

**RETHINKING BRAIN DRAIN IN MOLDOVA: MIGRANT YOUTH
DEVELOPMENT**

By:

Natalia Costin

Submitted to

Central European University

Department of Economics

In partial fulfillment of the requirements for the degree of Master of Arts

Supervisor: Professor Ádám Török

Budapest, Hungary

2012

Abstract

Brain drain has become one of the key concerns for the economy of Moldova. This thesis focuses on ways to decrease the mass out-migration of fresh graduate students and to keep the talent at home. In order to understand which policies would influence students' decisions, a questionnaire was created and offered to students on Facebook. The results from the questionnaire show that students need financial support as an addition to their salary because their start salary would be low. If the government offered financial support, fewer students would choose to leave Moldova after graduation. Additionally, the questionnaire results show that students consider that a career service and resume book would help them in finding a job, which is why it should be implemented in every university in Moldova. Very few students believe that they could find a job related to their area of specialization, which means that university programs do not meet market expectations, and universities should increase cooperation with local companies. Additionally, current debates and seminars currently organized in Moldova to solve brain-drain issues bring good ideas, such as tax breaks for the best graduate students and a monitoring system which could help analyze the out-migration trend of fresh graduates.

ACKNOWLEDGEMENTS

I would like to express sincere appreciation to the Department of Economics from Central European University and to the Center for Academic Writing for their long-term support and help. I would like to kindly thank Prof. Gabor Kezdi for the inspiring suggestions regarding the thesis topic and his help and guidance. Last but not least, this thesis would never have been completed without great contribution and valuable answers offered by students from Moldavian universities, that is why my deepest gratitude goes to them!

Table of contents

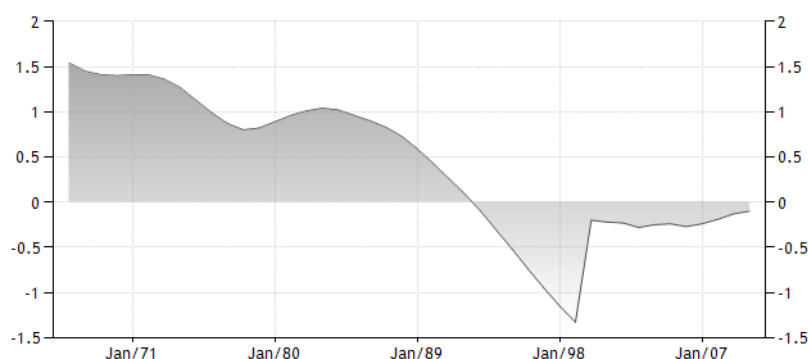
INTRODUCTION	1
CHAPTER 1: Previous studies on migration of skilled population	8
1.1 Brain Drain	8
1.2 Push and Pull factors.....	10
1.3 Six main policies proposed regarding high skilled emigration prevention	11
1.4 International experience of retention policies.....	13
CHAPTER 2: Methodology.....	17
2.1 Sample Design and selection	17
2.2 Data collection Processes.....	18
2.3 Limitations to data-gathering process	20
CHAPTER 3: Questionnaire Results	22
CHAPTER 4: Current policies to attract young migrants to Moldova	35
4.1 Grant Program for Moldovan Overseas Graduates	35
4.2 Initiatives to prevent brain drain in Moldova.....	36
4.3 International Seminar on Brain Drain: How to make the Young Graduates come back to their country of origin? Strategies and Experiences.....	38
4.4 Policy Proposal based on already existing policies and International experience 	40
CONCLUSION.....	43
REFERENCES	46
APPENDIX 1	49
APPENDIX 2	50

INTRODUCTION

In 1990, the countries of Central and Eastern Europe moved from a centrally planned to a market economy. Together with the change in regime, migration behavior changed significantly. During the communist regime migration was restricted by the government (Pawel et al. 2005). Starting with 1990 the importance of migration changed dramatically because the government opened the barriers for free exit. Both intra-regional and inter-country migration increased in significance and quantity. As a result, studying migration is becoming more important with each year, because the economy and migration are closely correlated. Taylor (2006) points out that recent economic studies show that migration and development are closely correlated with each other and influence each other's outcome. High out-migration has a negative impact on economic development in a country. Additionally, he mentions that underdevelopment also drives emigration because people have higher chances in more developed countries.

Moldova, as part of Eastern Europe, was no exception and had a significant change in the emigration rate, causing a decline in the population. Figure 1 shows that in 1990 the population in Moldova started to emigrate dramatically. This was primarily because of the civil war between Moldova and Transnistria. The Transnistrian region, starting from 1990, wanted to become an independent state which was not acceptable for Moldova. In 1992 war finished and Transnistria remained officially a part of Moldova, but at the same time operating as an independent nation within Moldova.

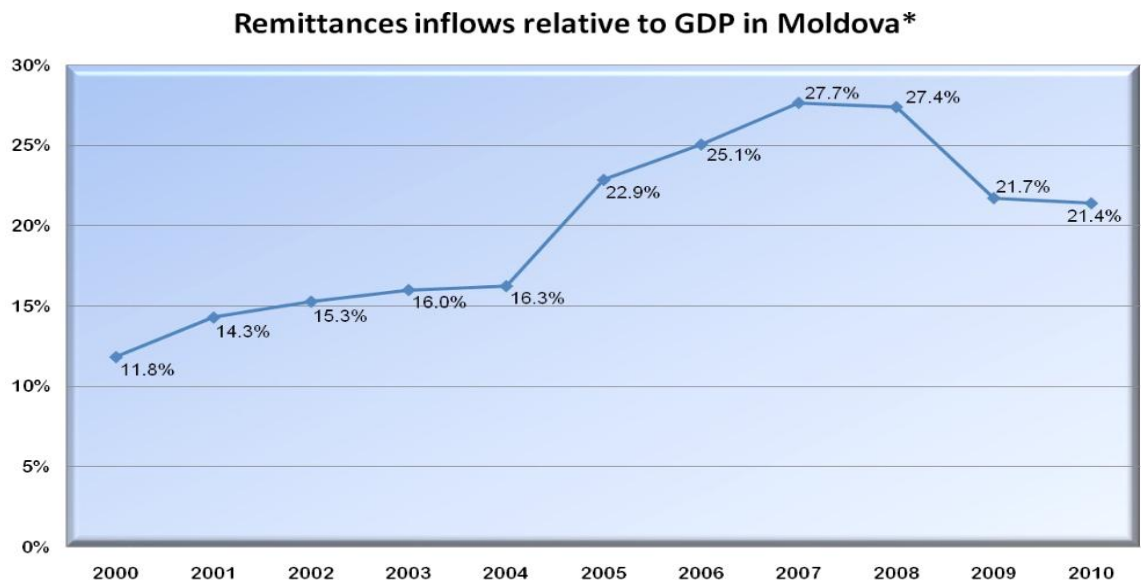
Figure 1: Population growth (annual %) in Moldova



Source: Trade Economics, 2012

Emigration brings more disadvantages than advantages to the economy of Moldova. The advantage of out-migration for the domestic economy is that remittances that are sent home play an increasing importance (Taylor, 2006). Figure 2 shows that in 2010 remittance inflows relative to GDP in Moldova doubled compared to 2000, while in 2007 it almost tripled. Additionally, Moldova became one of the leading countries in the world in terms of share of remittances to the Gross Domestic Product. However, considering the aging of the population and the majority of those who leave being youth, the country development perspectives look rather unfavorable and out-migration seems to bring more disadvantage than advantage.

Figure 2: Remittance inflows relative to GDP in Moldova



* Data includes only remittances via formal channels. The official calculations of remittances inflows are underestimated, because of a sizeable share of informal inflows, which are misreported and are difficult to measure.

Source: National Bank of Moldova, National Bureau of Statistics

During the last two decades many Moldavians left in order to earn money and have a better standard of living. The outflow of migrants increased significantly, from less than 100,000 in 1999 to more than 400,000 in 2005 (Chindea et al. 2008). In 2008 the number of Moldavians working outside the country amounted to 600,000 (IOM, 2012), which is almost the same number as the population of the capital, Chisinau, 789,500 people (National Bureau of Statistics of Moldova, 2012).

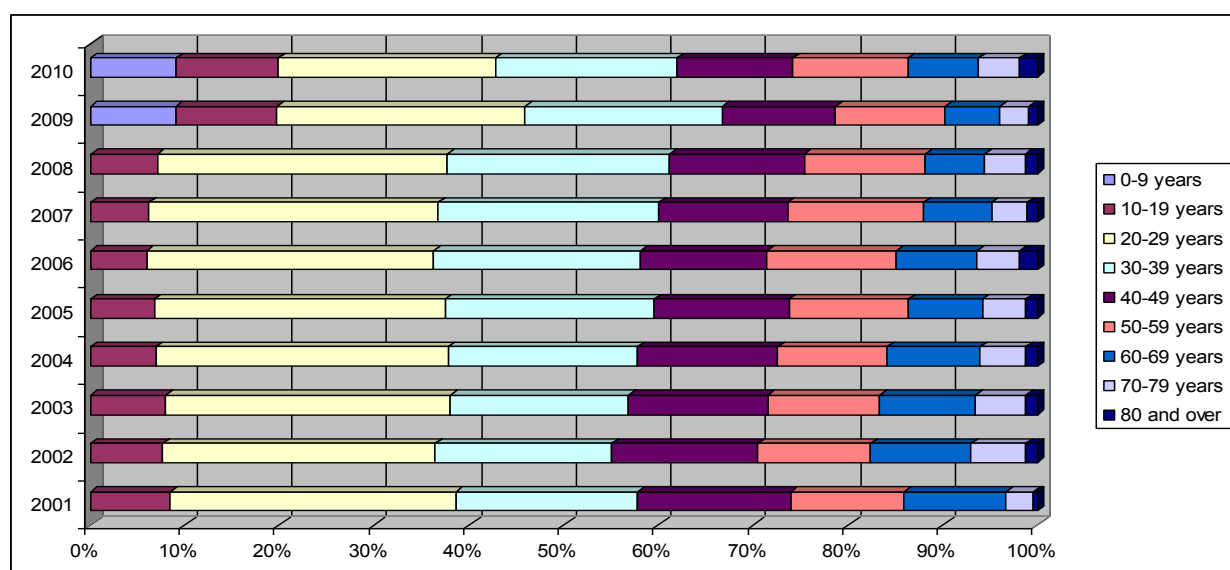
There are many reasons that can cause people to emigrate, including economic and demographic poverty, unemployment, low wages, lack of basic health and education, low pension, political insecurity, corruption, low professional development, low consumption opportunities, and externally that rich industrialized states are becoming more accessible (Roman, 2008). Poalelungi (2012) mentions that in the case of Moldova, the reasons for

emigration for graduates and experienced professionals are different. Graduates leave the country because of the difficulty of finding a job due to having no work experience. Experienced graduates leave the country because of low wages.

During an interview, Mosneaga, Head of the Chair of Political Science in Moldova, mentioned that it is impossible to present an exact statistic of emigrants from Moldova who leave the country for good and the place of emigration.¹ Additionally, different sources show different information depending on the methodology of collecting data and types of migration. There are two main types of migration: permanent migration and temporary. Permanent migrants are those who have permanently terminated their residence in Moldova and have no tax obligation toward the state. The main countries of destination for Moldavians in this case are Russia, Ukraine, Germany, Israel and the USA (Mopapy, 2012). As regards temporary migration; this is short types of stay abroad because of work, education and other reasons, the main destinations for Moldavians in this case are Russia, Ukraine and Italy (National Bureau of Statistics of Moldova, 2012).

¹ Interview held with Valeriu Mosneaga, 2012, Moldova State University, Faculty of International Relations, Political and Administrative Sciences. Head of the Chair of Political Science; Professor in Political Science, Doctor of Science, Republic of Moldova, Chisinau, May 7

Figure 3: Emigrants by Years and Age groups



Source: National Bureau of Statistics of Moldova

Talking about the situation nowadays, Iatco (2012) mentions that the greatest problem with emigration in Moldova is that the more active population is abroad rather than at home. Basarab (2011) states that 58.4 percent from 100 percent of the active population emigrated, and at the moment in Moldova there is less active population compared to those who have already emigrated. Furthermore, Soroptimist International states that Moldova “has one of the highest migration rates among youth aged 15-24 in Europe and Central Asia” (2011: 1). Analyzing the information provided by the National Bureau of Statistics of Moldova (2012), the highest number of emigrants are aged 20 to 29 years old (see Figure 3 above), who are mainly fresh graduates and are the most needed people for the economy of any country. As a result, Moldova has introduced a number of policies focused on people who emigrated from Moldova but not too many policies are oriented toward prevention of emigration. For example, there is a policy to attract young Moldavian students who finished their studies abroad; however, there is no similar policy for fresh graduates who finished their studies in Moldova.

In 2005 the President of the Moldavian Red Cross Organization, Larysa Byrka, mentioned that “Moldova can surely be described as a demographic disaster” (Nyanenkova, 2005); the demographic situation in Moldova has deteriorated further since 2005. Additionally she stated that because of out migration in Moldova there is high concern of both brain drain and youth drain. The problem is that the majority who leave Moldova are fresh graduates, leading to a brain drain problem in the country (see Figure 3). This drastic out-migration of young graduates also leads to great concern in the pension system. The ratio between contributors and pensioners in a country should be around 4:1- 5:1 in order to have a proper functioning pay-as-you-go system (Government of Republic of Moldova, 2012). However, in Moldova the ratio between active population and pensioners of all categories is 2:1. Additionally “a population is considered as “aging” when the ratio of elderly exceeds 12%”, in Moldova the ratio of the population over 60 years is alarming because it is over 14% (Government of Republic of Moldova, 2012). This clearly demonstrates that the economy needs to implement additional policies to retain brain drain, hence the focus of this thesis.

The government of Moldova does not have efficient policies to retain fresh graduates in Moldova; however it could create inexpensive and efficient policies for fresh graduates. The main aim of this paper is to identify and propose proper strategies which will prevent brain drain in Moldova. Previous studies by Dzvimbo (2003), Lowell (2001) and Wickramasekara (2003) argue that using retention policies, such as grant programs is most effective for keeping fresh graduates. To this end, this paper tests this through data collection, a questionnaire based on 24 different questions aiming to analyze the background of students, their skills, salary expectations, future plans and the grant which could influence their decision regarding emigrations plans. This study was conducted among the best four universities in Moldova –Academy of Economic Studies in Moldova, Moldova State

University, Free International University of Moldova and Transnistrian State University of Moldova (all together 266 respondents replied). In addition, a number of interviews were carried out with experts in Moldovan migration.

The analysis is organized in four chapters. Chapter 1 identifies the policies used in other countries to prevent youth emigration. Chapter 2 outlines the methodology used in the thesis. The chapter 3 examines the background of students from Moldova, their age, gender, educational background, language skills and marital status. Additionally, chapter 3 analyzes the probability of students going abroad after graduation, the probability of working in the field of specialization and salary expectation. Chapter 4 examines the policy for young Moldavian students who finished their studies abroad, named “Grant Program for Moldovan Overseas Graduates” and will highlight other initiatives to reduce migration problem. In Chapter 4, based on empirical data, the study will answer the main question of this thesis: how can financial support prevent brain drain? The findings of these explorations will be summarized in the conclusion. Appendix 2 contains the questionnaire.

CHAPTER 1: Previous studies on migration of skilled population

Graduates are one of the most valuable labor forces of any economy and their importance is growing continuously. Güngör et al. (2006 p.4) compares migration of highly educated individuals with an “expensive gift” that developed countries receive from less developed or developing places. As a result of out-migration of graduates brain drain problems occur. When talking about brain-drain concerns, one of the basic roles of policymakers is to develop patterns to retain highly-skilled human capital within their states.

1.1 Brain Drain

The concept of “brain-drain migration” was proposed in the 1960s as a result of drastic out-migration of highly skilled individuals from less developed countries to developed ones (Cohen, 1996-7). Brain drain or human capital flight refers to out-migration of skilled individuals.

The great concern for the state was the out-migration of scarce professionals, whose trainings and studies were expensive because the state had invested so much in such professionals (Cohen, 1996-7). Johnson (2008-2009), while talking about Caribbean Countries, mentions that the negative effects of out-migration of highly skilled individuals are that it creates a shortage of highly qualified individuals who remain at home to adequately develop the country. The receiving country becomes wealthier because it receives extra skills while the developing country loses highly skilled manpower.

On the other hand, brain-drain could bring advantages if there is mobility and those who emigrate can easily come back. Tudor (2006, p.6) mentions that “ a study in the 70s demonstrated that many of those who left their country, mainly the most brilliant of them returned home later in their careers and became important forces in the development of their

home country”. Talking about the advantages from brain-drain, Ghencea et al. (2004) give the example of India and especially that Indian science which returned from Silicon Valley corporations was the ones who formed the basis for Indian technology integration. Kapur (2004, p.9) states that remittances are the price of brain drain which compensate human capital.

However, Tudor (2006) states that if we compare advantages and disadvantages of brain drain the receiving country gains more compared to the sending one, as it receives highly qualified individuals for free. Additionally, remittances are not equal exchange with human capital loss, because brain-drain emigration means high skilled labor and “for the most part these households are in less need for remittances” Kapur (2004, p.9). Docquier et al. (2011) mention that previous studies concluded that remittances are not enough to compensate for the loss resulting from brain drain.

In Moldova, starting in 1991 with the liberalization from the Soviet Union, the brain drain began. CIVIS&IASCI (2010) mention that 18 percent of emigrants from Moldova represent intellectuals which caused brain drain concern. For example, during the last two decades more than 40 percent of intellectuals in the health care system left the country (CIVIS&IASCI, 2010). As a result of drastic out-migration the Moldovan economy became highly dependent on remittances and Moldova became among the top recipient countries of recorded remittances (Timmer, 2011). Certainly brain drain brings more disadvantages than advantages to Moldova. News posted on Moldova.org (2012) states that “Moldova’s biggest loss is the massive “brain drain” process”. Even remittances in Moldova are not enough to compensate for the negative effects caused from brain-drain of highly skilled labor. Even if outflow of intellectual capital is highly important “no systematic and detailed studies of brain-

drain exist to date” which proves that more attention should be provided to this field of research CIVIS&IASCI (2010, p.11).

1.2 Push and Pull factors

Since early 1990 the general population movements and complexity of migration forms increased significantly (Youthforum, 2008). Nowadays there are many types of migration such as transit migration, forced migration, refugees, labor migration and asylum seekers (Youthforum, 2008). There are diverse explanations why young people move from one place to another and “there is no such thing as a typical ‘migrant’” (Youthforum, 2008, p. 2).

Economists identify two types of factors: pull and push (Heritage Discovery Center, 2005). Push factors mean people have to leave the country because of lack of money or employment, poverty, high corruption at home, and political instability (Heritage Discovery Center, 2005). The analysis of push and pull factors in Moldova was basically focused on the total population and not particularly on youth migration. The main push factor in Moldova is poor living conditions, especially very low wages, which are not enough to support a family and push people to out-migrate. For example, the gross minimum wage in Moldova is 97 euros, which is extremely low and almost twice lower compared to the Romanian minimum wage (FedEE, 2012).

Pull factors “are the reasons why people move to a particular area” (BBC, 2012) or factors that encourage someone to move. The reasons of pull factors include: higher employment, good climate, political stability, more wealth (BBC, 2012). The wage gap between Moldova and a destination country is a key pull factor which motivates Moldavians to move to other places (Robert Scuman Center, 2011). Based on all the mentioned above push factors, low wages at home and the pull factor of higher salary abroad are the dominant reasons for out-migration in Moldova.

1.3 Six main policies proposed regarding high skilled emigration prevention

In early 1990 Papademetrious and Martin identified three policy responses regarding high skilled emigration decline, such as recruitment, remittances and return (Wickramasekara, 2003). Later, in 2002, Lowell and Findlay added the possibility of more areas of policy response, naming them “Six Rs”. These six main policies proposed regarding high skilled emigration decline are return, recruitment, reparation, resourcing, restrictions and retention (Lowell, 2001). Return migration and resourcing is already implemented in Moldova. While recruitment and restriction migration is not appropriate for Moldova, recruitment migration is mostly for developed countries, while restriction Migration is not used in Moldova because Moldavian policies are oriented toward freedom of movement of migrants. Relatively few studies have been made on monetary reparation and it is not clear if this policy would be suitable in Moldova. Less attention was provided to retention policy in Moldova; however this policy might be very efficient.

Policies implemented already in Moldova are return migration and resourcing. The first, return migration, aims at helping expatriates to return to their family back home. One of the main organizations responsible for this task is the International Organization for Migration. Normally governments or international organizations sponsor this program (Lowell, 2001). In the case of Moldova, the IOM has provided various efficient and valuable policies of return migration by awareness rising, assistance and protection program for the ones who wish to come back, that is why this thesis will not focus on this type of policy. For example, the current policy focusing on retention is the “Action plan for fostering return and reintegration of Moldovan labor markets (2012-2014)” (Punga, 2011, p.9). The second, resourcing, could be counted in monetary remittances and could be counted in gain from exchange of knowledge (Lowell, 2001). Monetary remittances encourage expatriates to save

foreign currency income at home, which brings benefits to the source country. IOM (2012) in Moldova already created the Diaspora Policy to “support local development initiatives through financial flows such as remittances, charitable donations and investment, as well as through knowledge and skill transfers”. Additionally, the Pilot Program, “PARE1+1”, was implemented for attracting remittances into the economy of Moldova.

Policies aiming toward high skilled emigration decline that are not present in Moldova are recruitment and restriction migration. Recruitment policy aims at attracting skilled and highly qualified workers. Many developed countries compete for a high skilled labor force and set attractive regulations on admission of such types of workers because advanced countries are looking for national advantage (Lowell, 2001). Moldova is a poor country which has no money for an efficient recruitment migration policy creation which will attract highly skilled labor from abroad, thus this thesis does not focus on this type of policy. Restriction migration is when sending or receiving countries place restrictions or quotas on international mobility (Lowell, 2001). During the last decade the policy of migration in Moldova is focusing toward increasing the circular migration and toward protecting the interests of both emigrants and immigrants and not on restrictions (Poalelungi, 2012). In Moldova it is believed that with visa liberalization circular migration will increase that is why restriction policy is not proposed.

Monetary reparation policy aims “to directly recapture some of the value of emigration” (Lowell, 2001, p.16). The receiving country may pay or share the revenue (tax gain) with the source country. An example of such a policy is Expatriates tax schemes (Lowell, 2001). Very few studies in general were made on this type of policy, and it is not clear if this type of policy could be proposed for Moldova.

One of the policies less analyzed and proposed in Moldova is retention. Dzvimbo (2003, p.13) mentions that “the best long-term strategies are retention strategies”. Lowell et al. (2001, p.23) support this idea and state that “grand policies of retention are likely to be the best long-run response to large volumes of high skilled out migration”. Part of retention policies is to provide the high skilled population with different initiatives that will motivate them not to out-migrate, such as valuable career opportunities, improvements in salaries, and institution straightening. The highest involvement of policies should be provided within emigration countries.

In the case of Romania, analyzing youth on the labor market, Vasile et al state that “what is lacking currently is the policy of retaining skilled and high skilled labor force in the county of origin on national markets” (2011, p. 21). Moldova has similar problems to Romania and it does not have a proper retention policy for skilled youth and fresh graduates. That is why this thesis will propose a retention policy for fresh graduates who finished their studies at home. Additionally, the examples of retention policies implemented by other countries will be described below and it will be analyzed whether Moldova could learn or implement similar policies.

1.4 International experience of retention policies

Various retention policies are used by different countries, such as retention by economic development, by foreign direct investment, and retention through aid. Wickramasekara (2003, p.13) states that “if skilled persons voluntarily decide to remain in the home country, it can be regarded as the best policy in the long run”. It is always easier to keep people at home than attract or motivate them to return; this is the key reason this thesis focuses on proposing retention policies. However, developing countries usually can not afford an expensive retention policy. That is why retention policies such as UK loan forgiveness for

graduates who enter the teaching profession or US loan forgiveness in return for retaining employees in difficult-to fill positions would not be appropriate for Moldova.

In 2008, Newfoundland and Labrador started to work on a “Youth Retention and Attraction Strategy” in order to reduce the negative impact of high out-migration of youth. The project was related to labor aged between 18 and 30. On behalf of the government, Canadian Policy Research Networks conducted dialogues with youth from Newfoundland and Labrador in order to create an efficient solution to this problem. One way proposed as a solution to encourage youth to stay, live and work in the province was to strengthen career development programs and services. CPRN (2009, p.32) stated that young people should be perceived as “valuable employees to cultivate rather than just someone to fill a shift”. In this case links to jobs should be provided, career centers created, media web news services. If career centers already exist there should be continuous career development.

Another policy response proposed by Canadian Policy Research Networks to solve youth migration was to create entry-level job experience which would encourage both private and non-private sectors to cooperate and provide entry level jobs to students from schools, colleges and universities. Additionally, small businesses could also offer different trainings, rotation programs, internships to graduates, in order to better meet future business needs (CPRN, 2009).

As mentioned above, in order to help fresh graduates to find a workplace it is advisable to provide a career service within university. A good example of a career service is Central European University Career Service, which is considered to be a bridge between companies and employees. Career Service from CEU helps students and alumni to find best career opportunities, to improve and create CVs and cover letters, to connect with employers and graduates from CEU. There is a career service office and there is a career service online

site where all the information is present online, companies place job offer at this site and students everyday are searching for openings which best suit their profiles. Additionally, the career service from CEU collects CVs from students and provides every year a Resume Book to employers who could easily contact any candidate. The official site *Alumni Relations & Career Services* (2011) from CEU conducted a survey on fresh graduates from CEU and based on the students' answers "51.9% of respondents submitted a resume to the CEU Resume Book (12% more than previous year) and 25.7% of them were directly contacted by employers, who had found their profiles in the book".

Boston retention policy consisted from creating connection between companies and students searching for a job. In 2003 the Boston Consulting group prepared a study named "Preventing a Brain Drain: Talent Retention in Great Boston". The reason for this study was because from 1990 to 2000 Boston lost roughly 16 percent of its young people ranging from 20 to 34 years and the demographic group declined by more than 5 percent. The Boston Foundation (2003, p.7) mentions that "jobs remain a critical factor in retaining graduates". As a policy recommendation the Boston Foundation (2003) offers one similar solution to the Canadian Policy Research Network, which is the creation of more job opportunities by establishing the initiatives to improve the connections between employers and fresh graduates. Another proposed policy to prevent brain drain was to increase housing affordability for future graduates by locating new and affordable housing. This project was provided by the Boston Foundation and Greater Boston Chamber of Commerce.

Given that Moldova is not a rich country and has a limited budget for policy proposal it could implement a similar policy as in Boston, Newfoundland, Labrador and Hungary even if it is poorer country, because the policies mentioned above are not expensive and Moldova could afford to implement them. Moldova should take example from countries mentioned

above and improve connections between businesses, private and non-private institutions and universities in order to create job opportunities. Additionally, it would be affordable to improve career services at universities, create a student resume book to build a bridge between companies and universities and students as a result of a career service will be more informed about job opportunities.

CHAPTER 2: Methodology

This chapter describes the methodology that was followed in doing this research, the geographic location where the research was conducted, the sample population which was selected and collection processes which were used to gather the necessary information. Additionally, this section describes the limitations of data gathering and presents the definition of the main concepts used in the thesis analysis. This study unitized both quantitative and qualitative research methodologies. Qualitative data was collected in the form of the questionnaire. Qualitative data was obtained from unstructured interviews. Furthermore, the information was collected from both primary and secondary data.

2.1 Sample Design and selection

In order to obtain the necessary information to make a decision about important issues and to obtain a broad view of the topic, data was collected from multiple sources. Both secondary and primary data was collected. Primary data was collected from a questionnaire and interviews, while secondary data was collected from books on migration, articles about migration analysis and internet research.

Face-to-face interviews were conducted in the capital of Moldova Chisinau. The questionnaires for the survey were conducted in Moldova and in an independent state situated in Moldova Transnistria. Four groups of respondents were targeted during the data collecting process of this research. The focus of the research was made on the highest educated students from Moldova who is doing their Master or Bachelor studies in four top universities in Moldova. Students who finished high school or elementary school were not selected as respondents to this survey because they are not key representatives of the highest skilled labor force in Moldova who most influence the brain-drain in the country.

The first group comprised students from the Academy of Economic Studies of Moldova (ASEM). The second group consisted of students from Free International University from Moldova (ULIM). The third group of respondents who were targeted during the data gathering process of this research was students from the State University of Moldova (USM). The last group of students who were targeted was students from Transnistria, from the Transnistrian State University, TG Shevchenko.

In all a total of 266 students from four universities answered the questionnaire. The age of the respondents was divided into categories from “less than 18” to “over 31”. Very few were 17 because of going to school earlier than expected, and very few were over 31 because of returning to studies after several years of work experience. Based on the questionnaire results, the majority of those questioned were between 19 and 24 years old.

2.2 Data collection Processes

The study utilized both quantitative and qualitative data. The qualitative data was collected in the form of a survey. Students from four top universities in Moldova were asked to answer a survey questionnaire which was prepared to help make a retention policy for young fresh graduates students, understand what is the basic reason of out-migration, what is the salary expectation of students in this group and also find out if there is a difference in migration thinking between students from Transnistria and Chisinau. The questionnaire contained 24 questions.

The questionnaire was provided to students in electronic format (see appendix 2). The questionnaire was sent to universities by e-mail and representatives from universities were asked to further send the questions to students. Additionally, the questionnaire was posted to Facebook to the main pages of USM, ASEM and ULIM universities. Friends from Moldova who study in ULIM, USM and ASEM were asked to post the short message with the

questionnaire to help find more volunteers to answer these questions. In Transnistria the representatives from the University TG Shevchenko were willing to send mails to students from their university directly; no page on Facebook was available for these students.

The questionnaire for the survey consisted of different types of questions, such as close-ended (multiple choice or yes/no), partial open-ended (multiple-choice with 'other' option), matrix of choices (multiple answers allowed) in case the students knew multiple languages open-ended at the end where students could give a short-answer comment or add any information they thought was necessary but not addressed in the questionnaire.

Students were asked if they receive any remittances from abroad or if after graduation their family will be able to support them financially. This was to help understand how much the students were in need of financial support. Additionally, the survey was aimed to see if those students who have any financial support or remittance help would expect less financial aid from the state.

To obtain qualitative data needed for this research, unstructured interviews were conducted with professionals in the migration field. The reason why the interview was unstructured is because interviewed people specialized in different fields of migration and were willing to share different information about migration problems in Moldova. Professionals who were willing to answer the questioner were invited for the interview; usually the interview was approximately half an hour. During the interview the professionals in migration were asked about the main reasons, problems, and concerns in migration. What can solve this problem? Why migration is a great concern in Moldova? Any additional information or comments were highly appreciated.

Students were given the possibility to answer the questionnaire in Romanian (local language) or Russian. This was to make sure that language did not become a barrier for students in trying to answer the questionnaire or express their opinion. The interviews were conducted just in Romanian because the professionals were more comfortable talking in this language.

2.3 Limitations to data-gathering process

During the data-gathering process a number of limitations were encountered. First the majority of studies of migration in Moldova were focused on out-migration of total population and not on fresh graduates. Very few studies, debates and analyses focus on brain drain in Moldova and out-migration of students. It was problematic to find various migration policies offered by other countries which would aim toward the decline of brain drain. In addition, no country before used a similar policy to that offered in this thesis, namely financial support as an addition to the salary.

Secondly, the timing of the research coincided with the examination month of the students in all universities on which the questionnaire was focused. This made it difficult to get a lot of students to participate in the research. Additionally, the representatives from universities of ULIM, ASEM and USM were not very interested in sending the questionnaire by e-mail to students and probably not all the students had access to the Facebook questionnaire. If the questionnaire was posted on Facebook the students were less willing to answer the questionnaire if they did not know the person who was doing the research. To overcome this problem and motivate more students to answer the questionnaire the students who personally were studying in that university were asked to post the questionnaire on their Facebook page.

Thirdly, it was hard to arrange the face-to face interview because the informants had busy schedules to teach and also had to mark examination papers of students or had lessons and other work at that time. Additionally, the interviewers were a bit reluctant in giving some information. However, several visits to the university with an agreed appointment time for meeting helped to facilitate the interview process.

Finally, it was difficult to properly analyze the data gathered from the questionnaire. However, MS Excel was used to properly analyze the data by creating different charts and tables with comparison analysis.

CHAPTER 3: Questionnaire Results

This study focuses on prevention of fresh graduates' emigration. The questionnaire analyzes graduate's expectation to emigrate, their salary expectation at home and abroad, their expectation on working according to their area of specialization and working not in accordance with their area of specialization. Especially the thesis tries to understand if the financial aid policy to fresh graduates would be efficient to retain the best qualified people at home. Two groups of fresh graduates can be distinguished, those from Moldavian universities and those from the Transnistrian university.

First the questionnaire examines the fresh graduates' background, their age, gender, education, type of university which they are attending, language, marital status, and from which region they come from. The majority of respondents who answered the questionnaire in Chisinau and Transnistria University were from 19 to 24 years old and roughly 80 percent were single. 215 people answered the questionnaire In Romanian, the majority being from Chisinau because in Chisinau the official language is Romanian. Just 51 people answered the survey in Russian, the majority being from Transnistria because there the official language is Russian. The total number of students who answered the questionnaire was 266. The questionnaire was focused on four universities in Moldova, three universities from Chisinau which are USM, ASEM and ULIM and one university in Transnistria, which is Transnistria State University, TG Shevchenko. As mentioned above, 266 people answered the questionnaire, 40 percent of answers coming from ASEM, roughly 26 percent of answers from USM, around 18 percent of answers from Transnistria State University, TG Shevchenko, 15 percent from ULIM and roughly 1 percent of questioned students were undertaking studies in two of these universities at the same time.

Figure 4: Gender Education Background (percentage distribution of answers)	Male	Female
Social sciences: Sociology and Social Work, History and Philosophy, Languages and Literatures, Journalism and Communication, Economics, Psychology and Educational Sciences	25%	23%
Applied Natural sciences: Biology , Chemistry and Chemical Technology, Physics and Engineering, Mathematics and Computer Science	4%	6%
Business sciences: finance, accounting, economic cybernetics, statistics and informatics, business management and administration, International Economic Relations, Economics and law	67%	66%
Other	4%	5%
Total	100%	100%

Roughly 73% of the total respondents were women, while around 27% were men, which show that women are more willing to answer the questionnaire than men. Even if three times more women answered the questionnaire compared to men, the percentage of women with educational background in social science, applied natural science and business science were almost the same as men, which shows that nowadays women have similar preferences in education specialization as men (see figure 4).

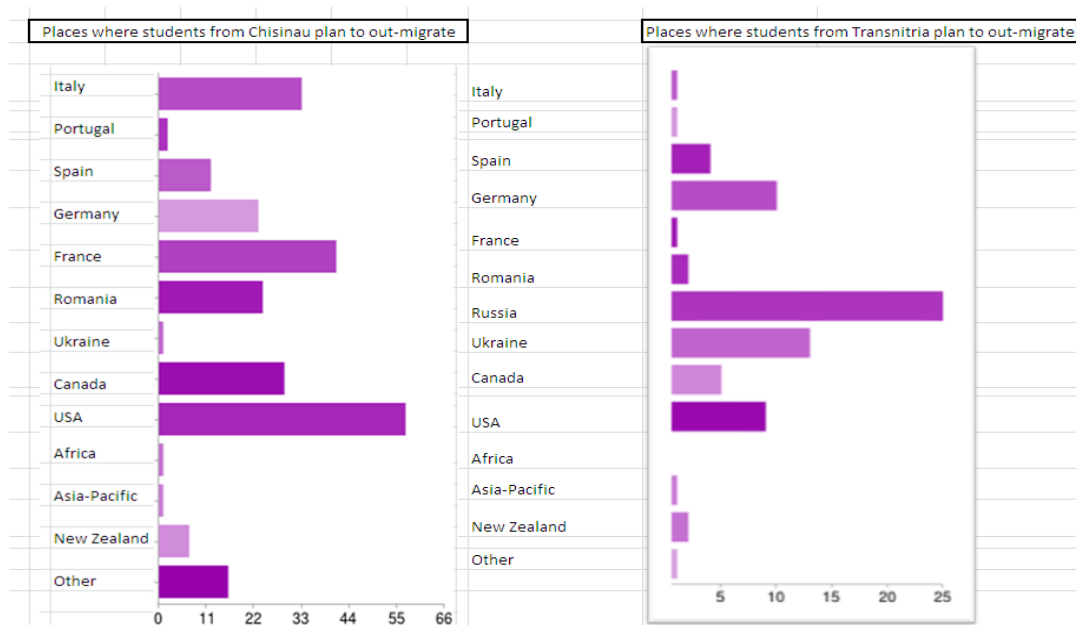
In the questionnaire there were 17 different education backgrounds which finally were divided in three key groups such as social sciences, applied natural sciences and business sciences (see figure 4). It can be seen that more than half of the education background of both females and males were in business sciences, which shows that this type of specialization is the most popular type of education in Moldova. Based on the questionnaire results, figure 4 shows that the applied natural sciences educational background constituted just 4-6 percent, which suggests that, this type of specialization is nowadays the least popular among students.

Figure 5: Comparison in foreign language skills

Foreign language skills in Chisinau								Foreign language skills in Transnistria							
	Basic	Intermediate	Advanced	Fluent	Native	Total			Basic	Intermediate	Advanced	Fluent	Native	Total	
English	5%	8%	7%	12%	0%	33%		English	9%	8%	7%	5%	0%	29%	
German	4%	3%	0%	0%	0%	7%		German	7%	6%	3%	4%	0%	19%	
French	6%	9%	5%	2%	0%	22%		French	5%	0%	1%	2%	0%	7%	
Spanish	3%	4%	1%	0%	0%	8%		Spanish	3%	1%	0%	1%	0%	5%	
Italian	3%	2%	1%	1%	0%	8%		Italian	2%	1%	0%	1%	0%	3%	
Portuguese	1%	0%	0%	0%	0%	2%		Portuguese	2%	0%	0%	1%	0%	3%	
Ukrainian	2%	3%	1%	1%	0%	7%		Ukrainian	4%	5%	2%	6%	2%	19%	
Bulgarian	1%	0%	0%	0%	0%	1%		Bulgarian	4%	0%	0%	1%	0%	4%	
Other	2%	0%	2%	5%	3%	12%		Other	2%	2%	0%	1%	5%	10%	
Total						100%		Total						100%	

The questionnaire was focused on universities from Chisinau and Transnistria. The official language in two regions is different, in Moldova the official language is Romanian while in Transnistria the official language is Russian. Even if both regions are part of Moldova the curriculum at universities and the focus on foreign languages differ. For example students from Chisinau universities have higher knowledge in French, Spanish and Italian,

most probably because of similarities of these languages with Romanian. In Transnistria students have higher language skills in German and Ukrainian.



Based on language skills knowledge it is easier to predict what place could be a destination in case of out-migration because language is an important pull factor which motivates people to come to a certain region. Figure 6 proves this fact and shows that students from Chisinau that have better skills in Romanian, French, Spanish and Italian will most probably out-migrate to these countries while students from Transnistria will most probably migrate to Russia, Ukraine and Germany, also due to their language skills.

After examining the students background, gender and age, the questionnaire focuses on the students' expectations to emigrate, their salary expectations at home and abroad, their salary expectations in case they work in the area of specialization and their expectations in case they do not work in their area of specialization.

Figure 6: Male/Female probability to out-migrate What is the probability that you will migrate after graduation?		
	M	F
0 % probability (nil)	9%	9%
1% until 25 % probability (low)	20%	22%
26% until 50% probability (medium)	43%	30%
51% until 75% probability (high)	10%	15%
76% until 100% (very high)	17%	25%
Total	100%	100%

In the case of probabilities to migrate, women indicated a higher probability to migrate compared to men. One quarter of women mentioned that the probability to out-migrate after graduation is very high and less than one fifth of men chose very high probability to out-migrate. The probability to out-migrate for men is less than for women, almost half of men mentioned that the probability for them to out-migrate is medium, which shows that men are less motivated to out-migrate compared to women.

Figure 7: Male/Female probability to stay home if the government helps to find a job. What is the probability that you will stay home? *		
	M	F
0% probability (nil)	3%	1%
1% until 25% probability (low)	26%	12%
26% until 50% probability (medium)	33%	30%
51% until 75% probability (high)	28%	26%
76% until 100% (very high)	28%	31%
Total	100%	100%

If the government helps to find a job, the probability of both women and men to migrate significantly decreases (see figure 7). The sum of high and very high probability to

stay home, for both women and men, in the case the government helps to find a job increases to roughly 60 percent. It is interesting to mention that women and men's choice to stay home if they are helped to find a job is similar, while in the previous example when no help from the government was proposed, women's willingness to migrate was higher compared to men. This percentage shows that an important motivation for fresh graduates to stay home would be the possibility to find a job. As Poalelungi mentioned during the interview, the key problem for young people is to find a job while for middle age people the key problem is to find a well-paid job. The difference among the students choice in the previous example and this example supports Poalelungi's suggestion.

Answers from question 17 show that if students plan to migrate, the expectations to work abroad in accordance with the area of specialization are low and very low. Roughly 80 percent of students chose from 0 until 50 percent probability to work in the area of specialization and just one fifth of students mentioned that the probability to work in the area of specialization is high or very high. These results show that students are aware that they will work abroad outside their area of specialization, which is why the next step of analyses is to compare the salary expectation at home and abroad if the graduate works outside the area of specialization.

	lower than 100 euro	from 100 until 250 euro	from 251 until 400 euro	from 401 until 600 euro	from 601 until 750 euro	from 751 until 900 euro	from 901 until 1000 euro	more than 1001 euro
Figure 8								
What is your salary expectation at home, if you work NOT in your area of specialization? *	5%	31%	34%	13%	7%	2%	3%	4%
What is your salary expectation ABROAD?	1%	2%	4%	15%	11%	14%	13%	40%

As mentioned earlier, the basic push factors in Moldova are poor living conditions and low wages. Figure 8 demonstrates this factor because the difference between the salary expectations at home and abroad is significant. At home more than 60 percent of fresh graduates expect to gain a salary from 100 to 400 euros, while abroad almost half of students expect to gain more than 1000 euros. Based on the results from these questions, the fact which motivates student to out-migrate is better leaving conditions and higher salary expectation abroad in comparison to home.

Figure 9: Probability at home/abroad to find work in accordance with the area of specialization

Question 12: If you stay home, what is the probability that you will work in accordance with your area of specialization?		Question 17: If you go abroad, what is the probability that you will work in accordance with your area of specialization?	
0 % probability (nil)	3%	0 % probability (nil)	11%
1% until 25 % probability (low)	22%	1% until 25% probability (low)	35%
26% until 50% probability (medium)	41%	26% until 50% probability (medium)	32%
51% until 75% probability (high)	20%	51% until 75% probability (high)	15%
76% until 100% (very high)	13%	76% until 100% (very high)	6%

The expectations of Moldavia's fresh graduates to work in the area of specialization at home and abroad are overall low; more than 60 percent of students choose very low, low and medium expectation to work in the area of specialization (see figure 9). At home the expectations to work in the area of specialization are higher compared to abroad, for example 41 percent of students expect medium probability to work in the area of specialization at home while abroad this expectation decreases to 32 percent. This result could have various

explanations: first of all the market is full in the specialization some students chose, which is why some have to work in the area of specialization other than what they studied. The second explanation is that all the market needs and the student's background do not match because there is lack of cooperation between the market and companies. The third explanation could be that students are overeducated and companies cannot afford to pay someone with higher qualifications, so they choose less qualified workforce for cheaper salary; this is why high qualified students start working not in their area of specialization.

Figure 10: Choice of industry field if working not in the area of specialization					
14. If you will work home, NOT according to your area of specialization, in which industry field might it be?	f	m	18. If you will work abroad, NOT according to your area of specialization, in which industry field might it be?	f	m
Agriculture	1%	13%	agriculture	1%	0%
Construction	1%	7%	construction	2%	8%
Manufacturing	2%	5%	manufacturing	4%	10%
commerce/sales	50%	46%	commerce/sales	24%	41%
hotel/restaurants	29%	16%	hotel/restaurants	56%	35%
cleaning/maintenance	4%	0%	cleaning/maintenance	4%	2%
domestic service	2%	2%	domestic service	4%	2%
Other	11%	11%	Other	5%	2%

The most popular area of employment in Moldova if working not in relation to their area of specialization is sales and commerce. Figure 10 shows that half of female and almost half of male fresh graduates from Moldova would work at home in this sector. It is interesting to note that when the questionnaire asks what would be the most popular job to get involved in abroad if working not in accordance with the area of specialization, the choice of females changes and more than half would work in the hotel and restaurant sector. The questionnaire was focused on students with highest qualifications in Moldova; this is why very few young

graduates would be motivated to work in cleaning, maintenance, construction, agriculture and domestic services.

Thirdly, the questionnaire focused on answering the following key questions:

- How much should the financial support be to motivate the best fresh graduate not to out-migrate?
- Does the remittance from abroad make the financial grant expectations lower?
- Does family support make the grant expectation higher or lower? Would a career office help students to find a job?

The final four are the most important because due to them it would be clear if the government should invest in these policies and if these policies would be efficient to reduce brain drain in Moldova.

Figure 11: Women and men grant expectations to motivate them to stay home

If the government, in addition to your salary, were to give you a half a year grant, how high should this grant be to motivate you to work home and not to go abroad?	F	m	total
1- 50 euro	2%	3%	4%
51- 100 euro	5%	10%	15%
101 - 150 euro	11%	17%	28%
151 -200 euro	13%	16%	29%
201-250 euro	9%	9%	17%
251-300 euro	19%	16%	34%
301-350 euro	5%	6%	11%
350-400 euro	11%	9%	20%
higher than 401 euro!	21%	16%	37%
even without grant I will stay home	5%	0%	5%

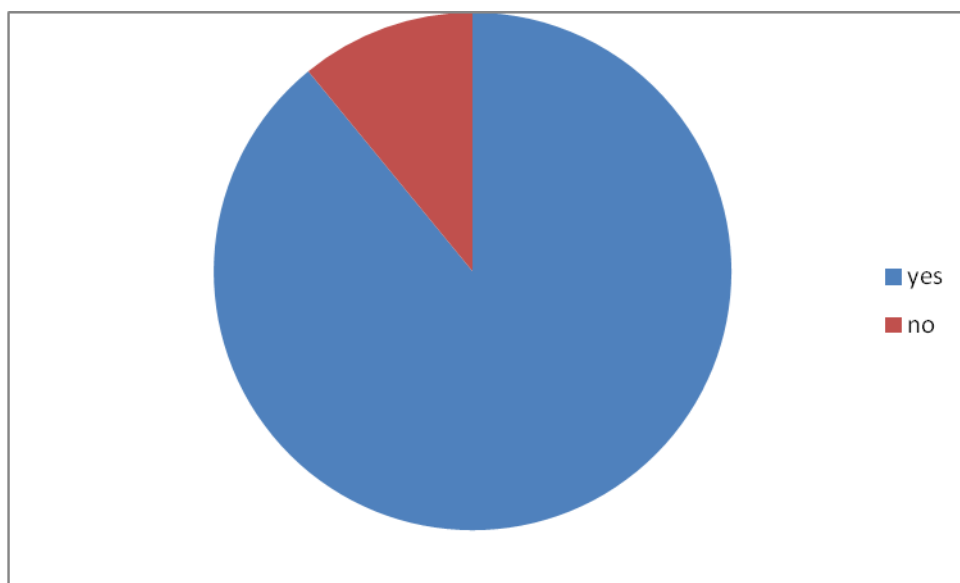
Almost forty percent of all questioned students stated that the government should offer more than 401 euros as an addition to salary to motivate them to stay home and not to out-migrate. This grant might be too expensive for Moldova. Around 35 percent of total students mentioned that a grant of between 251 euros and 300 euros would motivate them to stay home; this type of grant is more affordable for the government and it could be more realistic to implement (see figure 11). If we compare the women and men's financial expectations as an addition to their salary, women expect higher financial support. For example, 56 percent of women expect the financial grant to be higher than 251 euros. However, just 47 percent of men expect the financial grant to be higher than 251 euros, which is 9 percent lower than in the case of women's expectations, which shows that men expect the financial grant as an addition to the salary to be lower. Based on the results of question 21 it would be more expensive for the government to motivate women than men to stay home and the grant should be more than 251 euros to attract the majority of best fresh graduate students.

The majority of students, roughly 70 percent, mentioned that they receive no remittances. Because the majority mentioned that they have no financial support from abroad it is very difficult to analyze if remittances from abroad influence financial grant expectations at all. Those 30 percent of students who receive any remittances from abroad do not expect higher or lower financial grant, their expectation about financial grant as an addition to the salary is different and there is no exact trend in expectations.

More than half of fresh graduates mentioned that the probability is low or medium that their relatives or family will be able to financially support them. Family support does not have any influence on the grant expectation as addition to the salary. There is no correlation between the probability that the family/relatives will be able to financially support and the amount of the grant which could motivate a student not to out migrate. This means that

government should not provide a financial grant based on family financial background because even if family would be able to financial support the student that would not mean that student would expect lower financial support as an addition to the salary.

Figure12: Do you think the government should create Career Services which will be a bridge between fresh graduates and companies? Would that help you find a job? *



Earlier (page 30th) it was analyzed the probability to migrate if the government helps to find a job and it was proved that fewer students expect to outmigrate if they are helped to find a job. Figure 12 confirms that students need help in finding a job and believe that a career office could really help them in finding a workplace. In Moldova career services do not function in universities, which proves to be a great disadvantage for fresh graduates.

Several important conclusions can be drawn from this analysis. Firstly women are more willing to out-migrate compared to men, but if the government helps to find a job the probability of both men and women to leave decreases. The results show that students expect the government to help them find a job. Additionally, almost all the students mentioned that they believe the career office will help them find a job, which proves that it is necessary to

open career service office in every university. In a career service office students could improve their CV, ask advice about job opportunities, and get to know about new job opportunities.

Secondly the majority of students expect to work at home and abroad not according to their area of specialization, especially abroad the expectations to work in the area of specialization are very low or low. One reason could be that university curricula does not meet the needs of business because of reduced or no cooperation between the two. Another reason could be that too many students choose similar area of specialization and market is overwhelmed with one type of specialists. The results from question 4 confirm this, as mentioned before almost 70 percent of questioned students have a background in business science and an insignificant percentage of questioned students have their educational background in applied natural science. Therefore, companies in Moldova should be in closer connection with universities and try to attract the best students to their organization, offer them internships and one year placements. Furthermore, universities should fall into step with market trends and produce young specialists in different fields at the same rate as they are needed in the market fields.

Thirdly, salary expectations abroad are much higher compared to salary expectations at home. Based on the results from question 13, around 65 percent of fresh graduates believe that their salary at home if they work not in the area of specialization will be between 100 and 400 euros, while around 40 percent of fresh graduates believe that if they work abroad not in the area of specialization their salary will be more than 1000 euros. Results based on figure 8 show that one of the key pull factors which motivate fresh graduates to migrate abroad is much higher salary expectations. In order to motivate the best students to work in Moldova after their graduation it is highly advisable to offer them financial support as an addition to

their salary. Based on the results from question 21 women expect higher financial support than men, so it would be more costly to motivate a women to stay at home than a man. Additionally, based on figure 11 the highest percentage of students (both men and women) believe that financial support should be either between 251 euros and 300 euros or it should be higher than 400 euros.

CHAPTER 4: Current policies to attract young migrants to Moldova

Policies aimed at attracting return migration can be various, and include “information-based policies, economic incentive-based policies, and institution-based policies” (Willoughby et al. p.2). Information-based policies provide emigrants with additional information, opportunities and programs that can help emigrants to integrate in the society. Economic-based policies provide emigrants with financial support, grants, subsidies and additional material benefits. Institutional-based policies encourage migrants to return due to beneficial change in laws and practices which motivate people to come back (Willoughby et al. p.2).

As one of the poorest countries in Europe, Moldova does not have a huge budget to spend on policies that will reduce emigration and increase immigration. However, during the last decade it started to implement both information-based and economic incentive policies. The International Organization for Migration in Moldova is one of the main institutions dealing with migration problems. IOM is creating policies to improve migration management, to increase migration development, to increase awareness of legal migration possibilities and has recently started to develop a program that will attract young emigrants back to Moldova.

4.1 Grant Program for Moldovan Overseas Graduates

The economic incentive program in Moldova, which aims to attract emigrants back, is the Grant Program for Moldovan Overseas Graduates. The aim of the project was to bring the best graduate students back to Moldova. The participants should be less than 36 years old and have finished their studies abroad. Starting in 2011, the program is organized by the International Organization for Migration, the National Employment Agency, the Ministry of Education, the Ministry of Earth and the Sports and the Academy of Science in Moldova. The

best 30 graduates are offered 200 euros a month for a period of half a year and transportation costs from the destination country to Moldova. Those who receive a salary higher than 500 euros do not get this financial support.

Opinions differ about the effectiveness of this policy. Olaru, who works for International Organization for Migration in Moldova, during the one-to-one interview, mentioned that the program “Grant Program for Moldovan Overseas Graduates” was very successful. For example in 2011, 25 students participated in this program and received this grant. Olaru states that for the year 2012 the program extended its limit to 40 students. She (2012) concludes “I am very optimistic and I am confident that this program is very efficient for the Moldavian economy”. On the other hand, Mosneaga, who is the author of various books which analyze migration in Moldova, during the interview had a different opinion and believes the program to be inefficient, because 30 students do not make any difference. Additionally 200 euros, for just half a year, would not be a solution for young specialists.

According to the questionnaire results, a financial grant as an addition to the salary is highly important for fresh graduates. First of all financial support will lower the gap between salary expectations abroad and salary expectations at home. Secondly the financial support and help offered to find a job will significantly decrease the expectations to out-migrate. Thirdly the financial support will help best graduate students to more easily integrate in the labor market after their graduation.

4.2 Initiatives to prevent brain drain in Moldova

One of the initiatives organized on 10th of May 2012 in Moldova to prevent brain drain was a debate named: “Our youth study in France...How do we bring them back”? The debate was formed from two groups, each group having two people and public who were present at the debate and who were asking questions and offering their opinion about the debate

(Ospoon.eu, 2012). The main four participants from group one and group two present at the debate made their studies abroad. Group 1 included Doina Cebotari, who is Advisor to the Prime Minister, a graduate of Oxford, United Kingdom and Anastasia Primov, who is BlogGuvern Coordinator and completed his Master in Spain at Bilbao University. Group 2 comprised Daniel Belostecinic, who is graduate at ASEM and University of Nebraska, USA graduate and Andrei Panici, trainer, graduated American University in Bulgaria (Ospoon.eu, 2012).

Group 1 aimed toward bringing back emigrants mentioned that until now roughly 130 thousand young representatives left Moldova (Ospoon.eu, 2012). The Government of Moldova is aware of the problems that young emigrants, their parents, demography and the whole society face. Therefore the Government comes up with solutions: to create a Ministry of Diaspora, to be designed to facilitate youth access to information on employment opportunities in Moldova and to make a career and promote socialization: "The Ministry will have 20 employees who will be the best in its field" (Ospoon.eu, 2012). In addition to the ministry, there will be an agency which will deal with Diaspora funding to initiate entrepreneurial projects. The Agency will have an annual budget of one hundred million lei (6,485,084.31 euros), from which 28 million lei (1,815,823.6 euros) will go towards research projects for young people.

Group 2 was against the creation of the Ministry of Diaspora (Ospoon.eu, 2012). They mentioned that today social networking is very strong and students can easily find job opportunities online. Additionally, emigrants can easily find friends and socialize through Facebook and other internet sites. The opposition team mentioned that emigration can be prevented by increasing the patriotism feeling with the help of traditional songs, and the

cultivation of national values starting from school ages. Exactly this factor influenced Moldavian members from group 2 to return home.

The debate session ended without a winning team, because the public assigned votes to the teams equally. Even if no decisive policy was created as a result of the debate, it is still important to know that the young generation, society and the government is aware of the brain drain problem and they organize debates which could bring new ideas later (Ospoon.eu, 2012).

Following the debate on 6th June 2012, the Prime Minister, Vlad Filat, proposed the establishment of the Agency for Relations with Moldavian citizens abroad Diaspora (Ospoon.eu, 2012). The project was sent to 146 associations with whom the Government of Moldova interact at the moment. The Government Action Plan will have the execution time period established between the third quarter of 2012 and 2015 (Ospoon.eu, 2012). The Agency will have several key responsibilities, such as helping Moldavians who worked abroad and are willing to return back home to better reintegrate, protect the interests of Moldavians working abroad, promote Moldavian image internationally and increase the awareness of Moldavian culture. Additionally, the Agency will focus on temporary and seasonal migration to strengthen the relationship between Moldavians abroad and the community who are at home.

4.3 International Seminar on Brain Drain: How to make the Young Graduates come back to their country of origin? Strategies and Experiences

On March 1st an International seminar took place in Moldova, Chisinau in ULIM University. The name of seminar was: “Brain Drain: How to make the Young Graduates come back to their country of origin? Strategies and Experiences”, organized by the Office for Central and Eastern Europe (BECO) of the Francophone University Agency (AUF) and Free

International University in Moldova (ULIM). The seminar took place in Moldova and during the seminar academic staff, officials, experts, young professionals emigrated abroad and specialists from Moldova were present (ULIM, 2012).

The key purpose of the seminar was to raise the overall awareness of problems caused by out-migration of young graduates (ULIM, 2012). The participants took as example the policies used by other countries and offered several recommendations to retain brain drain in Moldova. The key proposals during the seminar were of Creation of Ministry of Diaspora which will be responsible of the emigration of young graduates and researchers, to implement a monitoring system that will be able to record a statistical data regarding the university degree, spatiality, age and reason for emigration, to follow the migrants flow changes with each year, to organize programs which could motivate graduates who out-migrated to return back home, to launch attractive programs for fresh graduates which will offer attractive tax breaks in order to encourage graduates to remain home and to facilitate periodic meetings of students who out-migrated in their country of origin in order to improve the academic and research networks (ULIM, 2012).

The proposal from this seminar to create the Agency which will be responsible for the Diaspora is similar to the proposal offered during the meeting named “Our youth study in France...How do we bring them back?” As we can see this proposal was implemented already, however for the moment it is difficult to analyze the effectiveness of this policy because of its recent implementation. A new idea proposed by this seminar which seems to bring positive outcomes is the proposal to create statistics regarding the out-migration of fresh graduates, which will show the reasons of emigration as well. Due to this statistical information it would be easier to understand the reasons of emigration, how the flow of emigration changes each year and what would motivate fresh graduates to stay home.

4.4 Policy Proposal based on already existing policies and International experience

During the last decade the Republic of Moldova became aware of the brain drain problem and started to propose policies aimed toward attracting and retaining young graduates in Moldova. Chapter 4 described policy, debate and a seminar which aimed to attract out-migrants back, such as the Grant Program for Moldavian Overseas Graduates, the debate named “Our youth study in France...How do we bring them back”? and the seminar on brain drain “How to make Young Graduates come back to their country of origin? Strategies and Experiences”. All the initiatives mentioned in Chapter 4 are useful and it is important to describe them because based on the initiatives already created it is easier to propose new and better policies which will further lead to a decrease of brain-drain. Additionally, knowing already existing policies could bring new ideas on how to improve the current situation of brain-drain.

The policy created for Moldavian overseas graduates is a good example to create additional similar financial help policy for local graduates because it is always easier to retain best graduates than to attract them back after they out-migrate abroad. Questionnaire results show that the salary expectations abroad is much higher compared to salary expectations at home, which could be a key pull factor that attracts best students to out-migrate from Moldova. The creation of the financial support as addition to the salary will be an attractive policy for local graduates, even the results from the questionnaire makes clear that such a policy will retain best students at home. This financial support as addition to the salary could be provided for half a year or one year, depending on overall performance of a student. The answers from chapter 3 mentioned that the financial support as additional to the salary should be either between 250 and 300 euros or the financial support should be higher than 400 euros.

The debate named “Our youth study in France...How do we bring them back”, similar to previous policy focuses basically on Moldavians who are abroad and has as a key idea to help overseas Moldavians to more easily find a job at home, protect overseas Moldavian interests and to have support from the Agency in the case of any inquiry they may have. After the debate from 10th of May 2012, for overseas Moldavians, the Agency for Relations with Moldavian citizen’s abroad Diaspora was created. What are missing for the moment are proposals provided to local graduate students who will soon graduate and might face similar problems with finding a job. Because in Moldova there is lack of policy which will help fresh graduates to find a job after graduation it is advisable to learn from international experience of retention policies mentioned in Chapter 1, such as the creation of career services in every university in Moldova. Career Services would be a great opportunity for fresh graduates in Moldova to more easily find a job, to get to know more companies and opportunities at home. Questionnaire results demonstrate the fact that Moldavian students are confident that career service will help them find a job.

Further strategies which should be taken into consideration were presented at the International Seminar on Brain Drain: How to make the Young Graduates come back to their country of origin? Strategies and Experiences propose fresh ideas such as implementation of a monitoring system that will be able to record a statistical data regarding the fresh graduates and to offer the fresh graduates tax breaks. These strategies were not mentioned before in the thesis and in the questionnaire research analyses. Both ideas presented at the seminar seem to be attractive and to bring positive outcomes; however, on the other hand, they seem to be very costly. The difficulty with creating a monitoring data agency is costly because a separate division responsible for this task should be created. Additionally, it should be mentioned that tax breaks should be offered not to all fresh graduates but to the best ones because offering

tax breaks to all fresh graduates will affect the economy of Moldova and diminish significantly the national budget.

CONCLUSION

In order to understand if financial aid, career service and help from the government to find a job would be valuable, a questionnaire was proposed online to fresh graduates who would soon finish their studies in Moldova. The results suggest that it would be helpful for fresh graduates to receive financial support from the government and this financial support would decrease the push factor to out-migrate. Chapter 4 shows that the existing policy named: “Grant Program for Moldovan Overseas Graduates” is a good example to follow and to propose a similar policy for home graduates because it is easier to motivate a best student to stay home than to attract them to come back later.

The results from the questionnaire prove that students need help in finding a job, the majority of students mentioned that a career service would help them in this. Universities in Moldova still do not have a career service within the university; this is why a key recommendation of the thesis is to introduce a careers office and resume book to every university. These would create a valuable bridge between companies and fresh graduates.

The research has demonstrated that the majority of students expect to work at home and abroad not in their area of specialization. The reason could be that the market is overwhelmed with one type of specialization, because the questionnaire results suggest that the majority of students study business science and an insignificant percentage specialize in other fields. As a result of this finding, it is recommended to start cooperation between universities and companies. Universities should be aware of market needs and prepare a certain number of specialists for different specializations.

Chapter 4 shows that proposals offered at the seminars and debates already organized in Moldova are also highly important to follow because they bring valuable ideas. For

example, the monitoring system of out-migration and tax breaks offered to best fresh graduates are advisable to implement together with financial aid as an addition to salary.

Making recommendations on migration policies to decline brain drain in Moldova is a challenging task considering the fact that this phenomenon requires a longer time to bring significant changes and very limited studies were made on a similar policy in Moldova. However, five main policies which are less expensive are proposed below:

- A financial grant as addition to the salary should be offered and it could last half a year or a year. This financial grant should be offered to best students and the amount of students should be limited to around 200 every year. This policy is highly recommended because the results from the questionnaire are positive and students mentioned that such a policy would motivate them not to out-migrate.
- Companies in Moldova should start closer cooperation with universities, offer internship programs, and one year placements for different training opportunities. Based on results from question 4 a lot of students choose one specific area of specialization, for example business science and because of this the market may be overwhelmed with such professionals. This could be one of the reasons why fresh graduates cannot find easily a place to work after their graduation.
- Universities should open career offices and resume books in order to help fresh graduates to find a job which fits their expectations. The Resume Book would be good not just for fresh graduates but for companies as well to find best fit

for a specific job. Additionally, a career day would help both companies and fresh graduates to more easily find each other.

- The government could offer tax breaks to fresh graduates. This policy could be efficient and attractive for fresh graduates but it cannot work for all fresh graduates because it would bring great losses for the economy. Tax breaks could be offered to just best students or to several targeted students.
- A monitoring system should be created which could record the migration trends of fresh graduates. This monitoring system is a long lasting process and required several years to help in making valuable analytical process. The monitoring process is needed to understand how the trend of youth migrant's changes in the long run and to understand what the key reasons which drive out-migration from Moldova are.

Policies mentioned above will decrease the brain drain problem in Moldova because it would help retain certain best candidates at home and motivate them not to out-migrate. The economy of Moldova highly depends on the quality of its labor force, which is why this topic is highly important and requires attention. In order to stop drastic mass out-migration of the population in Moldova the best factor would be to improve the overall economy of Moldova, but this is a long lasting process which cannot not be done in the short run. Moldova joining the European Union could also significantly positively influence the brain drain problem and bring more investment which could improve the overall economy of Moldova. However, Moldova cannot join the European Union until it solves the problem with Transnistria, which is a sovereign state with limited recognition. This thesis was focused mostly on shorter run policies and on how to retain fresh graduates at home, that is why the Transnistrian problem was not further elaborated.

REFERENCES

On-line sources:

- BBC, 2012, “Geography: Migration Trends”, Available at: (http://www.bbc.co.uk/schools/gcsebitesize/geography/migration/migration_trends_re_v2.shtmlc)
- Cali, Massimiliano, 2008**, “Migration restrictions and the ‘brain drain’: The wrong response to an ill-defined problem”, Overseas Development Institute, Available at: (<http://www.odi.org.uk/opinion/docs/1834.pdf>).
- Canadian, Policy, Research Networks, 2009, “Making Newfoundland and Labrador a province of Choice for Young People”, Policy Actions Report, Available at: (<http://youth.gov.nl.ca/strategy/pdf/CPRN-Final-Report.pdf>), September.
- CIVIS, IASCI, 2010, “Strengthening the Link between Migration and Development in Moldova”, Available at : (<http://siteresources.worldbank.org/INTECA/Resources/WBMoldovaReport.pdf>), Chisinau, Moldova
- Cohen, Robin, 1996-7**, “Brain Drain Migration”, Available at: (<http://www.queensu.ca/samp/transform/Cohen1.htm>).
- Delisle, Francoise, Shearmur, Richard, 2009**, “Where does all the talent flow? Migration of young graduates and nongraduates, Canada 1996–2001”, Available at: (<http://onlinelibrary.wiley.com/doi/10.1111/j.1541-0064.2009.00276.x/pdf>).
- Docquier, Frédéric, Rapoport, Hillel, Salomone, Sara, 2011**, “Remittances, Migrants.Education and Immigration Policy: Theory and Evidence from Bilateral Data”, Available at : (<http://sites-final.uclouvain.be/econ/DP/IRES/2011012.pdf>), March
- Dzvimbo, Kuzvinetsa Peter, 2003**, “The International Migration of Skilled Human Capital from Developing Countries”, World Bank, HDNED, Available at: (http://siteresources.worldbank.org/INTAFRREGTOPTEIA/Resources/peter_dzvimbo.pdf)
- Federation of European Employers (FedEE), 2012**, “FedEE Review of minimum wage rates”, Available at: (<http://www.fedee.com/pay-job-evaluation/minimum-wage-rates/>).
- Ghencea, Boris, Gudumac, Igor, 2004**, “Labour Migration and Remittances in the Republic of Moldova”, Soros Foundation, Alianta AMM Mirofinantare, Available at : (http://pdc.ceu.hu/archive/00002327/01/Raport_Migration_Remittances_2.pdf), March 14
- Government of Barbados, 2008**, “Migration Management: Policy Responses to the Movement of Skilled Labor”, Ministry of Labor, Available at: (<http://labour.gov.bb/news/23>), May 15th.
- Government of Republic of Moldova, 2012**, “Moldova 2020 National Development Strategy: 7 Solutions for Republic of Moldova”, Available at:

- (http://www.gov.md/public/files/Moldova_2020_ENG.pdf), January 1, Moldova, Chisinau
- Güngör, Nil Demet, Tansel, Aysit, 2006**, “Brain Drain from Turkey: An Investigation of Students' Return Intentions”
- Heritage Discovery Center, 2005** “Through Immigrants' Eyes / Push and Pull”, Available at: (http://www.jaha.org/edu/discovery_center/push-pull/peopling_pa01.html).
- Johnson, Nadja, 2008-2009**, “Analysis and Assessment of the “Brain Drain” Phenomenon and its Effects on Caribbean Countries”, ATLANTIC COMPARATIVE STUDIES JOURNAL Vol. 11, Available at: (<http://home.fau.edu/peralta/web/FACS/braindrain.pdf>), Florida.
- Kapur, Devash, 2004**, “Remittances: The New Development Mantra?”, G-24 Discussion Paper Series, UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT, Available at : (http://unctad.org/en/docs/gdsmdpb2420045_en.pdf), April
- Leipziger, Danny M. 2008**, “Brain Drain” and the Global Mobility of High-Skilled Talent”, The World Bank, Available at: (http://siteresources.worldbank.org/INTCDRC/Resources/Brain_Drain_Prem_Note_123.pdf)
- Lowell, Lindsay, 2001**, “Policy responses to the international mobility of skilled labor”, International Migration Papers, Available at: (<http://www.ilo.org/public/english/protection/migrant/download/imp/imp45.pdf>).
- Lücke, Matthias, Omar, Mohmoud, Toman, Pinger, Pia, 2007**, “Patterns and Trends of Migration and Remittances in Moldova”, International Organization for Migration, Available at: (http://www.iom.md/materials/5_patterns_eng.pdf)
- Moldova.org, 2012, ““EX-EU official: Moldova’s brain drain issue can be solved with easier travel in EU”, Available at: (<http://social.moldova.org/news/exeu-official-moldovas-brain-drain-issue-can-be-solved-with-easier-travel-in-eu-230974-eng.html>), June 12
- Nyanenkova, Elena, 2005**, “Disaster by depopulation “Available at : (http://www.redcross.int/EN/mag/magazine2005_2/20-21.html).
- Ospoon.eu, “DEZBATERE: „Ai noș tri tineri la Paris învaț ă...” Cum îi aducem acasă?”, Available at : (<http://ospoon.eu/dezbatere-%E2%80%9Eai-nostri-tineri-la-paris-invata-cum-i-aducem-acasa/>), May 10, Chisinau, Moldova
- Punga, Nina, 2011**, “GFMD Seminar on „Mainstreaming Migration into Strategic Policy Development ” Addressing the challenges and opportunities of migration as parte of sectoral strategies - Employment Experience of the Republic of Moldova”, Available at : (http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCoQFjAA&url=http%3A%2F%2Fgfmd.org%2Fdocuments%2Fswitzerland%2Fmoldova%2Fgfmd_swiss11_moldova_presentation_punga.pdf&ei=nqPoT5v5NcTusgaaqInQAQ&usq=AFQjCNGLB3OFGL3G_fcU84aE16rkNFWHzQ&sig2=R0RtzRqNy85lOcORLbBqA), October 13
- Robert Scuman Center for Advanced Studies, 2011, “Socio-political module News from Countries Moldova”, Available at: (<http://www.carim-east.eu/database/socio-political-module/?ss=5&country=Moldova>).
- Ta Place est ici, 2012, Available at : (<http://placeauxjeunes-sdg.ca/english>).

- The Boston Foundation, 2003, “Preventing a Brain Drain: Talent Retention in Greater Boston”, available at:
<http://www.tbf.org/uploadedFiles/Retaining%20Talent%20Oct%202003.pdf>), October.
- Timmer, Hans, 2011**, “Migration and remittances Factbook 2011”, The International Bank for Reconstruction and Development / The World Bank, Second Edition, Available at:
<http://siteresources.worldbank.org/INTLAC/Resources/Factbook2011-Ebook.pdf>),
 1818 H Street NW Washington DC 20433
- ULIM, 2012**, “International Seminar “The Brain Drain: How to make the Young Graduates come back to their country of origin? Strategies and Experiences”, Available at:
<http://ulim.md/en/news/events/seminar-exodul-de-creieri-cum-s%C4%83-i-facem-petinerii-absolven%C5%A3i-s%C4%83-revin%C4%83-%C3%AEen-%C5%A3ara-de-origine-startegii-%C5%9Fi-experien%C5%A3e>)
- Vasile, Valentina, Vasile, Liviu, 2011**, “Yourths on labor market. Features. Particularities. Pro-mobility factors for graduates. Elements of a balanced policy for labor migration”, Available at: <http://www.revecon.ro/articles/2011-1/2011-1-6.pdf>), January 6.
- Wickramasekara, Piyasiri, 2003**, “Policy responses to skilled migration: Retention, return and circulation”, Perspectives on Labor Migration, Available at:
<http://www.ilo.org/public/english/protection/migrant/download/pom/pom5e.pdf>)
- Willoughby, John, Henderson, Heath, 2009**, “Preparing Contract Workers for Return and Reintegration – Relevant for Development?” Global Forum on Migration and Development, Athens, November

APPENDIX 1

Interviews:

Dr. Viorica Olaru-Cemîrtan, 2012, International Organization for Migration, Moldova, May 10

Iatco Mariana, 2012, Moldova State University, Faculty of International Relations, Political and Administrative Sciences, PhD. Senior Lecturer, May 4

Poalelungi, Olga, 2012, Institute of European Integration and Political Sciences Academy of Moldova, Demographic Division of Moldova, Chisinau, May 3.

Valeriu Mosneaga, 2012, , Moldova State University, Faculty of International Relations, Political and Administrative Sciences. Head of the Chair of Political Science; Professor in Political Science, Doctor of Science, Republica Moldova, Chisinau, May 7

APPENDIX 2

Questionnaire

Young GRAGUATES in Moldova

Dear Friends, my name is Natalia Costin, I am student from Central European University. I am writing my thesis on: “RETHINKING BRAIN DRAIN IN MOLDOVA: MIGRANT YOUTH DEVELOPMENT ” This survey is JUST for students who are attending ASEM, USM, ULIM or Transnistrian State University, TG Shevchenko in Moldova. If you are a student from any of these universities and have 5 minutes free, please answer my questions. If you have any questions/concerns/suggestions please contact me anytime! at e-mail :natasha_costin@yahoo.com.

* Mandatory

1. What is your age? *

- ☐ less than or equal to 18
- ☐ 19-21
- ☐ 22-24
- ☐ 25-27
- ☐ 28-30
- ☐ more than 31

2. GENDER? *

- ☐ F
- ☐ M

3. Which university do you attend? *

- ☐ ASEM
- ☐ USM
- ☐ ULIM
- ☐ Transnistrian State University, TG Shevchenko

4. Education Background?*

- ☐ Business Management and Administration
- ☐ Economics and Law
- ☐ International Economic Relations
- ☐ Finance
- ☐ Accounting
- ☐ Economic Cybernetics, Statistics and Informatics
- ☐ Biology
- ☐ Chemistry and Chemical Technology
- ☐ Physics and Engineering
- ☐ History and Philosophy
- ☐ Journalism and Communication
- ☐ Languages and Literatures
- ☐ Mathematics and Computer Science
- ☐ Psychology and Educational Sciences
- ☐ Sociology and Social Work
- ☐ Economics
- ☐ Other:

5. What region are you from? *

6. What's your marital status? *

- ☐ Single
- ☐ Divorced
- ☐ Married
- ☐ Cohabitation
- ☐ Widower
- ☐ Other:

7. Foreign language skills? Russian and Romanian do not count as foreign languages

	Basic	Intermediate	Advanced	Fluent	Native
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
German	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
French	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spanish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Basic	Intermediate	Advanced	Fluent	Native
Italian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Portuguese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ukrainian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bulgarian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. What do you think is the main problem in Moldova, for young graduates? *

- ☐ to find a job
- ☐ low paid salaries
- ☐ both
- ☐ none of this
- ☐ Other:

9. Have you ever worked or studied abroad? *

- ☐ yes
- ☐ no
- ☐ Other:

10. What is the probability that you will migrate after graduation? *

- ☐ 0 % probability (nil)
- ☐ 1% until 25 % probability (low)
- ☐ 26% until 50% probability (medium)
- ☐ 51% until 75% probability (high)
- ☐ 76% until 100% (very high)
- ☐ Other:

11. If you migrate, where are you planning to go? If you don't plan to migrate, please skip this question

- ☐ Italy
- ☐ Portugal
- ☐ Spain

- ☐ Germany
- ☐ France
- ☐ Romania
- ☐ Russia
- ☐ Ukraine
- ☐ Canada
- ☐ USA
- ☐ Africa
- ☐ Asia-Pacific
- ☐ Australia-New Zealand
- ☐ Other:

12. If you stay home, what is the probability that you will work in accordance with your area of specialization? *

- ☐ 0 % probability (nil)
- ☐ 1% until 25 % probability (low)
- ☐ 26% until 50% probability (medium)
- ☐ 51% until 75% probability (high)
- ☐ 76% until 100% (very high)
- ☐ Other:

13. What is your salary expectation at home, if you work in your area of specialization? *

- ☐ lower than 100 euro
- ☐ from 100 until 250 euro
- ☐ from 251 until 400 euro
- ☐ from 401 until 600 euro
- ☐ from 601 until 750 euro
- ☐ from 751 until 900 euro
- ☐ from 901 until 1000 euro
- ☐ more than 1001 euro
- ☐ Other:

14. If you will work home, NOT according to your area of specialization, in which industry field might it be? If you don't plan to migrate, please skip this question

- ☐ agriculture
- ☐ construction
- ☐ manufacturing
- ☐ commerce/sales
- ☐ hotel/restaurants
- ☐ cleaning/maintenance
- ☐ domestic service
- ☐ Other:

15. What is your salary expectation at home, if you work NOT in your area of specialization?
*

- ☐ lower than 100 euro
- ☐ from 100 until 250 euro
- ☐ from 251 until 400 euro
- ☐ from 401 until 600 euro
- ☐ from 601 until 750 euro
- ☐ from 751 until 900 euro
- ☐ from 901 until 1000 euro
- ☐ more than 1001 euro
- ☐ Other:

16. What is your salary expectation ABROAD? If you don't plan to migrate, please skip this question

- ☐ lower than 100 euro
- ☐ from 100 until 250 euro
- ☐ from 251 until 400 euro
- ☐ from 401 until 600 euro
- ☐ from 601 until 750 euro
- ☐ from 751 until 900 euro
- ☐ from 901 until 1000 euro
- ☐ more than 1001 euro
- ☐ Other:

17. If you go abroad, what is the probability that you will work in accordance with your area of specialization? If you don't plan to migrate, please skip this question

- ☐ 0 % probability (nil)
- ☐ 1% until 25 % probability (low)
- ☐ 26% until 50% probability (medium)
- ☐ 51% until 75% probability (high)
- ☐ 76% until 100% (very high)
- ☐ Other:

18. If you will work abroad, NOT according to your area of specialization, in which industry field might it be? If you don't plan to migrate, please skip this question

- ☐ agriculture
- ☐ construction
- ☐ manufacturing
- ☐ commerce/sales
- ☐ hotel/restaurants
- ☐ cleaning/maintenance
- ☐ domestic service
- ☐ Other:

19. Do you think the government should create Career Services which will be a bridge between fresh graduates and companies? Would that help you find a job? * Career service will aim at assisting students and graduates in achieving their career goals

- ☐ YES
- ☐ NO
- ☐ Other:

20. If the government helps you find a job, what is the probability that you will stay home? *

- ☐ 0 % probability (nil)
- ☐ 1% until 25 % probability (low)
- ☐ 26% until 50% probability (medium)
- ☐ 51% until 75% probability (high)
- ☐ 76% until 100% (very high)

- ☐ Other:

21. If the government in addition to your salary would give you a half a year grant, how high should this grant be to motivate you to work home and not to go abroad? *

- ☐ 1- 50 euro
- ☐ 51- 100 euro
- ☐ 101 - 150 euro
- ☐ 151 -200 euro
- ☐ 201-250 euro
- ☐ 251-300 euro
- ☐ 350-400 euro
- ☐ higher than 401 euro!
- ☐ even without grant I will stay home
- ☐ Other:

22. After your graduation, what is the probability that your family/relatives will be able to financially support you? *

- ☐ 0 % probability (nil)
- ☐ 1% until 25 % probability (low)
- ☐ 26% until 50% probability (medium)
- ☐ 51% until 75% probability (high)
- ☐ 76% until 100% (very high)
- ☐ Other:

23. Do you receive any remittances from abroad? (Roughly how much per month?) *

- ☐ 1 - 50 euro
- ☐ 51- 100 euro
- ☐ 101 - 150 euro
- ☐ 151 -200 euro
- ☐ 201-250 euro
- ☐ 251-300 euro
- ☐ 350-400 euro
- ☐ Higher than 401 euro!

- ☐ I don't receive any remittances
- ☐ Other:

24. Any comments are welcomed!