Lithuanian "Brain Drain" Causes: Push and Pull Factors

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This article investigates Lithuanian "brain drain" causes: push and pull factors and its manifestation between different migrant groups. Traditionally international labour migration is interpreted as a response to the existing gaps in wage levels between countries. But the causes of migration should not be simplified to economic (usually wage/income) conditions. Even if economic factors dominate in most countries migratory processes, migration flows of each country are still influenced by the specific conditions or changes in local economy as well as country's historical perspective. Therefore migration determinants might be different in separate countries, especially when talking about highlyskilled migration. Perception of dominating factors in the Lithuania's highly-skilled migration is needed to obtain an objective evaluation of the "brain drain" problem and to solve it in proper ways.

Empirical research gives us a general picture of a Lithuanian highly-skilled migrant as being a young person with higher skills who treats his or her socioeconomic status at rather satisfactory level before departure and is more inspired by pull effects.

Factor analysis reveals us four main factors of interrelated variables in Lithuania's highly-skilled migration: professional attraction in foreign countries, socioeconomic conditions having mostly push effects, state academic system and collaboration manifesting itself both in push and pull effects, and state macroeconomic conditions and governmental policy showing mostly migrants' discontent with the general situation of Lithuania. Other factors such as ecological conditions and family reunification play much lesser role in this phenomenon of brain drain.

The article consist of two parts: first part deals with the concept of "brain drain" and its recent tendencies, in the second part Lithuanian brain drain causes: push and pull factors and their manifestation between different migrant groups are investigated.

Keywords: brain drain, highly-skilled migration, push and pull factors.

Introduction

Rapid globalization processes embrace more and more fields generating many economic, social, cultural, and other changes all over the world. These processes inevitably affect national labour markets, raising increasingly intensive and multidirectional labour movements. Two main tendencies stand out in the contemporary global migrations: 1) continually growing highly-skilled migration in all the flows and 2) the problem of "brain drain" increasingly affecting less developed countries. This phenomenon is mainly influenced by a rapid progress of science and technology that generates a steady growing demand for highly–skilled labour force in the international labour market (IT professionals are one of the best examples). Negative demographic changes with the ageing population in the advanced economies is another strongest reason to pull immigrant labour force.

Importance of labour migration manifests itself primarily in the changes caused in the national labour markets. In the long run it makes an impact on the whole national economy and society. International labour migration is being interpreted as a positive appearance for the global productivity as it equalizes wage and welfare gaps between different countries. For some country, however, it may cause very contradictory effects.

Lithuanian openness to the global markets is perceived as a positive step stimulating economic, financial, intellectual, cultural and social capital exchange which, in its turn, stipulates the growth of economy. This integration, however, is being accompanied by increasingly growing migratory flows. The problem becomes more acute because of dominating one-way migratory flows, which show big overweight of emigrants compared to immigrants. It means that highly-skilled emigrants are not substituted by appropriate immigrants neither in quantitative nor in qualitative context. In such a situation a set of further subsequences arise: country's investments made to the preparation of these professionals are being lost; negative changes in the local labour market and demographic situation arise; the quality of governmental services decrease; finally, an average qualification level of a country's labour force declines diminishing economy's competitiveness in the international arena.

The international labour migration causes and processes are being investigated in different ways for a long time. Various theoretical studies more or less investigating mechanism of migration push and pull determinants could be found in the recent literature (Krugman, Obstfeld, 1991; Jovanovich, 1997; Tassinopoulos, Werner, 1998, Massey, 1998, 1999). Highly-skilled migration is also being analyzed in a number of different ways (Massey, Zenteno, 1999; Brandi, 2001; Iredale, 2001; Ushkalov, Malakha, 2001; Khadria, 2001; Castles, 2002; Raghuram, Kofman, 2002; Brandi et al, 2003; Golub, 2003, Chen et al, 2003; Williams, Balaz, 2005). It is worth to notice that neither of the studies in the field of "brain drain" has unanimous course as well as unanimously established definition. Furthermore, there is a shortage of data about migratory flows. It is observed that the causes and processes of "brain drain" are usually related to the specific characteristics and fields of concern in a separate country.

The problem. Contemporary Lithuanian migration as well as "brain drain" has been popularly interpreted as a phenomenon influenced mostly by the country's macroeconomic situation. One would perceive that Lithuanian emigration (particularly highly-skilled) could be stopped by the country's economic growth which would provide better working and living conditions. Yet, growing economy and welfare could not be perceived as the only one necessary factor to cease emigration. Attractive working and living conditions traditionally called "pull" factors may constantly raise emigration potential despite a speedy country's growth. Moreover, the causes of migration may be related to the specific country's characteristics and do not be dependent only on popular wage difference account. Thus it is important to assess which determinants dominate in Lithuanian highly-skilled migration and what migrants are most influenced by it. This analysis can be useful for implementing one of the most important tasks - how to stop "brain drain".

The aim is to analyze causes of highly-skilled migration of Lithuanians and their manifestation in the different migrant groups.

The object is "brain drain" from Lithuania.

The article is based on the empirical research conducted in 2004 – 2005. Using snowballing method an internet survey of highly-skilled Lithuanians living abroad was carried out. Total number of more than 500 questionnaires was obtained, 416 of them were used in the analysis.

The concept of "brain drain" and its contemporary trends in the global context and Lithuania

The concept of "brain drain" used in the contemporary literature reflects emigration of highly-skilled labour force. Traditionally international labour migration is viewed as economic migration when people leave for better working and living conditions. In the literature dealing with migration phenomenon there is no precise definition of "brain drain". For instance, the Oxford dictionary gives a link to the loss of academic and qualified personnel because of their emigration (Illustrated Oxford Dictionary, 1998). The "brain" category embraces large scale of people from highly educated persons with the university degree to well-trained skilled workers (Korner, 1998; Iredale, 1999). Migration of scientists, academic personnel and other professionals is characterized as migration of talents. Highly-skilled migration contains: managers, financial analysts, consultants of special services, scientists, engineers, computer specialists, biotechnologists, etc. (Castells, 1996).

It could be noticed that the object of "brain drain" is practically related to the matters of great concern. In Canada recently "brain drain" is seen mostly as a loss of medical attendants and nurses, in Italy attention is pointed mostly at scientists, Ph.D students (Cervelli in fuga, 2000; Brandi, 2001). In Lithuania the phenomenon of "brain drain" has taken a large scale so all highly educated persons (with university degree) and university students are usually considered when analyzing real or potential migration of highly–skilled people (see Kuzmickaitė, 2000; Jucevičienė et al, 2002; Ruzgys and Eriksonas, 2004; Antinienė, 2005; Gečienė, 2005).

"Brain circulation" and "brain waste" are two other concepts related to the "brain drain". "Brain circulation"(or exchange) characterizes both emigration (or loss) and immigration (or gain) of highly-skilled persons (Castells, 1996). In fact, the brain gain countries are usually highly developed ones (e.g., the USA, the Western Europe). For Lithuania brain loss is typical feature of contemporary highly-skilled migration. "Brain waste" refers to the highly-skilled people who pass from highlyskilled positions to low-skilled or unskilled works.

Globally recent international migration flows have been intensifying and changing their directions, forms and structures (Castles 2002). Global labour movements are being accelerated particularly by rapidly growing demand for highly skilled labour (particularly in IT sector), developing networks, political, economic, social and cultural integration that substantially changed immigration policies and border control regulations in many developed countries. This is peculiar to EU and such political and commercial agreements as NAFTA, MERCOSUR which attract immigrant labour from all over the world. In 1990 in the OECD countries there were 39.8 mln. of the immigrants older than 25 years, in 2000 the number has grown up to 58.5 mln. (Docquier, 2004). By the UN estimations approximately 175 mln. people, i.e. 3% of the world's population, lived and worked not in their home countries (Adams, 2003).

Recent investigations of global migration reveal two main trends: 1) migration quality becomes more important; 2) less developed countries become more affected by "brain drain" (Docquier, 2004). It is estimated that in the OECD high-skilled migrant flow reach 70% of a whole migration during the period of 1990-2000. The nymber of highly-skilled migrants has increased in all well-developed countries, especially in Canada and Australia, as they were first to introduce selective immigration policy. Intellectual labour force originated from the countries with low income level has increased in all OECD countries, particularly in the North America where significant part of immigrants are Asian people. Aggregate level of highly-skilled labour has increased by 0.75% compared to 0.06% increase of low-skilled labour in 1990 – 2000 (Docquier, 2004).

Migration of intellectuals emerges not only in the underdeveloped or economically weak countries but also in developed countries. Currently the problem of "brain drain" is also familiar to such countries as Canada, the UK, Ireland, France, Italy, Germany, etc. However, looking at the dimensions of the "brain drain" Central American and Pacific region countries are in the foreground (Docquier, 2004). The biggest pull centre of the highly-skilled labour became the USA which has significantly increased the quota for immigrant visas (H1-B). The USA differs from other pull counties by its excellent research centres, flexible and open career opportunities, strong entrepreneur culture and high living standards. Is has been estimated that about 50% of the Europeans who graduated from their doctoral studies continue their further work in the USA. On the other hand, some EU member states (France, Germany, Ireland, the UK) have launched similar programmes to attract highly– skilled immigrants (Docquier, 2004).

Recent Lithuanian international migration features continuously growing labour emigration. Although statistics about real emigrant flows is scarce and unreliable the Department of Statistics estimates that there were about 236500 more arrivals than departurers in 1990 - 2003 and Lithuanian population had decreased in approximately 250000 people since 1992 (Statistics, 2003). Under the estimations of experts some 200-250 thousand people have left Lithuania mostly for the USA, the UK and Western European countries during the past decade (Morkvenas, 2004). According to the forecast made on International Lithuanian migration emigratory flows are likely to increase up to 320 thousand by the year 2008 (The Estimation of potential free movement of labour to the EU member states, 2001). In respect to the emigratory structure researches confront also shortages of statistical data though supposedly the size of the "brain drain" has grown significantly since 1990.

Empirical study of Lithuanian "brain drain"

In 2004 – 2005 the survey on Lithuanian "brain drain" has been conducted where snowball method was applied. Snowball sampling is a special nonprobability method, used when the desired sample characteristic is rare. It relies on refferals from initial subjects to generate additional subjects. Over 500 Lithuanians with a university degree (including the students) living in 27 countries were surveyed using "snowballing" via the internet (the website: www.djmigracija.lt with an original questionnaire created by the authors), 416 responses of which were used in the analysis. Initial subjects were Lithuanian embassies and more than 20 foreign Lithuanian organizations and e-clubs, which helped to reach Lithuanians with higher skills living abroad so that we could contact (by e-mail) and invite them to participate in the survey. These people were asked to indicate their known migrants as potential respondents.

The methodological background of the research is based on the concept of neoclassical macro- and microeconomics of migration, historical perspective, and social network. In this article only one facet is presented: the interpretation of macro- and micro-structural push and pull factors of Lithuanian skilled-migration.

Demographic and socio-economic characteristics of highly-skilled migrants

According to the age the majority of the respondents, there were the migrants younger than 35 years old (80.2 %). Other age groups were: those of 36-45 years old made up 12.3%, while those of 46 and older made up only 7.4%. The average age of the respondents resulted in 31.5 years old (median is 29). 49.8% were men and 50.2% were women. According to their nationality, the absolute majority were Lithuanians (95.8%), other nationalities indicated Russians (2%), Jewish, Polish, and Ukrainians (for each nationality less than 1%).

With regard to education 36.1% indicated the Bachelor degree or studies, 20.7% were college graduates or students, 28.5% had Master degree or studies, and 14.6% had Doctoral degree or studies. Social sciences made up 29.5%, humanities -26.1%, technical sciences -23.6%, biomedicine -12.7%, and physical sciences -8.2%. In the structure of specialization most often were indicated: engineering, business administration and management, philology, medicine, informatics, biochemistry, finance and accounting, philosophy, sociology, and economics. Other specialities, such as art, theology, ethics, law, agronomy, forestry, etc. were mentioned much less. More than a half of the respondents (60.9%) have graduated from Lithuanian universities, another part (23.7%) graduated from foreign universities or other higher institutions, the third part acquired the Bachelor's degree in Lithuania and Master's or Doctor's degrees abroad (14.9%). Majority of respondents knew at least one foreign language (mostly English) very well or well.

The overall majority of questioned migrants were employed permanently before their leave (63%), another part had occasional occupations (21%), and the rest part (16%) was unemployed. The majority of those employed in Lithuania before the departure had worked according to their speciality (68%). The respondents were asked also if they had been looking for a job in Lithuania before the departure: 37% noted that they put all their efforts to gain some position, 22% were moderate job seekers, and even 42% did not look for a job at all. The majority of people (65%) who had been looking for a job in Lithuania put their efforts to work according to their speciality.

The aggregate estimations of social and economic status show that in general it was at the satisfactory level. So it could be said that in general these examined migrants had not been in a bad situation before the departure (see Table1).

Table 1

Factors	Mean	Std. Dev.	Low ranking %	Medium ranking %	High ranking %			
Professional realization (6 items, Cronbach $\alpha = 0.9$; spread 35.2%, $L = 0.8-0.6$)	3.1	1.18	32.8	30.8	36.4			
<i>Economic-financial status</i> (4 items, Cronbach $\alpha = 0.8$, spread 15.5%, $L = 0.9$ -0.7)	3.0	1.09	33.9	33.0	30.6			
Cultural-inner life & socialization (4 items, Cronbach $\alpha = 0.7$, spread 12.2%, $L = 0.8$ -0.7)	3.8	1.01	12.05	23.9	63.4			

Socioeconomic status of migrants in Lithuania before the departure

Note: KMO = 0.847; Barlett's test 1893, df = 91, p < 0.01. Principal component method, rotation Varimax with Kaiser's normalization converged with 5 iterations. 5 point scale was used where point 1 indicates "very bad" and point 5 – "very good" estimations. Low ranking contains 1+2 points, medium -3, and high -4+5.

The highest marks were given for cultural and inner life, and socialization (3.8). The majority of questioned migrants pointed out satisfactory and very good marks. Professional realization conditions were ranked lower (3.1), still the highest acceptance rate was given to high marks. Economic and financial conditions were ranked the lowest, though the overall mean (3.0) shows rather satisfactory level. Here the highest acceptance rate was given to "bad" and "very bad" conditions.

Destination country. Looking at the direction of migration, two main geopolitical pull zones emerge: North America with the biggest part of migrants located in the USA, and the EU with mostly located in the countries of EU-15. The overall distribution of the questioned migrants reached 27 countries (see Figure 1).



Figure 1. "Brain drain" by geopolitical regions

The direction of migration diverged by the educational level of the questioned migrants: respondents with the higher degree (doctoral, master) chose mostly the USA (χ^2 =46.7 (df=15); p<0.01). The choices of the destination country were also differed in accordance with migrants' educational field: migrants with biotechnology and technical specialities gave the highest ranks for the USA (χ^2 =41.752 (df=20); p<0.01).

The goals of migration. More than a half of the interviewed migrants (51.5%) indicated work as the reason of leaving the home country with a bigger part of those occupied according to their speciality (see Figure 2). Relatively big part of the respondents (24.3%) had left Lithuania to study abroad (for a Bachelor, Master or Doctoral degree). Other indicated emigration and family reunification as a cause of migration (13.9%) and still other migrants pointed out visiting/travelling aims (9.2%).





The chosen primary aim of the departure differs according to the choice of migration direction. The people who have chosen Great Britain most often pointed out the jobs not related with their speciality, in the countries of North-West Europe the highest rates were given to the work according to the speciality, in Scandinavian countries – studies, in the countries of southern Europe – the emigration and family reunification and in the USA and Canada – the work not according to the speciality (χ^2 =65.3 (df=25); p<0.01).

The chosen departure aim also varied in accordance with the qualification level and education field of the respondents. The respondents with the Bachelor degree most often pointed out the job not in accordance with their speciality while the college graduates pointed out mostly the work according to their speciality, the Master students - studies, the Doctoral students - the work according to their speciality (χ^2 =40.1 (df=15); p<0.01). The disparities were also noticed in the groups in accordance with the education field. The greatest number of the respondents of humanities went to work not according to their speciality, the graduates from social sciences most often pointed out studies, in the group of physical sciences and biomedicine most of the respondents pointed out studies and work according to their profession, and the representatives of the technical sciences outweighed those who left to work according to their speciality $(\chi^2 = 41.7 \text{ (df} = 20), p < 0.01).$

Situation abroad. Respondents indicated their socio-economic status change in the foreign country with significant improvement in professional realization (mean 4.0) and financial-economic status (mean 3.9) but decrease in their inner cultural life (3.5) compared to these factors before the departure (table 1). Majority of respondents (83.6%) were employed at the moment of the survey, 63.8% of which worked in private sector and others (36.2%) in the public sector. With regard to occupational field there were mostly mentioned following areas: academic, R&D, education (30.3%), trade (7.8%), construction (7.8%), financial intermediary (6.6%), health service (6.1%), manufacturing (7.8%) IT and telecommunications (5.5%), public administration and defence (4.9%), hotels and catering (4.0%), social work (3.5%), transportation (2.6%), etc. Majority (84.6%) of questioned people have also indicated that they were in the workplaces where higher skills were required. The average wage (after taxes) of respondents made up 2.906 eur (CI 95% [2.339 - 3.473]). Significant differences between wage with regard to migrants' education level are indentified: Masters and Doctors on average earn more than Bachelors (χ^2 =36.8 (df=18), p<0.01).

Migration causes: push and pull factors

In the neoclassical macro- and microeconomic migration models labour migration has been explained as the response to the existing differences of economic (usually the level of salaries and income) and social development level of various migration areas. Unfavourable conditions in the emigration places are traditionally defined as the push factors, and the benevolent conditions the far away places are determined as the pull factors (Krugman and Obstfeld, 1991, Filler et al, 1996; Jovanovich, 1997; Tassinopoulos, Werner, 1998). Some authors (Brandi et al, 2003) found out that push factors are more common to unskilled mass migration, and the pull ones are likely to affect more highly-skilled migration. Massey (1998) has summarized the preconditions of the neoclassical macro-level migration theory:

- international labour migration occurs because of wage differencies in different countries;
- migration will stop when these discrepancies vanish;
- the international flows of the intellectual capital, i.e. the migration of the highly-skilled work force is the response to the differences in return of the intellectual capital that can vary because of the general level of the job payment thus influencing quite different migration character that can be contrary to the migration of the unqualified labour;
- the international flows of work force are mostly effected by the mechanisms of the labour markets: other types of markets have no significant influence to the international migration;
- the government can control the flows of the migration by regulating or influencing the labour markets in the labour importing and exporting countries.

In the present conditions of globalization the national politics, two-way deals or triangular agreements acquired especial importance (NAFTA, MRA, ES, GATS, WTO, OECD), that accelerated the movement of highly-skilled labour (Iredale, 2001; Docquier, 2004). Many advanced countries (the USA, Canada, the UK, Australia) are oriented to the internationalization politics of the higher education and perspective professions. This is indicated by the growing number of the foreign students in these countries (most of these students come from developing or less developed industrial countries) and the increasing collaboration of various universities and business structures.

To estimate the international labour force movements and their dependence on the macro-structural factors is rather difficult first of all because of the specificity of statistics recording these movements. It is noticed that at the national level, most labor – exporting countries do not collect data on their migrants (Adams, 2003). This is peculiar to the situation in Lithuania. One of the ways to state the causes of highly-skilled emigration is to fulfill more detailed surveys though it is also rather complicated problem.

One of the tasks of this survey was to state how push and pull mechanism worked in the migration of the educated people in Lithuania. For this purpose the questions were formed on the basis of the macro- and micro- level migration concepts and various empirical findings. The respondents were asked to give their own opinion about other reasons (if there were any) that forced them to leave Lithuania except the formulated questions.

In order to identify determinants of the highly-skilled migration, questions were formulated so that it could be possible to trace two things: the main causes (economic, professional or other) and which of their effects push or pull had stronger impact to leave.

The most general results show that the most important were the economic (payment) factors in the structure of the migration reasons. Economic motivation is obvious when comparing the indexes of salaries, income, the levels of gross national product and other indicators of welfare in Lithuania and foreign countries as they vary from several to many times. Economic motives as one of the strongest incentives to migrate are pointed out in many other empirical investigations of the "brain drain" of similar and/or less developed countries (see Hardill, MacDonald, 2000; Khadria, 2001; Raghuram, 2002; Ushkalov, Malakha, 2001; Williams, Balaz, 2005).

In the comparison of the push and pull variables practically at all events the stronger effect of their attraction (pull effect) to the foreign country has been noticed. This can be seen when the same pairs of push – pull variables have been paralleled. Wilcoxon's related sample set test (see Figure 3) shows the statistical significance of the differences between push and pull factors.





(5 point scale was used in the survey, where 1 indicates "no influence", 5 - "the highest influence") Wilcoxon's related sample set test: when p < 0.05, the difference is significant

The greatest difference of the estimation of migration reasons in accordance with their push - pull effect was displayed from the point of view of labour conditions. This shows that good material conditions in the field of labour and profession that helps to create beneficial labour conditions and enabling to effectively use one's own professional skills has much greater effect as the migration factor than its lack in the home country. The averages of other factors varied approximately by 0,5 point for the benefit of pull effect. The differences of estimation averages of governmental business policy, fiscal and science policy were the smallest and statistically insignificant. Attention should be paid to the only factor that overweighed the push effect (and which had good rating) has revealed itself in the unfavourable relations in academic society of Lithuania.

The differences of push – pull effects are statistically based by the Wilcoxon's test. They validate two main preconditions of neoclassical macroeconomic migration theory that the migration of the labour force is substantiated by the differences in the level of existing welfare (wage) in various countries, and that the migration of the highly-skilled labour force is the response to the differences of the return of the intellectual capital between the countries. Thus we can state, that bad socio-economic conditions are not sufficient cause for the labour migration and "brain drain". The socio-demographic characteristics of the respondents show that according to the socioeconomic status they were not in bad conditions: most of the migrants (63%) had permanent jobs before they left their home country and their general estimation means of socioeconomic status in Lithuania are a bit higher than satisfactory.

The conclusion is that even significant improvement of socioeconomic and professional realization situation in the country ensuring more qualitative level of work and life will not stop the "brain drain" from Lithuania as long as the quality of their life and work is relatively higher in the foreign countries. It should be also stated that the greatest pull effect was not the payment for the job but the equipments necessary to do the job.

Then it was important to state what basic groups of migration reasons dominate in the skilled Lithuanian migration, and how they are revealed in separate migrant groups in accordance with some of their socioeconomic characteristics and socioeconomic status in Lithuania. For this purpose the push – pull variables were reduced into the main groups of inter-correlative variables. 6 factors explaining the 69% of the spread were extracted by the method of factor analysis (see Table 2). According to the meaning of these variables the factors were given corresponding titles (the numbers in brackets beside the factors define the variables shown in Figure3).

Table 2

Factors	Mean	St.Dev.	Temperate Acceptance, %	Substantial Acceptance, %	Total Acceptance, %
Professional attraction (1,2,4,6 var. with pull effect, Cronbach $\alpha = 0.8$; spread 6%, L = 0.7-0.6)	3.8	1.30	22.1	66.2	88.3
Socioeconomic status push (1,2,3,6 var. with push effect, 3 with pull effect, Cronbach $\alpha = 0.82$, spread 9%, $L = 0.8$ -0.6)	3.4	1.38	29.7	52.5	82.2
Academic system and collaboration (5,9,10 var. both with push and pull effects, Cronbach α = 0.89, spread 12%, L = 0.9-0.6)	2.9	1.56	27.3	41.6	68.9
Country's macroeconomic status and governmental policy (7,11,12 var. both with push and pull effects, 8 with push effect, Cronbach $\alpha = 0.88$, spread 33%, $L = 0.8-0.6$)	2.7	1.45	34.5	34.1	68.6
Ecological conditions (14 var. with pull and push effects, Cronbach $\alpha = 0.7$, spread 5%, $L = 0.8-0.78$)	1.8	1.42	23.7	12.8	36.5
Family unification (13 var. spread 4%, $L = 0.78$)	2.0	1.65	8.3	24.8	33.1

Main factors of the highly-skilled migration

Note: KMO = 0.880; Barlett's test 5009, df = 351, p < 0.01. Principal component method, rotation Varimax with Kaiser's normalization, converged with 8 iterations. Temperate acceptance rate consists of 2+3 points substantial acceptance is 4+5 points in the 5 points scale where the point 1 indicates "no influence", and point 5 – "the highest influence".

The factor of **professional attraction** consists of the variables characterizing the excellent conditions for professional realization and work abroad, i.e. they are significant because of the advantage of the pull effect in the structure of the migration causes. Though relatively insignificant general part of the factor spread of (6%) shows that this group of related "professional pull" variables is peculiar to rather small group of the migrants, the descriptive statistics reveals that among the other groups

of migration causes this group of variables gives the greatest percent of acceptance (88.3%) and one of the most important reasons for migration (average of 3.8). The highest estimations and acceptance percents were given to the favourable payment for the job (4.14; 94.3%) and the means necessary to do the job (3.88; 91.5%), less importance was given to the conditions for the improvement of professional skills (3.83; 89.0%) and still less to the benevolent evaluation of the demand of

acquired profession abroad (3.22; 78.4%).

The dispersive analysis (ANOVA) showed that this professional pull factor is mostly spread among the respondents with higher scientific degree and narrower specialization. It is obvious that the greater intellectual capital requires the greater return that is hunted for. This factor was mostly mentioned by men (F=5.8 (df=1), p<0.05), from the point of view of education – the graduates and those with doctoral degree (F=3.2 (df=3), p<0.05), and from the point of view of the scientific field the best estimation was given to the respondents of technical field and a bit less to the biomedical field (F=4.3 (df=4), p<0.01).

The estimation of the factor also differed according to the country where respondents got their education: the most importance was given by the people who acquired their education abroad (F=4.2 (df=3), p<0.01). Besides one more interesting aspect has been noticed: the pull effects abroad were more stressed by the respondents who estimated their profession as prestigious in Lithuania (F=2.8 (df=4), p<0.05). One more interesting fact of various opinions has been noticed according to the destination point of the migrants, i.e. the country they left for: the factor role was mostly stressed by the migrants who went to the USA and Canada (F=3.0 (df=5), p<0.05).

In this context one of the opinions that validates the importance of the influence of the pull factors is as follows: "I left Lithuania because I wanted to improve my English. I was quite sure to return in a year and continue my studies and work at home. Never before have I planned to go abroad but for the holidays. I was even very categorical about the migration and spoke against migrants. But today my opinion has radically changed. I will never have such opportunities to study and work or even do business with my speciality in Lithuania as I have found here. The essence is really not the money, but the possibilities and freedom of choice. I had a good and prestigious job in Lithuania and good salary but that constant feeling of insecurity. Here, so far, I earn less (but the same abilities to live like in Lithuania) but can sleep calmly and trust in the future." (27 years-old Bachelor of animal technology).

The factor of *Socio-economic status with push effects* reflect the influence of individual economical and social situation to leave abroad. The acceptance ratings of the variables that factor consists of show that these causes were estimated as the second-strongest migration determinants (average 3,4) with dominating push effects: 88.1% for unsatisfactory wage, 83.8% for scarce possibilities for professional realization and improvement, 82.2% for unsatisfactory material conditions, 75.3% for bad labour conditions, insufficient equipment, and 70.2% for low demand for profession acquired. Only one and the highest rate of 93.8% for material and living conditions abroad manifested itself in pull effect.

Socioeconomic conditions in migration were mostly stressed by those who before the departure abroad estimated their economic and social situation as very bad: the financial situation (F=24.2 (df=4), p<0.01), and the disposable income (F=23.5 (df=4), p<0.01), the demand of their profession in Lithuania (F=20.0 (df=4), p<0.01), job payment (F=18.5 (df=4), p<0.01), material living

conditions (F=16.7 (df=4), p<0.01). The reverse correlations between socioeconomic migration factor and the above mentioned variables (accordingly: -0.47; -0.45; -0.44; -0.42; -0.41, p<0.01) show, that the worse the socioeconomic situation of the respondent awakened the stronger stress of the socioeconomic push factor in the structure of migration causes. Such estimation tendency and the correlation has been peculiar to all the variables showing the socioeconomic status in Lithuania (before the departure) with the estimation category "very bad" of their economic, social and professional realization in Lithuania. It should be noted that similar findings were defined in the investigation of emigration intentions of Lithuanian students where the reverse correlation between personal income and emigration intentions has been disclosed (Antinienė, 2005).

From the point of view of employment the socioeconomic situation has been mostly mentioned by the respondents who were trying with all their might to find the jobs before the departure (F=11.6 (df=2), p<0.01), and among those who had the job in Lithuania before their departure abroad the socioeconomic factor has been mostly stressed by people who had only temporary jobs (F=7.8 (df=2), p<0.01). The reverse correlation has been found (-,252, p<0.01) between the endeavour to find the job in Lithuania and the importance of socioeconomic factor in migration.

It has been also stated that this factor has been mostly emphasized by the people who gained their education in Lithuania (F=2.8 (df=3), p<0.05), there has been also found the reverse correlation (-0.112, p<0.05). From the point of view of education the highest estimation ratings were in the categories of the owners of Doctoral and Bachelor degrees (F=5.0 (df=3), p<0.01).

The influence of the unsatisfactory situation shows the opinions of the respondents defining the problems of individual payment or income from the household and the existing labour relations: "Not normal are the 'unlawful or black' salaries and the insufficient material evaluation of professional knowledge (e.g. that of the physicians)" (33 years old teacher of the English language). The problems become obvious not only from the point of view of the income itself but their calculation as well when the principle of double calculation ("black" and "white") has been used in the companies helping to evade from taxes. Thus earned officially undeclared income increases the individual and/or household economic risk and act as the factor limiting the possibilities of credits and loans: "I left my homeland because the official income of my family was 300 Lt. and the rest salary was unofficially given in envelopes thus we were unable to buy goods on the never-never (this is especially important for the young families that need some flat to live in)" (26 years old Master of medicine).

Some empirical investigations of migration fulfilled in the frames of new economics of migration showed that the income risk together with the covariance of the risks strongly influenced the mobility of people across countries (Rosenzweig and Stark, 1989; Morrison, 1994). In the countries where the capital markets do not function properly (or are undeveloped) migration provides a shelter against uncertain income prospects (Daveri and Faini, 1999). The barriers in the markets minimize the migration risk and maximize the intention to migrate, thus the migration process can be noticed even when the migration risk exceeds the risk to stay in the native country or in other words the income of the migrant become less after the moving to another distant country (Chen et al, 2003).

The factor of State academic system and collaboration is actually related with the influence of the state education system and the relations in academic society to the migration. The factor average (2.9) and the approbation to its statements equal to (68.9%) shows a bit less but still relatively strong weight between other groups of migration causes. It has been also obvious that the substantial acceptance (41.6%) significantly exceeded temperate acceptance rate (27.3%). In attempt to disclose the factor consistency the best estimation (3.26) has been given to the open and flexible influence of the education system abroad that acted as the traction factor. But rather significant part of the respondents pointed out the strong influence of the conservative education system of Lithuania, its closure and the authoritarian hierarchical academic relations as the push factors of migration (substantial acceptance 41.0% and 43.8%, accordingly). The discontent with the science and education system in Lithuania has been also reflected in the works of other authors as well (Kuzmickaitė, 2000, Jucevičienė et al, 2002, Viržintaitė and Jucevičienė, 2004, Kalytis, 2004). Unsatisfactory treatment of hierarchical organization of scientific and research activities were strongly emphasized by other researches of the brain drain phenomenon (see Cervelli in fuga, 2000; Golub, 2003).

The problems lie not only in poor financing of the studies and research, and the principles of its application but in the existing unfair contests to occupy the academic positions and the relations between the members of academic society of our country where in the contrast to the Western academic society dominate too hierarchical formal management/leadership principles constraining the realization possibilities of ideas and innovations of especially young people. This is supported by the opinions of the respondents: "...the strongest push is because of the absence of the perspective when you see that the government institutions badly utilize their managerial possibilities and you see no end for this ... " (26 years old physician, resident-trainee). The factor of "corruption" has been also mentioned: "you have to know someone in order to get a good position..." (31 year-old Bachelor from the field of finance). Discontent of the relationships between people reveals itself in the reticence of people that is estimated as "the most awful problem of Lithuania" (30 year-old Ph.D. of mathematics).

Though the general estimation averages of the variables reflecting education system are not very high but in the individual groups of the respondents they are about 4 -5 points (in 5 point scale) and show that this group of causes for some category of people had really significant value. The greatest concern about the education system, especially the one that has push effect in Lithuania has been expressed by the owners of doctoral degree. They stressed the role of the relationship in the academic society more often than respondents from other professional

groups (F=11.9 (df=3), p<0.01). The correlation has been disclosed between the education level of the respondents and the factor of scientific system (0.229, p<0.01), thus the conclusion can be made that higher education level requires better quality of the scientific system as well as the demand to realize the professional skills and get better return of one's own intellectual capital. Among the groups of various education fields the highest estimation of this factor were attributed to the respondents of biomedicine and physical sciences fields (F=5.2 (df=4), p < 0.01). Besides the greatest attention to this factor has been given by the representatives who acquired the basic education in Lithuania and gained higher degrees abroad (F=16.1 (df=3), p<0.01). Later the tendency of various opinions became obvious in accordance with the estimations of professional realization and possibilities of skill development in Lithuania: on the whole the highest weight of the education system factor as the cause of migration can be attributed to the respondent group who estimated aspects of the professional realization in Lithuania the lowest, i.e. "very bad". From this point of view the factor correlates negatively with the estimation of professional realization before the departure (-0.326, p<0.01). The worse the possibilities of professional realization in Lithuania the greater is the influence of the education system on migration.

The factor of the *State macro-economic status and governmental policy* duly reflects the dominating effect of macro-structural factors in migration and the present discontent by the Lithuanian economic situation and the economic, fiscal and social policy of the state. Though the factor dispersion is the greatest among other factors (33%), the general acceptance rating of its variables shows that this migration of the educated people was more strongly affected by the microeconomic and social situation in Lithuania than the position of Lithuania in global context. Still the general high percentage of the acceptance factor shows that macro-structural causes have significant value from the migration of educated people as well.

Men more stressed the macro-structural factor (F=4.9 (df=1), p<0.05). The reverse correlation has been found from this point of view (-0,109, p<0.05). In accordance with the education level the highest average of the estimation has been peculiar to the specialists with diploma and a bit less for the Bachelors (F=9.5 (df=3), p<0.01). Meanwhile, the owners of doctoral degree did not give much significance to this factor. The resulted reverse correlation (-0.229, p<0.01) enables us to state, that with the higher education degree the influence of the macrostructural migration effects on migration become less significant. According to the education field the importance of this factor has been mostly stressed by the respondents of the humanitarian professions (F=6.6 (df=4), p<0.01). The importance of this factor in migration has been also more stressed by the respondents who gained their degrees in Lithuania and those who have acquired their education abroad paid less attention to this factor (F=6.0 (df=3), p<0.01). The correlation has been also found for this approach (-0.222, p<0.01). Opinions also varied in accordance with the employment situation in Lithuania before the migration abroad: the highest estimation has been given by those respondents who had permanent jobs (F=5.0 (df=2), p<0.01) and those who estimated the salaries as rather good, i.e. or satisfactory (F=2.5 (df=4), p<0.05). Besides, the importance of the factor in migration mostly stressed those who actively searched for the job before the departure abroad (F=4.0 (df=2), p<0.05). The dispersion analysis of the factor disclosed one more interesting aspect: opinions were different according to the estimation of their inner life in Lithuania before they went abroad: the greatest stressed on estimation has been given by the respondents who negatively estimated their inner life in Lithuania (F=3.0 (df=4), p<0.05). The correlation has been found for this approach (-0.172, p<0.01). Estimation of the macrostructural factors of the country and government policy varied depending on the chosen country and aim: the greatest importance has been given by respondents who left for Ireland and Great Britain (F=5.2 (df=5), p<0.01) and those whose aim in migration has been work in the fields unrelated with their profession (F=6.1 (df=5), p<0.01). Besides the greatest weight of the factor estimation has been peculiar to the respondents who left the native country for long period (F=21.7 (df=1), p<0.01).

Ecological factor. The role of ecological situation for migration has been mentioned by more than one-third of the respondents but the weight of this estimation has been relatively insignificant and low (1.8). Besides the benevolent climatic conditions outweighs the discontent with the climate in Lithuania (46.3% and 26.6%, respectively). The correlation has been defined between the attractive climatic conditions abroad and the destination country (0.143, p< 0.01). From this point of view the Southern countries such as Spain and Italy are in the better position.

The opinions about the significance of the ecological factor for migration have not varied in accordance with the socio-demographic characteristics of the respondents. It has been noticed that people who left to the Southern European countries more often than not mentioned the importance of the climate but these estimations were not significant (p>0.05).

Family reunification. Though this factor explains only 4% of the spread, and for this reason cannot be estimated as being significant or interpretable when discussing the reasons of migration but mention should be given that for a large number of the respondents (24.8%) it had a significant or even crucial effect to go abroad. Women distinguished from men significantly (χ^2 =47.3 (df=1), p<0.01). The records of the respondent opinions showed the role of this factor as the one that stops their re-emigration.

Conclusions

Contemporary international migrations reveal increasing movements of persons with the higher skills. For some countries, as well as Lithuania, it means increasing problem of "brain drain".

The analysis of the migration push – pull factors enables us to state that pull factors except the relations in academic society play much greater role for the migration of the people with higher-skills. This confirms one

of the statements that the flows of international migration are generally directed to the rich states but it does not mean that people migrate there from the poorest countries. In this process of migration the decisive role belongs not to the abscence of various possibilities at home but the traction of better possibilities abroad. This statement could be supported also by the findings that general Lithuanian migrants with the higher skills is of a young age and treats his or her social and economic status at satisfactory level before departure. Thus migration, especially of the highly-skilled specialists may exist as long as there are better possibilities in other countries. In spite of the improvement of socio-economic and other conditions in Lithuania the migration of the labour force and especially "brain drain" may not stop as the understanding about better possibilities abroad will increase the potential of this migration.

Education level in the structure of push – pull disclosed some significant correlation: the higher is the education level of the respondents, the greater influence to the departure play not economic effects but better conditions of professional realization.

Four main factors (or groups of causes) of the Lithuanian highly-skilled migration are revealed: professional attraction, socio-economic status in Lithuania, academic system and collaboration, country's macroeconomic status and governmental policy.

Professional attraction reflecting the attractive situation of the labour and professional realization abroad especially was stressed by the migrants with the higher education level (the specialists of technical, biomedicine sciences and other university graduates and respondents with doctoral degrees). Mostly these were people who were satisfied with their professional status in Lithuania and abroad.

Socio-economic factor is related with the push effect of the migrants' socio-economic situation in Lithuania. The bigest stress for the factor was given by the respondents who estimated their socioeconomic situation in Lithuania as negative. If compared with the first group of macro-structural migration effects, this group of socioeconomic aspects has been estimated much more controversially and actually discloses more individual effect to the departure abroad of those people who have had bad financial, labour payment, professional realization and similar conditions in Lithuania. Relatively strong correlations also show that the worse the estimation of the socio-economic situation in Lithuania, the greatest is the influence of these negative socio-economic factors to the departure abroad.

The motives of the state academic system and collaboration had the greatest impact on the respondents who had higher education level (doctoral degrees). Here the opinions show the frustration about the bad education system in Lithuania and the conditions for professional realization in the country. On the other hand we notice the positive estimation of the education system abroad and the possibilities.

Macro-economic factor of migration actually disclosed the discontent with the general position of the country. It was mostly mentioned by the respondent group with the lower socioeconomic status and by people who were disappointed not by individual but general situation in the spheres of labour and life in Lithuania. It could be said that among the respondents who stressed these causes mostly is the economically motivated group of people.

The rest factors of the migration: ecological, family reunification and other motives had less effect on migration. It should be mentioned that the factors such as the climate, marriage with a foreigner in to-days globalization situation when there have been left no barriers for migration as communication constantly improves in the long run may acquire the greater importance.

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Lietuvos "protų nutekėjimo" priežastys: stūmimo ir traukos veiksniai

Santrauka

Šiuolaikinė tarptautinė migracija, stipriai veikiama vykstančių globalizacijos procesų, suintensyvėjo visame pasaulyje, pakeitė savo pobūdį, kryptis, struktūrą. Sparčiai besivystantys tarptautiniai ryšiai politinėje, ekonominėje, socialinėje, kultūrinėje sferose, pokyčiai valstybių sienų kontrolės srityse, tarptautinės darbo jėgos paklausos struktūroje, spartus mokslo bei technologijų vystymasis, naujos komunikacijos ir transporto technologijos sąlygojo darbo jėgos srautų judėjimą globaliu mastu. Tai ypač būdinga ES, taip pat tokioms politinio ir komercinio pobūdžio susitarimų dalyvėms kaip NAFTA, MERCOSUR. Šių susitarimų vystymasis veikia kaip traukos zonos, pritraukiančios darbo jėgą iš įvairių pasaulio šalių.

Pastarojo meto tarptautinės migracijos tyrimai atskleidžia dvi pagrindines tendencijas: pirma, vis svarbesnė tampa "migracijos kokybė", o antra, silpnesnio ekonomikos išsivystymo lygio (arba žemo pajamų lygio) šalys vis labiau yra paveiktos protų nutekėjimo.

Šiuolaikinėje literatūroje paplitusi "protų nutekėjimo" sąvoka iš esmės atspindi aukštos kvalifikacijos darbo jėgos emigraciją. Prie šios aukštos kvalifikacijos kategorijos priskiriami: "aukščiausio lygio verslo vadybininkai, finansų analitikai, specialių paslaugų konsultantai, mokslininkai, inžinieriai, kompiuterių programuotojai, biotechnologai" (Castells, 1996). Skirtingose šalyse paprastai pasirenkama ta žmonių kategorija, kurios emigracija tuo metu kelia didžiausią nerimą. Lietuvoje susiduriant su ypač didele lietuvių emigracijos problema, "protų nutekėjimo" objektu tampa visi aukštajį išsimokslinimą įgiję asmenys, "nutekantys" iš šalies darbo rinkos.

Tikslūs Lietuvos "protų nutekėjimo" (ir emigracijos apskritai) mastai nėra žinomi dėl jų įvertinimo problematikos, tačiau ekspertų vertinimais per laikotarpį nuo Lietuvos nepriklausomybės atkūrimo šalį paliko 200 – 250 tūkst. žmonių. Prognozuojama, kad artimuoju metu Lietuvos žmonių emigracija turėtų dar didėti. Nėra tiksli ir migruojančių žmonių kvalifikacijos struktūra, o tai apsunkina ir šio reikšinio struktūrinių priežasčių bei poveikio šaliai įvertinimą. Kol kas vienintelis būdas išsiaiškinti migruojančiųjų išvykimo priežastis yra rengti didesnio masto jų apklausas, nors tai taip pat nelengvas uždavinys.

Šiame straipsnyje analizuojamas vienas iš klausimų – kaip pasireiškia stūmimo ir traukos mechanizmas Lietuvos išsimokslinusių žmonių migracijoje. Analizė atlikta remiantis "protų nutekėjimo" tyrimo, vykdyto 2004 – 2005m., duomenimis. Šiam tyrimui atlikti vykdyta iš Lietuvos į užsienį išvykusių žmonių su aukštuoju išsimokslinimu ir studentų internetinė apklausa tam specialiai sukurtoje internetinėje svetainėje (<u>www.djmigracija.lt</u>), kurioje įdėta originali autorių sukurta anketa ir atliekamos automatizuotos apklausos, duomenų laikmenos ir eksportavimo procedūros. "Sniego gniūžties" metodu apklausta daugiau kaip 500 užsienyje gyvenančių žmonių, tyrime naudojamos 416 tinkamų anketų. Pirminiai adresatai šioje "sniego gniūžtės" apklausos grandinėje buvo Lietuvos ambasados ir įvairios užsienio lietuvių organizacijos bei elektroniniai klubai, padėję pasiekti kitus užsienyje gyvenančius išeivius iš Lietuvos. Tokiu būdu respondentai pasiekti 27 užsienio šalyse.

Sociodemografiniai apklaustųjų duomenys rodo, kad didžioji išvykusių iš Lietuvos i užsieni žmonių dauguma yra jauno amžiaus (iki 35m.), daugiausia baigę Lietuvos universitetus ir įgiję išsimokslinimą (ar jo siekiantys) įvairiose mokslo srityse bei pakopose. Dauguma respondentų (63%) išvykdami turėjo nuolatinį darbą, o savo socioekonominį statusą Lietuvoje vertino patenkinamai arba vidutiniškai. Daugiausia respondentų buvo išvykę į JAV (44%), kiti į Š.V.Europą (19%), D.Britaniją ir Airiją (16%), Skandinavijos šalis (15%), P.Europą ir kitas šalis (7%). Daugiau nei pusė apklaustųjų nurodė išvykę darbo tikslu (52%), kita dalis (24%) – studijuoti, dar kiti (14%) - emigracijos ir šeimos susijungimo, ir likę (11%) - svečiavimosi ir kitais tikslais. Užsienyje absoliuti respondentų dauguma (84%) nurodė esą užimti įvairiose veiklos srityse, tarp kurių daugiausia buvo minima mokslo, tiriamoji, švietimo sritis (30%). Duomenys taip pat parodė respondentų bendrus socioekonominio statuso užsienyje pokyčius dėl ryškaus profesinės realizacijos sąlygų ir finansinės bei ekonominės padėties pagerėjimo, bet dvasinio ir kultūrinio gyvenimo pablogėjimo.

Stūmimo ir traukos veiksnių įtakos migracijoje analizė parodė, kad traukos veiksniai, išskyrus santykius akademinėje visuomenėje, vaidina kur kas didesnį vaidmenį aukštos kvalifikacijos žmonių migracijoje. Šiuo požiūriu patvirtinama viena iš prielaidų, kylančių iš neoklasikinių makroekonominių migracijos teorinių koncepcijų, kad tarptautinės darbo jėgos migracijos srautai paprastai nukreipti į turtingąsias valstybes, tačiau nebūtinai vyksta iš pačių neturtingiausių šalių. Tai reiškia, kad šiame migracijos procese lemiamą vaidmenį turi ne tiek pats galimybių skirtumas tarp šalių, kiek geresnių galimybių trauka užsienio šalyse. Todėl migracija, ypač aukštos kvalifikacijos specialistų, vyksta paprastai tol, kol egzistuoja geresnės galimybės svetur. Vadinasi, nepaisant socioekonominių ir kitų sąlygų gerėjimo kilmės šalyje (Lietuvoje), darbo jėgos migracija ir ypač "protų nutekėjimas" gali nesiliauti, kadangi suvokiamų geresnių galimybių užsienyje buvimas didins ir šios migracijos potencialą. Šiuos samprotavimus sustiprina ir tai, kad bendru požiūriu Lietuvos aukštos kvalifikacijos migrantai yra daugiausia jauno amžiaus žmonės ir savo socioekonominio statuso požiūriu prieš išvykdami nebuvo blogiausioje padėtyje (bendrai jis buvo vertinamas kaip vidutinio lygmens).

Faktorinės analizės būdu sutankinus migracijos stūmimo ir traukos veiksnius, gautos keturios pagrindinės išsimokslinusių žmonių išvykimo priežasčių grupės:

- viliojančios darbo ir profesinės realizacijos sąlygos, atspindinčios iš esmės "gerų galimybių ieškojimo" tendenciją, kuri būdinga daugiausia aukštesnio išsimokslinimo respondentams (techninių, biomedicinos mokslų diplomuoti specialistai, mokslų daktarai). Daugiausia tai savo profesiniu statusu Lietuvoje ir užsienyje patenkinta žmonių grupė;
- socioekonominės sąlygos Lietuvoje, t.y. grupė veiksnių, turinčių daugiau stūmimo iš šalies efektą ir atspindinčių daugiau individualios padėties įtaką išvykimui į užsienį: menkas finansines, darbo užmokesčio, profesinės realizacijos ir kitas panašias sąlygas. Šie veiksniai daugiausia buvo akcentuoti neigiamai savo socioekonominę padėtį Lietuvoje vertinusių respondentų. Šiuo požiūriu rasta ir statistiškai reikšmingų sąryšių;
- valstybės mokslo sistema, atspindinti teigiamą požiūrį į užsienio mokslo sistemą bei galimybes ir, kita vertus, nusivylimą nekokybiška Lietuvos mokslo sistema bei profesinės realizacijos sąlygomis. Čia atkreiptinas dėmesys, kad stūmimo ir traukos santykio požiūriu santykiai akademinėje visuomenėje pasireiškė persveriančiu stūmimo (iš Lietuvos) efektu. Mokslo sistemos veiksnių grupė stipriausiai veikė aukštesnio išsimokslinimo žmones (mokslų daktarus);
- makroekonominės šalies sąlygos ir valstybės politika, t.y. motyvai, susiję su makrostruktūrinėmis šalies sąlygomis, turinčiomis tiek traukos, tiek stūmimo efektus. Daugiausia ši veiksnių grupė buvo akcentuojama žemesnio socioekonominio statuso respondentų. Šios priežastys labiau paplitusios tarp nusivylusiųjų ne tiek individualiomis, kiek bendromis Lietuvos darbo ir gyvenimo sąlygomis; taigi jos aiškiai atspindi vyraujančią nusivylimo šalimi nuotaiką. Tarp stipriausiai šias priežastis pabrėžusių respondentų išryškėjo ekonomiškai motyvuota žmonių grupė.

Kitos migracijos priežastys – ekologiniai, šeimos susijungimo ir kiti motyvai – turėjo mažesnės reikšmės šioje migracijoje. Vis dėlto verta pažymėti, kad tokie veiksniai kaip klimato sąlygos ir (ar) santuoka su užsienio piliečiu šiuolaikinėmis, globalizacijos sąlygomis, mažėjant susisiekimo ir migracijos apskritai barjerams, ilgainiui gali įgauti didesnę svarbą.

Raktažodžiai: "protų nutekėjimas", aukštos kvalifikacijos darbo jėgos migracija, stūmimo ir traukos veiksniai.

The article has been reviewed.

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