this were obvious: Armenian skilled workers migrated to other foreign countries and the existing professionals either are not well developed, or do not meet the needs of employees. Most of the time graduates of Armenian educational institutions do not have the necessary qualifications for the current labor market. Moreover, knowledge of Soviet graduates is no longer needed in Armenian labor market (International Labor Organization, 2009; Chobanyan, 2013).

Despite the high rate of emigration from Armenia the number of returned migrants is not small either. Many factors affect these migrants decision to return back. As researches done in Armenia show the main factors that caused return migration were the worsening of working and living conditions abroad, unacceptability of social values, personal issues, deportation, homesickness, willingness to raise children in Armenia. In addition to these factors, return migrants may also be finished with their college/university education abroad and return, or their stay abroad has been decided to be temporary even before moving abroad (Chobanyan, 2013; Fleischer, 2012; International Labor Organization, 2009; Gevorgyan, 2007; Yeganyan, 2006).

So far, no effective policies or mechanisms have been formulated in order to attract transfer of skills and investment from migrants. As returned migrants may use their skills acquired abroad for the development of Armenia, certain policies should be developed in

order to support the reintegration of returned migrants. Otherwise, re-emigration of returned migrants will become another problem for Armenian reality (Kabaleova et al., 2007; Chobanyan, 2013).

Country study done by International Labor Organization (2009) found out that the main reason of skilled migration in Armenia is not just the absence of jobs, but also high paid jobs corresponding to their qualifications. The main age group for this kind of migrants is secondary-aged people, since young people do not have enough working experience and old people do not satisfy the needs of current labor market. Another factor that also affected returned migrants' decision to re-emigrate was the willingness to live in a socially and culturally active environment. As a consequence migrants move to marz centers or Yerevan and try to find an appropriate job. After failing to integrate in new environment and not finding the needed job their final decision becomes the migration (International Labor Organization, 2009).

As for the skills acquired abroad most of the returned migrants stated that the skills they obtained abroad increased their competitiveness in Armenian labor market. Skilled returned migrants bring with them new skills and know-how (International Labor Organization, 2009; Yeganyan, 2006; Chobanyan, 2012). However, another problem that they are facing with is the age discrimination. Armenian employers have certain age requirements while foreign employers' main requirement is the proficiency in the job migrants are doing. This is also a factor that may contribute to the migration of returned migrants (International Labor Organization, 2009).

Moreover, Armenian returned migrants also contributed to the business sectors by taking managerial positions and sharing their knowledge with their colleagues which is useful in terms of innovations. As for the entrepreneurship, returned migrants had problems mainly

with legislative framework and taxes (Gevorkyan & Gevorkyan, 2006; International Labor Organization, 2009).

Many returned migrants are also having problems with the availability of information and luck of awareness. Furthermore, problems with reintegration also arise while returning back to Armenia. Reintegration problem of migrants is mainly connected with the difficulties of finding jobs after returning. For the skilled migrants the solution of this problem is very important as it may later cause the re-emigration of these migrants (Chobanyan, 2013).

Policy Responses to Skilled Migration

A high emigration rate of skill migrants is a problem for many developing countries. Even though many researches have been conducted in order to find out the causes and consequences of skilled migration and brain drain, the main goal of these researches should be the recommendation of certain policies for attracting skilled migrants to come back and preventing returned migrants from migrating again (Wickramasekara, 2012; Skeldon, 2008; Kabeleova, 2007; Chobanyan, 2013; European Training Foundation, 2013; International Labor Organization; 2009).

Wickramasekara (2012), Skeldon (2008) and European Training Foundation (2013) suggest that one of the ways of keeping educated people in their countries is the investment in primary and tertiary education. Moreover, the main policy response to migration of skilled workers or brain drain is the brain exchange and circulation. This way sending countries will get benefits from the brain circulation and receiving countries will also benefit since talents would remain in the host country. Through brain circulation win-win situation will be feasible for both sending and receiving countries. Cooperation between sending and receiving countries of skilled migrants is very important for benefiting from brain circulation.

Moreover, Skeldon (2008) found out that policies like limiting the movement of skilled and

compensation by developed countries for skills obtained are old and ineffective. In contrast, policy responses such as human capital improvement in both countries of destination and origin, investments in the field of education, trainings are considered to be effective ways against brain drain. In line with these, improvement of working conditions will also encourage skilled people to live and work in their countries.

Re-emigration of returned skilled migrants is another important issue that should be considered by policymakers. As for the administrative framework, example of most of the European countries could have its positive impact on the reintegration of returned migrants and coordination of their activities. Creation of a state agency responsible for coordination of the activities of return migrants is one option. Detailed division of responsibilities among existing agencies is another option that could effectively solve reintegration problems of returned migrants (Kabeleova et al., 2007). Return and reintegration policies should be formulated and implemented in order to achieve successful results in keeping returned skilled migrants at their home countries (Chobanyan, 2012).

Chapter 3: Research Methodology

Research Design/Methodology

The research methodology of this study is quantitative and uses causal design. The main instrument which was used for this study is secondary data collected by ETF and CRRC. Causal design was used in order to find the main causes of migration and see what variables affect returned migrants decision to migrate back and to what extent. This database was chosen for this study because of a big sample. Data collection instruments were also reliable. Moreover, CRRC is a professional research institution and the quality of database is high by considering the fact that more than 74 interviewers and 10 supervisors were involved. Sample was chosen from all regions of Armenia and Yerevan. Sample size is 1395 returned migrants. Data was collected between 13 and 29 December, 2011 and 7 and 30 January, 2012. Two hundred clusters were separated within the country. No more than 7 returnees were chosen in each cluster. Snowball method was used in order to find and choose returned migrants. Interviewers were asking each potential migrant whether they know any returned migrants in the neighborhood or not. Returned migrant was defined as someone aged 18 or older, who had worked abroad for at least three months and returned back no more than 10 years ago (Caucasus Research Resource Center, 2011/2012).

Data analysis

Secondary data analysis was done in order to test the hypotheses. Data was analyzed using SPSS and STATA, statistical analysis software packages. Data analysis included descriptive statistics, mainly frequencies. Logistic and linear regressions were done in order to find out which variables cause migration. Confidence level of 95% has been used.

Correlation analyses between different variables have been used in order to find the significance between the selected variables.

Limitations of the Study

The main limitation of the study is the use of only one instrument for testing the hypotheses. Moreover the data was collected in 2011-2012 period. The migration situation may be different during the 2013-2014.

Chapter 4: Data Description

Within the scope of the following research data on migration, development and skills, collected by the European Training Foundation (ETF) and the Caucasus Research Resource Center (CRRC) will be used. Survey was carried out in Armenia during the period of 2011-2012. Returned migrants' datasets is going to be used in order to provide an evidence based statements about the brain drain and migration patterns of returned migrants in Armenia. Sample size of the dataset is 1426. Questionnaires for the surveys touch upon 5 groups of characteristics: (1) education, skills and socio-demographic characteristics; (2) work; (3) intentions; (4) expectations and (5) economic and living conditions of household. The first part of the research will observe the results from Returned Migrants' dataset in order to find out variables that would help to explain the phenomenon of brain drain in Armenia.

The first useful factor while studying brain drain is the education level of migrants.

The following results are obtained for the question about the highest education level before moving abroad for the first time:

Table 1: Level of Education before Moving Abroad for the First Time and after Returning.

What was your highest level of education completed with a certificate/diploma before moving abroad for the first				
time? What is your current level of education completed with a certificate/diploma?				
Education Level	Freq. (before)	Freq. (after)	Percent (before)	Percent (after)
Same as the one before				
moving abroad for the		881		63.89
first time				
1.Primary and less	7	11	0.50	0.80
2.Lower secondary	164	63	11.76	4.57
3.Upper secondary General	586	186	42.01	13.49
4.Upper secondary Vocational	124	40	8.89	2.90
5.Post-secondary Vocational	194	69	13.91	5.00
6.Higher education (incl. Bachelor and Master	313	112	22.44	8.12

degrees)				
7. Post-graduate (PHD)	7	17	0.50	1.23
TOTAL	1,395	1,379	100.00	100

From the above provided table¹, 42.01 % of returned migrants had an upper secondary general education before moving abroad for the first time. Significant number of migrants had higher education (Bachelor's and Master's) before moving abroad (22.44 %). This number is significant for this research since people with higher education may go abroad for further education or for finding a job abroad. These are signs of either brain drain or even brain gain. Comparison of the education level after moving abroad will bring some evidences about the reasons of migration and whether this was a gain for the sending country or not. The lowest percentage has people who either have a primary education or post-graduate education levels.

In order to find out whether these migrants improved their education level or not, it is important to know the current level of education of already returned migrants² and compare the results with the education level of migrants before moving abroad.

The table can help to make comparison of education levels of migrants. The largest part of the returned migrants (63.89) had the same level of education, which means that they had other reasons to migrate other than studying. Around 22 % of respondents got their primary, lower secondary, upper secondary general and upper secondary vocational educations abroad. From these results could be assumed that many families moved abroad with their children, where they got their school and vocational education. Compared to the educational level of people with higher and post-graduate degrees before moving abroad around 10 % of people improved their education levels. In other words, 112 returned people got their masters' or bachelors' degree abroad and 17 people got their PHD's abroad. This means that even

¹ Thirty one missing values were taken out from the results.

² Forty seven missing values were excluded from the results.

though the percentage of people whose education level have changed after the return, is small, it is still significant and Armenia did have a brain gain because of people who improved their education level and returned home.

Other variables that may be helpful in this research are the attitude toward the importance of education and whether the education could be an opportunity for a better job abroad or not.

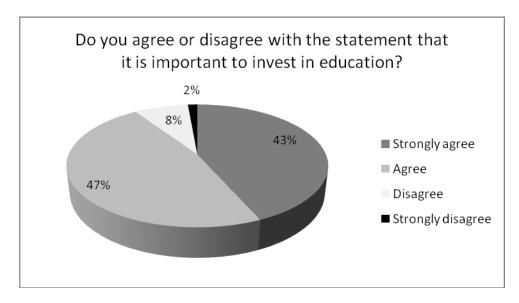


Figure 1: Investing in education.

As it could be seen from the figure above, from 1,363 respondents more than 90 % of respondents agree that investing in education is important and around 10% disagree. This may tell that people value the importance of education.

As figure 2 shows, out of 1,360 respondents more than 64 % either agree or strongly agree with the statement that higher education at home may help to find a better job abroad. However, more than 36 % disagree or strongly disagree with the statement. Negative results may tell, that those returned migrants either had an education but did not get an appropriate job abroad or they did not have an education and did not value the education gotten at home.

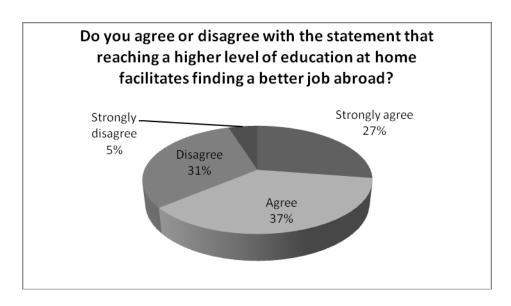


Figure 2: Reaching a higher level of education at home facilitates finding a better job abroad.

Another important fact that could be helpful for the research is the reason for these migrants to move abroad.

Table 2: Reasons for leaving your country

Reasons for leaving your country			
Reasons to move	Freq.	Percent	Cum.
0.Other	17	1.22	1.22
1.Had no job/could not find job in Armenia	1,111	79.81	81.02
2.Unsatisfactory wage/career prospects in Armenia	107	7.69	88.72
3.Harsh and difficult working conditions in Armenia	11	0.79	89.51
4.Insufficient social security system (particularly health car	5	0.36	89.87
5.To repay debts	16	1.15	91.02
6.To improve standard of living	39	2.80	93.82
7.To get married/just married	12	0.86	94.68
8.To accompany/follow spouse and/or parents abroad	16	1.15	95.83
9.To join relatives/ friends/ fellowmen abroad	26	1.87	97.70
10.To escape family problems (conflict with	3	0.22	97.92
parent/divorce)			
11.To get education or training	9	0.65	98.56
12.To finance children's education or training	1	0.07	98.64
13.Fear of war/civil conflict/persecution			
14.Adventure in life	3	0.22	98.85
15. Did not like living in Armenia			
16. To receive necessary health care	1	0.07	98.92
17. Wanted to go abroad/ like living abroad	2	0.14	99.07
18. no future here in Armenia	2	0.14	99.21
19. to get a higher paid job abroad	11	0.79	100.00
Total	1,392	100.00	

Out of 1,392 respondents 79.81 % left Armenia because they could not find any job in Armenia, around 7.69 % left their jobs because of unsatisfactory wages and the absence of

career prospects in Armenia. Only 0.65 % of the respondents left Armenia for training and continuing their education. Small percentage of people, 0.79 % left Armenia for getting a higher paid job.

Table 3: The biggest problem you encountered after you returned.

	Percent	Freq.
I have not encountered any problems	51.71	712
I could not/cannot find work here	45.17	622
My spouse could not/cannot find work here	0.29	4
I could not/cannot find proper accommodation	0.36	5
No appropriate educational services for myself/family	0	0
No appropriate health services for myself/family	0.94	13
I could not/cannot re-integrate myself/I did not/do not know	1.38	19
I lack(ed) information on legal rights & obligations	0.15	2
Total	100	1,377

According to this table the biggest problem for returned migrants while returning was the inability to find a work (45.17 %). More than half of the respondents did not encountered any problems (51.71). Very small number of people chose from the other answers, which talks about the significance of finding a job.

Another factor that may be important while studying return migration is whether the migrants brought money back home with them or not. From 1,372 respondents around 66% brought money with them. However, about 34% of respondents came back without bringing money.

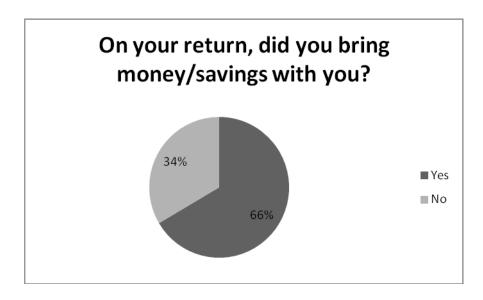


Figure 3: Savings

According to the figure bellow, 94.04 % of respondents never studied or attended a training abroad. Only 5.96% studied abroad.

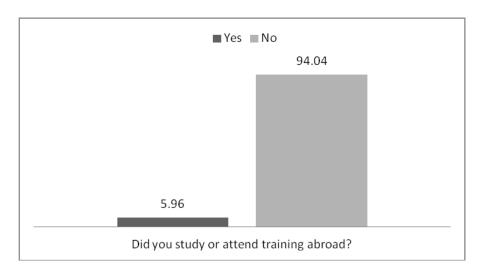


Figure 4: Did you study or attend training abroad?

Not all migrants' jobs corresponded to their educational level. According to the collected data work of 53.38 % corresponded to their educational level, for 6.38 % more than educational level was required.

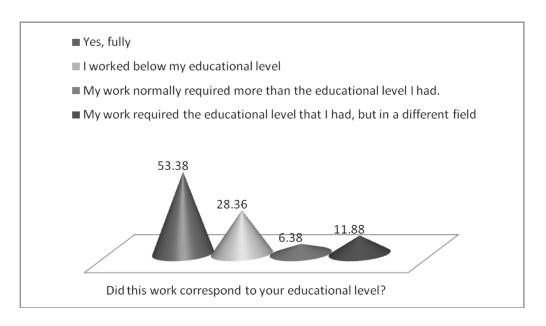


Figure 5: Correspondence of work to the education level

From 1,391 returned migrants only 33 % were working at the time when survey was conducted. The other 67 % did not have a job.

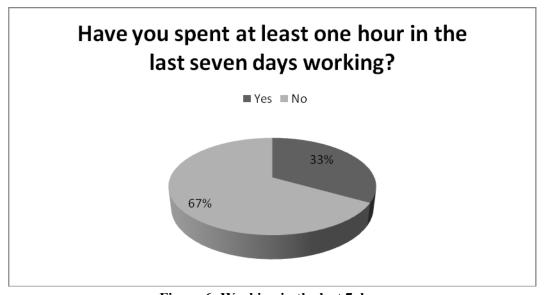


Figure 6: Working in the last 7 days

Returned migrants had different reasons for not working. 63.96 % had problems with finding a job, 12.60 % were on holiday and 13.80 did not need to work. Only 1.75 was not working because of studying or participating in training.

Table 4: Reasons of not working

What is the reason of your not working?				
Reasons for not working	Freq.	Percent	Cum.	
0.Other	44	4.82	4.82	
1.Cannot find work	584	64.96	68.78	
2.Holidays	115	12.60	81.38	
3.Sickness	24	2.63	84.01	
4.Strike	1	0.11	84.12	
5.Studying/in training	16	1.75	85.87	
6.On pension/disability	1	0.11	85.98	
benefits				
7.Household	2	0.22	86.20	
work/housewife				
8.Do not need/want to work	126	13.80	100.00	
Total	913	100.00		

Each returned migrant somehow analyses his/her career prospects in their home countries before deciding whether to move abroad or not. Out of 1,328 return migrants 51.88 % and 12.80 % rated their career prospects in their country good and very good. However, 35.32 % has been pessimistic about their future career in their own country.

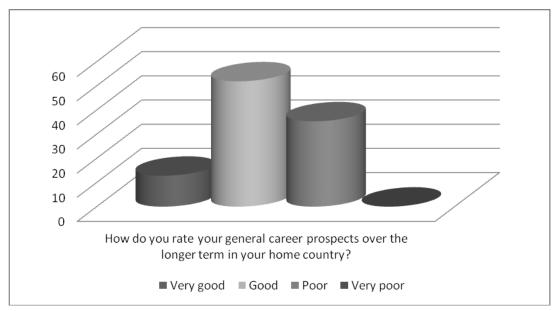


Figure 7: General career prospects in home country

Vast majority (68.38 %) of the respondents currently plan to go abroad again which is the main evidence about the intentions to migrate.

Table 5: Plans to move abroad again

Are you currently thinking seriously to move abroad to live and work?			
Plans to move abroad	Freq.	Percent	Cum.
again			
Yes	947	68.38	68.38
No	438	31.62	100.00
Total	1,385	100.00	

It is very likely and likely that 54.28 % and 25.48 % of respondents will move abroad within the next 6 months. This informs about the high intentions to migrate abroad again. Moreover, it is very likely and likely that 66.13% and 29.99% that returned migrants will move abroad within the next 2 years. However, the research will find out whether these numbers are significant in case of educated migrants also.

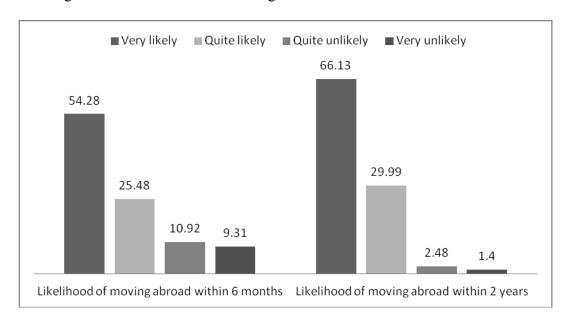


Figure 8: a) How likely or unlikely is it that you would leave Armenia for work (temporary/permanent) within the next 6 months? b) How likely or unlikely is it that you would leave Armenia for work (temporary/permanent) within the next 2 years?

Returned migrants (total number of 927) were also asked to explain the main reasons for moving abroad again and most of the returned migrants (70.87%) brought up the fact of not finding a job in Armenia as the main cause for leaving Armenia again. Only 5.39% wants to leave Armenia because of not seeing career prospects or low wages. From the returned migrants 4.21 % complained that they are not satisfied with the social security system

especially health care. Only 0.22% or 2 respondents wanted to move abroad for further education.

In addition to the mentioned reasons for leaving, financial situation of the returned migrants may be considered as a cause for leaving the country.

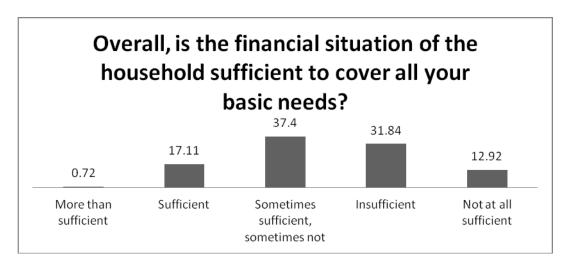


Figure 9: Financial situation

Chapter 5: Data Analysis

In order to find out the major factors that affect skilled migrants' decision to migrate abroad linear and logistic regression analysis will be done in line with correlations and frequency analyses. The use of regression models is explained by the fact that it shows causation between different variables and the main aim of the research is finding out the main causes of moving abroad again.

The first step to find out the impact of education level on intentions to migrate is the linear regression between the education levels and plans to migrate.

Table 6: Linear regression (Education level and intention to move abroad)					
Move abroad	Coefficient	P	R-squared		
Education level	-0.03	0.009	0.00	0.01	

Above presented table shows that the relationship between plans for moving abroad and education level is significant at .,01 level because of the P value of 0.000. However, -0.03 coefficient and R-squared are very low. This means that even though as the level of education increases the likelihood of moving abroad decreases, education level could not be considered as the main cause of high migration intentions. For this reason logistic regressions will be done while moving forward.

Logistic regression models will be developed by adding values that could affect the dependent variable which is the decision to move abroad. The first model will be the logistic regression that will show if the education level may cause migration or not.

Table 7: Logistic regression (Education level and intention to move abroad)

Move abroad	Coefficient	Standard Error	P
Education level	-0.16	0.04	0.00

Above model shows that there is a negative regression between the education level and migration meaning that higher the education level, lower the likelihood of moving abroad. Another important factor that may affect migrants decision to migrate in line with education is whether these returned migrants have a work or not.

Table 8: Logistic regression (Education level, intention to move abroad and work status)

Move abroad	Coefficient	Standard Error	P
Education level	-0.08	0.04	0.061
Work status	-1.03	0.12	0.000

Second logistic regression model shows that the significance of education level decreased (P=0.061) while considering work status in line with education level. -1.03 coeficient of work status shows that having a current work decreases the likelihood of moving abroad.

Two more variables could be added in order to see whether the education level can somehow influence migrants decision to migrate. These variables include the money brought by the migrate while coming home and household needs (whether the finances are sufficient to cover household needs).

Table 9: Logistic regression (Education level, intention to move abroad, work status, money with and sufficient finances)

Move abroad	Coefficient	Standard Error	P
Move abroad	Coefficient	Standard Error	r
Education level	-0.06	0.04	0.164
Work status	-1.02	0.13	0.000
Money with	-0.4	0.13	0.002
Sufficient finances	0.11	0.07	0.088

Above provided model shows that the most important factor that affects migrants' decision to migrate is the work status. Education level doesn't really affect migrants' decision to migrate. In contrast, work status was important for both migrants with different education levels. Coefficient for work status in this model also increased by showing that work status explains migrants' decision to migrate more than all the other variables. Another important factor that affected migration decision is the fact of bringing money with them while coming back. There is a negative regression with the P value of 0.088 and coefficient of -0.4 which explains that if the migrants brought money with him after coming there is a less likelihood of moving abroad again. Sufficient finances for covering household needs did not play a significant role in this model.

Studies show that correspondence of the education level to the job position may also have an impact on decision to migrate. Thus, correlation analysis that may explain the effects of the correspondence of the education level to the job position will also find out whether the results may affect the decision to migrate or not.

As for the education level and likelihood of moving abroad, those who have higher education are more inclined to stay at their home countries rather than live abroad. Education qualifications of those who have a higher education were officially recognized by the destination country. This is proved by a negative correlation of -0.079. Moreover, likelihood of moving abroad within 2 years was higher among these people (correlation of 0.07). Moreover, returned migrants who currently work and whose education level fully corresponds to their education level have a higher likelihood of moving abroad within two years (correlation of 0.097).

Table 10: Correlations

E	ı	1 4 5 1 5	. Correlations	,		F	·
		highest	educational	correspond	correspon	likelihood of	likelihood of
		education	qualification	ence of	dence of	moving	moving
		_current	officialy	work with	work with	abroad	abroad
			recognised	educational	skills and	within 6	within 2
			in the	level	abilities	months	years
			destionation				
			country?				
	Pearson Correlation	1	-,079**	-,032	,011	,066 [*]	-,022
highest education _current	Sig. (2-tailed)		,004	,242	,678	,046	,511
	N	1379	1303	1334	1335	922	916
educational qualification officialy recognised in the	Pearson Correlation	-,079**	1	,106**	,109**	,053	,070 [*]
destionation country?	Sig. (2-tailed)	,004		,000	,000	,115	,038
destionation country?	N	1303	1318	1273	1277	881	874
correspondence of work with	Pearson Correlation	-,032	,106**	1	-,060*	,044	,097**
educational level	Sig. (2-tailed)	,242	,000		,028	,186	,004
	N	1334	1273	1348	1329	901	894
correspondence of work with	Pearson Correlation	,011	,109**	-,060 [*]	1	-,033	-,034
skills and abilities	Sig. (2-tailed)	,678	,000	,028		,327	,309
	N	1335	1277	1329	1349	904	898
likelihood of moving abroad	Pearson Correlation	,066*	,053	,044	-,033	1	,709**
within 6 months	Sig. (2-tailed)	,046	,115	,186	,327		,000
	N	922	881	901	904	934	913
likelihood of moving abroad	Pearson Correlation	-,022	,070 [*]	,097**	-,034	,709**	1
within 2 years	Sig. (2-tailed)	,511	,038	,004	,309	,000	
	N	916	874	894	898	913	927

^{**.} Correlation is significant at the 0.01 level (2-tailed).

In addition, returned migrants were asked to give the three main reasons of not thinking seriously to move abroad and for 42.52% first choice was the argument of having family and relatives in Armenia. In addition, 41.36% of respondents said that this is their country and this is where they belong to. For the second choice 60.73 % brought the fact of

^{*.} Correlation is significant at the 0.05 level (2-tailed).

having relatives and family in Armenia again. Feeling of loneliness, homesickness and luck of financial resources followed the first answer by less than 8% of respondents each. For the first choice the most common answers were the feeling of loneliness abroad (less than 20%) and homesickness (less than 34%). As it could be seen Armenian returned migrants don't complain about financial resources, unequal treatment, difficulty of finding a job and legal barriers as serious reasons for not thinking to move abroad again.

While observing whether the correspondence of education level to the work affects migrants' decision to migrant it is also necessary to see how migrants rate their general career prospects at home. Around 65% percent rated very good and good their career prospects, while 35% rated their career prospects very poor.

Having a current job is also an important factor that could show whether more educated people may change their decision to migrate based on having a job during the last 7 days.

Table 11: Correlations

		Working in the	Plans to move
		last 7 days?	abroad again
	Pearson Correlation	1	-,246**
Working in the last 7 days?	Sig. (2-tailed)		,000
	N	1391	1382
	Pearson Correlation	-,246**	1
Plans to move abroad again	Sig. (2-tailed)	,000	
	N	1382	1385

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As the correlation analysis shows, there is a negative correlation (-0.246) between the plans to move abroad and work status in the last 7 days. This means that those returned migrants who currently work are less inclined to think about remigration. However, the analysis will be complete by taking into account the education level of migrants also.

Table 12: Correlations

		working in the last 7 days?	plans to move abroad again	highest education _current
	Pearson Correlation	1	-,246**	-,084**
working in the last 7 days?	Sig. (2-tailed)		,000	,002
	N	1391	1382	1375
	Pearson Correlation	-,246**	1	,021
plans to move abroad again	Sig. (2-tailed)	,000		,443
	N	1382	1385	1369
	Pearson Correlation	-,084**	,021	1
highest education _current	Sig. (2-tailed)	,002	,443	
	N	1375	1369	1379

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As the correlation analysis shows, there is a significant negative correlation (-0.084) between the work status within the last 7 days and the level of education. This means that returned migrants who have a higher level education currently have a job. Therefore, migrants who have a higher level of education and a current job are less inclined to migrate again. Moreover, logistic regression analysis also proves that work status plays a role. In the regression model the factor of ever working since return was taken into account. The model shows that while considering the fact of work status education level plays a significant role. However, if coefficients of education level and work status since return is compared, work status again plays a key role.

Table 13: Logistic regression (Education level and working since return)

Move abroad	Coefficient	Standard Error	P
Education level	-0.09	0.04	0.026
Worked since return	1.09	0.12	0.000

The last factor that should be taken into account is the reason of not working. Since the analysis showed that work status is the major factor that affects migrants' decision to migrate, the reasons of not working should be taken into account.

Out of 913 respondents who did not worked during the last 7 days, 63.96 % could not find a job, 13.80% did not need or want to work and 12.60 were on holiday. Only 1.75 were studying or on training as a reason of not working. Therefore, from these results the necessity of the creation of work places is proved which will keep many returned migrants including the ones with higher education and skills at their home country.

Another regression model that includes correspondence of education level and skills with the job position and whether their qualifications were recognized in the destination country shows that these variables have very low significance level therefore they are not among the most important causes of migration. Moreover, in this model neither education level nor sufficient finances for household needs play an important for making a decision to migrate. Therefore, migration intentions among returned Armenian migrants are not based on education level. In addition, evidences of labor migration could be seen by considering the significance of work status as a primary cause of migration.

Table 14: Logistic regression (Gender, birth year, marital status, education level, work status, money with, sufficient finances, qualification recognized in destination country, correspondence of education level, correspondence of skills and abilities, career prospects in home country)

Move abroad	Coefficient	Standard Error	P
Gender	-0.2	0.18	0.277
Birth year	0.01	0.008	0.144
Marital status	-0.2	0.13	0.094
Education level	-0.04	0.05	0.38
Work status	-0.9	0.13	0.000
Money with	-0.39	0.14	0.004
Sufficient finances	0.06	0.05	0.277
Qualifications recognized in the destination	-0.03	0.05	0.568
country			
Correspondence of job position with education	-0.05	0.07	0.462
level			
Correspondence of job position with education	0.05	0.08	0.525
level			

The final regression model that explains the causes of migration and their connection with education level is provided below. Since above mentioned variables that did not play significant role were taken out, significance level of the remained variables increased. However, education level still does not affect migrants' decision to migrate. In this model gender and age do not play a significant role. Marital status is significant in this model. There is negative causation between the marital status and intentions to migrate meaning that those who are married or were married are more inclined to migrate. This could be explained by the difficulties connected with finding a job, earning enough money and solving household needs at home country. Education level is still insignificant. Since the correlation is negative, it means that higher the education level lower the likelihood of moving abroad again. However, low level of significance shows that education level is not the cause of migration. Work status is the most significant variable in this model. Therefore it is the main cause of migration. There is a negative correlation between the work status and migration intentions: those who do not have a job are more inclined to migrate no matter their level of education. This is a sign of labor mass migration but not a brain drain. Jobless people are inclined to migrate again no matter what is the level of their education. Money brought with them while coming back is another significant fact. Correlation is still negative meaning that those who brought money with them are less inclined to migrate. Whether the finances are sufficient for household needs or not is not significant either. Career prospects at home country is the second significant variable that may cause migration. Migrants who rate their career prospects at home good or very good are less inclined to migrate. While saying career prospects higher education level is not necessary since people with different professions but without higher education may also have success in their career at home. This proves that there are no signs of brain drain and that other factors rather than education level affect decision to migrate. While doing logistic regression analysis, career prospects were taken out in order to see if education level's impact will increase. Analysis showed that impact of education level increased since people with higher education rated their career prospects higher at home. Therefore, people with higher education are less inclined to migrate and are hopeful about their future career in their home country. This also proves that there is no brain drain in Armenia.

Table 15: Logistic regression

Logistic Regression (final model)					
Move abroad	Coefficient	Standard Error	P		
Gender	-0.25	0.18	0.171		
Age	-0.008	0.008	0.299		
Marital status	-0.26	0,12	0,04		
Education level	-0.04	0.05	0.407		
Work status	-0.9	0.13	0.000		
Money with them	-0.38	0.1	0.004		
Sufficient finances	0.07	0.05	0,199		
Career prospects	-0.34	0.097	0.001		

Chapter 6: Summary of Findings and Suggestions for the Future Research

Summary of Main Results

Analysis of survey results showed that the most important factor affecting returned migrants decision to migrate again is the work status. Those who worked during the last 7 days before the survey was conducted were less likely to move abroad. For those who did not work the main reason was inability of finding a job. Moreover, the biggest problem that returned migrants were faced was the absence of jobs. Very small percentage of people indicated low wages as a reason to migrate.

Logistic regression analysis also showed that education level does not have a significant role as a factor that could cause migration. The main reason why most returned migrants migrated was the inability to find a job in Armenia. Furthermore, most of the returned migrants did not have changes in their education level, which talks about labor migration. Even though most of them thought that it is important to invest in education and better education may facilitate better jobs abroad, none of them moved abroad for getting a better education. The main reason was the work abroad. Regression analysis also showed that education level in line with other factors is a weaker predictor of migration. As for the career prospects in home country, those who were more educated were less inclined to migrate. Also correlation between the education level and intentions to migrate did not show significant results. In addition, regression analysis showed that education level could not be considered as a factor that may cause migration.

Even though there was a positive correlation between the correspondence of education level to the job position and the likelihood of moving abroad within the two years, regression analysis showed that it could not be a cause of migration in line with correspondence of skills and abilities to the job position.

Other important factor besides work status and career prospects at home county that may cause migration of returned migrants is the fact of bringing money with them to their home countries. Those who brought money are less inclined to migrate. Whether their qualifications were recognized in the destination country or not did not show significant results in the regression analysis.

Overall, after the analysis of the most important factors causing migration, it is appropriate to state that education level is not connected with current migration intentions of returned migrants. Even though most of the returned migrants have plans to move again, there is no correlation between the education level and migration intentions. In addition, regression analysis also did not found education level as a cause of migration. In contrast, it showed positive results saying that people who have higher education and who currently work are less inclined to migrate. Moreover, returned migrants with higher education see better career prospects at home therefore are less inclined to migrate. These results may be explained by the fact that higher educated people have better opportunities at home. Since the main reason of not willing to migrate was the homesickness and having relatives and family at home, they prefer to work at home; no matter if they could have better working conditions abroad. As for the overall migration, results show that there is a labor migration in Armenia most of the people who do not have jobs migrate no matter how educated they are.

Testing the Hypothesis

The first hypothesis (H1) is refuted, since survey results showed that work status and not the low wages is the most important factor that affects returned migrants' decision to migrate. Second hypothesis (H2) is partially accepted, since correspondence of education level to the job position cannot cause migration, however, those whose education level corresponded to their job position have plans to move abroad within the two years. Third

hypothesis (H3) is refuted, since education level does not affect migration decision of returned migrants. Moreover, among those who have high intentions to migrate are both people with higher education and low level of education. Forth hypothesis (H4) is accepted according to the results of correlations and regressions. Fifth hypothesis (H5) is refuted since there are no signs of brain drain and potential migrants have different level of education. Their main reason of migration (inability to find a job) provides an evidence of mass labor migration but not brain drain. Sixth hypothesis (H6) is accepted since the main problem upon return and currently is the absence of workplaces. Moreover, the main reason that forces people to migrate is also the inability to find a job in Armenia. Thus, in order to keep returned skilled migrants and encourage migrants with higher education to return back creation of workplaces is the best way.

Conclusions and Discussion

Migration is a vital problem for both sending and receiving countries. However, the causes of migration and migration patterns are different in all countries. In some country there is a labor migration, in other countries there is a brain drain. There are also countries where mass migration was found. Within the framework of this research the main causes of the migration were observed. Special attention was paid to the role of education. One of the main purposes of this research was the observation of skilled and educated workers migration in order to see whether Armenia currently faces brain drain or not. Therefore, the analysis of the data about returned migrants showed that the main factor that affects migrants' decision to migrate is the work status. Even though these migrants cared about their wages and correspondence of their education level to their job position, these variables were not the major causes of migration. The most important factor that could affect migrants' decision to migrate was the presence of jobs. The research also showed that there is no connection

between the education level of migrants and their intentions to migrate. Almost every returned migrant (no matter the level of education) who could not find a job in Armenia has higher intentions to migrate. Moreover, it was found out that there is no brain drain in Armenia, but mass labor migration. Most of the returned migrants are inclined to migrate back. This is mainly explained by the fact of not having a job in Armenia also. However, the fact of facing brain drain in the future is not excluded either. Harsh living conditions and low wages may later become a cause of skilled migration which would be the greatest problem for Armenia. Since the main cause of migration was the inability to find a job, it was observed through the research that the most effective way of keeping returned migrants at home and encouraging others to return back is the creation of workplaces. However, this is not enough. Considering the main causes of migration which were explored through the research, Armenian government and international organizations should develop and adopt policies that would solve the main problems that force Armenians to move abroad. Since majority of the migrants also had problems with reintegration and unfamiliarity with new laws and local authorities, more attention should be paid to the reintegration of these migrants while returning to their countries of origin. Special programs should be developed in order to solve some of the problems of returned migrants. Assistance should be provided while searching for the job and solving social problems connected with the integration with the society and new laws and regulations of the country of origin.

Suggestions for Future Research

The main suggestion for future research would be to pay attention to the limitations of the current study. It would be better to conduct a similar study within which data from 2013-2014 periods would be used in order to see if there are any changes occurred during the last 2 years. Moreover, use of other data collection instruments is encouraged for future research. It

would be better to use a sample which would include returned migrants who got their education abroad and also AUA alumni.

BIBLIOGRAPHY

- Bauer, Tomas and Klaus Zimmermann "Causes of International Migration: A survey" (1988)
- Beine, Michel, Frederic Docquier and Hillel Rapoport. "Brain Drain and Economic Growth: theory and evidence." *Journal of Development Economics* 64 (2001): 275-289.
- Beine, Michel, Frederic Docquier and Hillel Rapoport. "Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers." *Economics Journal* 118 (2008): 631-652.
- Boudarbat, Brahim. "Employment Sector Choice in a Developing Labour Market." *University of British Columbia* (2004)
- Bourdieu, Pierre. "O" konomisches Kapital, kulturelles Kapital, soziales Kapital." *In Soziale Ungleichheiten* (1983): 183-198.
- Caucasus Research Resource Center. "Migration and Skills." [Returning Migrants Database]

 Retrieved from http://crrc.am/research-and-surveys/ongoing-projects/migration-and-skills?lang=en (2011/2012).
- Cerase, F. P. "Expectations and Reality. A Study of Return Migration from the United State to Southern Italy." *International Migration Review* 8 (1974): 245-262.
- Chang, Shirley L. "Causes of Brain Drain and Solutions: The Taiwan Experience." *Studies in Comparative International Development* 27 (1992): 27-43.
- Chobanyan, Haykanush. "Return Migration and Reintegration Issues: Armenia." *CARIM-East Research Report* (2013): 1-23.
- Chobanyan, Haykanush. "Return Migration to Armenia: Issues of Reintegration." *Cross-Regional Information System* (2012): 1-12.
- Clark, W. A. and Huangy. "Linking Migration and Mobility: Individual and Contextual Effects in Housing Markets in the UK " *Regional Studies* 38 (2004): 617-628.
- de Haas, Hein and Tineke Fokkema. "The effects of integration and transnational ties on international return migration intentions." *Demographic Research* 25 (2011): 755-782.
- de Haas, Hein, Tineke Fokkema and Mohamed Fassi Fihri. "Return migration as failure or success? The determinants of return migration intentions among Moroccan migrants in Europe." *International Migration Institute* (2009): 1-19.
- De Jong, Gordon, Brenda Davis Root, Robert W. Gardner, James T. Fawcett and Ricardo G. Abad.

 "Migration Intentions and Behavior: Decision Making in a Rural Philippine

 Province." *Population and Environment* 8 (1986): 41-62.
- Docquier, Frederic and Abdeslam Marfouk. "International Migration by Educational Attainment (1990-2000) Release 1.1." (2005): 1-44.
- Docquier, Frederic, and Hiller Rapoport. "The Brain Drain." *The New Palgrave Dictionary of Economics* (2006): 1.

- Docquier, Frederic, Oliver Lohest, and Abdelsam Marfouk. "Brain Drain in Developing Countries." *The World Bank Economic Review* 21 (2007): 193-218.
- Docquier, Frédéric. "Brain Drain and Inequality Across Naitons." *IZA Discussion papers, NO.* 2440 (2006): 1-41.
- Drinkwater, S. et. al. "Poles Apart? EU Enlargement and the Labour Market Outcomes of Immigrants in the United Kingdom." *International Migration* 47 (2009): 161-190.
- Dustmann, C. and A. Glitz. "Migration and Education, Handbook of the Economics of Education." *CreAM* 4 (2011).
- Erdogan, Irfan. "Brain Drain and Turkey." Istanbul University 3, no. 1 (2003): 96-100.
- European Training Foundation. "Migration and Skills in Armenia. Results of the 2011/12 Migration Survey on the Relationship between Skills, Migration and Development." (2013): 1-81.
- Fan, Simon and Oded Stark. "The Brain Drain, 'Educated Unemployment', Human Capital Formation, and Economic Betterment." *Economics of Transition* 15 (2007): 629-660.
- Fan, Simon, and Akira Yakita. "Brain Drain and Technological Relationship between Skilled and Unskilled Labor: Brain Gain or Brain Loss." *Journal of Population Economics* 24 (2011): 1359-1368.
- Fleischer, Annett. "A Statistical Overview on Return Migration to the Republic of Armenia." *Robert Schuman Centre for Advanced Studies, Analytical Note* (2012): 1-9.
- Foadi, Sonia M. "Key Issues and Causes of the Italian Brain Drain." Innovation 19 (2006): 209-223.
- Gevorgyan, Gagik. "Labour Migration in Armenia. Results of a Pilot Sample Survey." *National Statistical Service of RA* (2007): 1-71.
- Gevorkyan, Aleksandr V. and Arkady Gevorkyan. "Economics of Labor Migration from Armenia: A Conceptual Study." *Worldbank* (2006): 1-41.
- Gibson, John, and David McKenzie. "The Economic Consequences of "Brain Drain" of the Best and Brightest: Microeconomic Evidence from Five Countries." *The Economic Journal* 122 (2012): 339-375.
- Gillis, Malcolm, Dwight H Perkins, Michael Roemer and Donald R Snodgrass. "Economics of Development." W. W. Norton (1996)
- Gmelch, George. "Return Migration." *Annual Review of Anthropology* 9 (1980): 135-159. Gorter, C., Nijkamp, P., and Poot, J. (eds.). *Crossing borders: Regional and*
- Grigoryan, Aleksandr. "Who Else Migrates from Armenia? Evidence from Intentions." *American University of Armenia* (2013): 1-49.
- Harris, John R and Michael P Todaro. "Migration, unemployment and development: A two-sector analysis." *American Economic Review* 60 (1970): 126-142.
- Hernandez-Alvarez, Jose. "Return Migration to Puerto Rico." Berkeley University (1967): 78-108.
- Horvat, Vedran. "Brain Drain. Threat to Successful Transition in South East Europe?" *Southeast European Politics* 5 (2004): 76-93.

- Hunt, Jennifer. "Are Migrants More Skilled than Non-Migrants? Repeat, Return and Same-Employer Migrants." *McGill University and NBER* (2004): 1-30.
- International Labor Organization "Migration and Development: Armenia Country Study." *International Labor Organization* (2009): 1-111.
- International Labour Organization. "Migration and development: Armenia Country Study." (2009): 1-106.
- Jensen, P. and P. J. Pederson. "To Stay or not to stay? Out-migration of Immigrants from Denmark." *International Migration* 45 (2007): 87-113.
- Kabeleova, Hana, Armen Mazmanyan and Ara Yeremyan. "Assessment of the Migration Legislation in the Republic of Armenia." *OSCE* (2007): 1-56.
- Kayser, B. "Cyclically Determined Homeward Flows of Migrant Workers." OECD (1972).
- Kilic, Talip, Calogero Carletto and Benjamin Davis. "Investing Back Home Return Migration and Business Ownership in Albania." *Economics of Transition* 17 (2009): 587–623.
- King, R. "Towards a New Map of European Migration." *International Journal of Population Geography* 8 (2002): 89-106.
- King, R. L. "Problems of Return Migration: Case Study of Italians Returning from Britain." *Tidschr. Voor* 68 (1977): 241-245.
- King, R., A. Strachan and J. Mortimer. "Gastarbeiter go home: Return migration and economic change in the Italian Mezzogiorno." (1986): 38-68.
- Klagge, Britta and Katrin Klein-Hitpab. "High-skilled Return Migration and Knowledge-based Development in Poland." *European Planning Studies* 18 (2010): 1631-1651.
- Kwok, Viem, and Hayne Leland. "An Economic Model of the Brain Drain." *The American Economic Review* 72, no. 1 (1982): 91.
- Labrianidis, Lois and Panos Hatziprokopiou. "Albanian migration cycle: Migrants tend to return to their country of origin after all", in *King, R., Mai, N. and Schwandner-Sievers, S. (eds.)*, The New Albanian Migration, Brighton, UK: Sussex Academic Press
- Lien, Donald, and Yan Wang. "Brain Drain or Brain Gain: A Revisit." *Journal of Population Economics* no. 18 (2005): 153-163.
- Lucas, Robert. "Why Doesn't Capital Flow from Rich Countries to Poor Countries?" *The American Economic Review* 80 (1990): 92-96.
- Mara, Isilda and Michael Landesmann. "The Steadiness of Migration Plans and Expected Length of Stay: Based on a Recent Survey of Romanian Migrants in Italy." *The Vienna Institute for International Economic Studies* (2013): 1-40.
- Martin, Reiner and Dragos Radu. "Return Migration: The Experience of Eastern Europe." *International Migration* 50 (2012): 109-128.
- Mathew, Elangikal Thomas. "Employment and Unemployment in Kerala: Some Neglected Aspects." *Sage Publications* (1997)

- Mountford, Andrew. "Can a Brain Drain be Good for Growth in the Source Economy?" *Journal of Development Economics* 53 (1997): 287-303.
- Nekby, L. "The Emigration of Immigrants, Return vs. Onward Migration: Evidence from Sweden." *Journal of Population Economics* 19 (2006): 197-226.
- Niedomysl, Thomas. "How Migration Motives Change over Migration Distance: Evidence on Variation across Socio-economic and Demographic Groups." *Regional Studies* 45 (2011): 843-855.
- Oosterbeek, Hessel, and Dinand Webbink. "Does Studying Abroad Induce a Brain Drain?" *Economica* (2011): 347-366.
- Organization for Economic Cooperation and Development "Return Migration: A New Perspective." *International Migration Outlook* (2008): 161-222.
- Organization for Economic Cooperation and Development. "Return Migration: A New Perspective " *SOPEMI* (2008): 162-222.
- Pungas, Enel, Ott Toomet and Tiit Tammaru. "Are Better Educated Migrants Returning? Evidence from Multi-Dimensional Education Data" *University of Tartu* (2012): 1-30.
- Regets, Mark C. "Research and Policy Issues in High-Skilled International Migration." *IZA Discussion Paper Series* 366 (2001): 1-32.
- Rhoades, R. "Toward an Anthropology of Return Migration." *Papers in Anthropology* 20 (1979): 1-111.
- Rodriguez-Pose and Monsterrat Vilalta-Bufi. "Education, Migration, and Job Satisfaction: The Regional Returns of Human Capital in the EU." *BEER Paper* 1 (2004): 1-29.
- Rosenzweig, Mark. "Education and Migration: A Global Perspective." Yale University (2007): 1-73.
- Schiff, Maurice. "Brain Drain: Claims About its Size and Impact on Welfare and Growth are Greatly Exaggerated." *IZA Discussion Paper* 1599 (2005): 1-34.
- Schwartz, Aba. "Migration, Age and Education." Journal of Political Economy 84 (1976): 701-720.
- Shumba, Almon, and Douglas Mawere. "The Causes and Impact of the Brain Drain in Institutions of Higher Learning in Zimbabwe." *International Migration* 50, (2012): 107-109.
- Sjaastad, Larry. "The costs and returns of human migration." *Journal of Political Economy* 70 (1962): 80-93.
- Skeldon, Ronald. "Of Skilled Migration, Brain Drains and Policy Responses." *Journal Compilation* (2008): 1-27.
- Stark, Oded and Simon G Fan. "Losses and Gains to Developing Countries from the Migration of Educated Workers: An Overview of Recent Research, and New Reflections." *World Economics*8 (2007): 259-269.
- Stark, Oded, Christian Helmenstein and Alexia Prskawetz. "Brain Gain with a Brain Drain." *Economics Letters* 55 (1997): 227-234.

- Stark, Oded. "Rethinking the Brain Drain." *ZEF Discussion Papers of Development Policy* no. 71 (2003): 1-14.
- Steahr, Thomas and Jennifer Brown. "Preference Patterns and the Decision to Migrate: Connecticut as a Case Study." *Department of Agricultural Economics and Rural Sociology University of Connecticut* (1980): 175-189.
- Straubhaar, Thomas. "International Mobility of the Highly Skilled: Brain gain, Brain Drain or Brain Exchange." *HWWA Discussion Paper* 88 (2000): 1-23.
- Tessema, Mussie. "Causes, Challenges and Prospects of Brain Drain: The Case of Eritrea." *Journal Compilation* 48 (2009): 134-138.
- Trevena, P. "Why do Highly Educated Migrants Go for Low-skilled Jobs? A Case Study of Polish Graduates Working in London", in Glorius, B., Grabowska-Lusinska, I., Rindoks, A. (Eds), Lost in Mobility Transition? *Amsterdam, Amsterdam University Press* (2011).
- Tung, Rosalie and Mila Lazrova. "Brain Drain Versus Brain Gain: an Exploratory Study of Ex-host Country Nationals in Central and East Europe" *The International Journal of Human Resource Management* 17, (2006): 1853-1872.
- United Nations Statistics Division, . "Recommendations on Statistics of International Migration, Revision 1." *United Nations* (1998) *urban perspectives on international migration*. Aldershot: Ashgate (1998): 95-127.
- Vidal, Jean-Pierre. "The Effect of Emigration on Human Capital Formation." *Journal of Population Economics* 11 (1998): 589-600.
- Wang, Huiyao. "China's Return Migration and its Impact on Home Development." *UN Chronicle* 3 (2013): 34-36.
- Whisler, Ronald L., Brigitte S. Waldorf, Gordon F. Mulligan and David A. Plane. "Quality of Life and the Migration of the College-Educated: A Life-Course Approach." *Growth and Change* 39 (2008): 58-94.
- Wickramasekara, Piyasiri. "Policy Responses to Skilled Migration: Return and Circulation." *International Labour Organization* (2012): 1-28.
- Williams, Allan and Vladimir Balaz. "What Human Capital, Which Migrants? Returned Skilled Migration to Slovakia from the UK." *IMR* 39 (2005): 439-468.
- Yeganyan, Gagik. "The Migration Situation in Armenia: Challenges and Solutions." *Migration Perspectives* (2006): 17-26.