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The Problems Caused by Intellectual Exodus. The Solutions to Stem the Brain Drain in Republic of Moldova

Abstract

The intellect exodus remains a phenomenon of the XX–XXI century, its study being especially valid now because the effects it can generate are unpredictable, contradictory and sometimes quite difficult to perceive. The migration of highly educated people across international borders, most often from relatively poor countries of origin to relatively rich recipient countries requires particular attention and close monitoring. The article examines patterns of recent emigration of the highly-educated from developing countries, and particularly from Moldova – the “brain drain”. The purpose of this paper is to assess the issue that is caused by highly educated and skilled migration, and to try to analyze the impact of this phenomenon on the economic development of the countries of destinations and on the origin countries. Also, in article is shown the global action and solutions undertaken by the authorities in the Republic of Moldova to stem the brain drain. The paper predominantly uses the analysis method to expose and explain the phenomenon of intellectual migration from an economic perspective. Synthesis is used as a research method to highlight and present the links between brain drain and the economic development of a state.

Key words: brain drain, labor migration, the effects of brain drain, qualified human capital.

Introduction

The modern period is characterized by the fact that the world economies are becoming increasingly globalized, and in such ways that create both opportunities and worries.

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Many sectors of the economy are deeply touched by globalization, including an increase in trade with products, services and ideas, the movement of factors of production, such as capital and labor, and the movement of productive activity across international borders. The migration of highly educated people across international borders, most often from relatively poor countries of origin to relatively rich recipient countries requires attention and close monitoring. This article examines the patterns of recent emigration of the highly-educated from developing countries – the “brain drain”.

Even though brain drain or skilled labor migration is a long-standing phenomenon, in recent years it has become a matter of great concern. “Brain drain” or “skilled labour migration” can be defined as a one-way movement of highly skilled people from developing countries to the developed countries that only benefits the industrialized countries. To what degree are qualified migrants interchangeable with indigenous specialists is a question worthy of answering. Therefore, the important point is to determine the effectiveness of migration and its impact on the income and wealth of the countries of destination. Major migration waves in Europe that have occurred in recent decades, especially after the crisis in Syria, raised the issue of the effect that migrants have on the national economy of the state. Until now, international assessments have been reduced to the fact that migrants will help to resolve the problem of labor shortage and achieve an increase in economic growth. But is it really so?

As for the problem of brain exodus from Moldova, the situation is quite threatening. Moldovan society is considerably affected by the brain drain, which has a direct negative impact on the development of the economy, science and technology. Exodus of brains and skilled workers strongly affect the public and private sectors of the economy, leaving behind distortions on social equality and income per capita. With the amplification of the phenomenon of brain drain and exodus of skilled labor, the outlook for innovation is diminishing, which is in fact the most important catalyst for the economy and the development of a state. Moldova lacks innovation and technology transfer, much needed for an economy in transition, which can be assimilated and put into practice only by a highly qualified staff. The state needs public policies that encourage the studying youth to practice their professions in the country in exchange for real social and economic benefits. Moldovan population decreases rapidly and will continue to decline due to aging and low birth rates, which are detrimental.

The purpose of this paper is to assess the issue that is caused by highly educated and skilled migration, and to try to analyze the impact of this phenomenon on the

economic development of the countries of destinations and on the donor countries. Additionally, the global and national action and solutions to stem the brain drain are explored.

The paper predominantly uses the analysis method to expose and explain the phenomenon of intellectual migration from an economic perspective. The article describes the situation of brain drain in Moldova and shows the steps used in the Republic to improve the current situation. Synthesis is used as a research method to highlight and present the links between brain drain and the economic development of a state.

1. The Drain of Minds – a Kind of Modern Scientific Migration

For developed countries, this problem is more urgent than for developing economies. Over the past three decades, the world's population aged 60 and over has doubled; by 2050 its share will double again. For example, in Germany, without taking into account the refugee factor, the able-bodied population would have decreased by 8.7 million by 2050 (TASS). The number of elderly people in developed countries has already exceeded the number of minors. It is expected that by 2050 there will be twice as many retirees in the United States, Western Europe and Japan as young citizens.

According to a recently published report of Global Commission on International Migration (GCIM), today, there are nearly 200 million migrants internationally and around 60% of them are in developed countries, while the other 40% in developing countries. The report also acknowledges that almost one in every 10 persons living in developed countries is a migrant. Each year the more developed regions receive about 2.3 million migrants coming from the less developed regions, accounting for two thirds of their population growth. The policy of covering the labor shortage by migrants has led to the situation that in the main countries of immigration, newcomers constitute 5–10% of the population and 10–25% of its economically active part (United Nations, 2016).

The recent migration policy of Germany is based on the hypothesis of the favorable impact of migrants on the host economy if the basis of immigrants is unskilled labor. The main idea is the filling of low-skilled specialties by migrants and the preservation of an average and highly qualified labor market for the indigenous population. This

position explains the approach to Ukraine, in which the share of potential highly qualified emigrants in the EU exceeds the share of low-skilled workers. According to Europeans, this poses a threat to indigenous specialists in the EU countries. That is why the European Union opens the doors for low-skilled workers from the countries of the Middle East and Africa arriving through the humanitarian migration channel and closes them to workers from Ukraine (Strielkowski, Šperková 2016) But how do refugees affect the situation in the economy of Germany, for example? The authorities of this country cite the data of the International Monetary Fund report, according to which Germany's GDP increased by 0.3% in 2016. Such growth is due to social welfare spending, which increased significantly in 2016–2017, mainly due to payments and social benefits to refugees (Deutsche Bundesbank. International Monetary Fund. Accessed July 22th 2016).

Migration, nevertheless, affects the economy ambiguously. The improvement and acceleration of the economy at the expense of migrants depends on how successfully new labor resources are integrated into society and their ability to give up on state funding in the future. In places where immigrants are concentrated, social services and payments are heavily pressured by the need for schooling, health care and social services for poor immigrant families that are not compensated for (Ottaviano, Peri, 2012). The 2013 study "The Economic Impact of Immigration in OECD Countries" showed that in developed European countries, as well as in Australia, Canada and the US, its positive impact is close to zero, or at best 0.5% of GDP. The study analyzed the migration of the last 50 years. Its influence is most noticeable in Switzerland and Luxembourg, where immigrants provide a net profit of 2% of GDP. The study said that although migrants do not make a tangible contribution to the country's budget, they are not a burden to it. The document noted that in most countries, migrants pay in the form of taxes and social contributions more than they receive in the form of benefits (facilities). However, since the salaries of migrants are lower than the salaries of local workers, the level of deductions to the budget, respectively, is also smaller. The wide involvement of low-skilled migrants in those or other industries can reduce labor productivity. Although low-paid immigrants can save financial resources of employers, in some cases this slows down the modernization of production (OECD–UNDESA, 2013).

Nevertheless, the use of cheap labor by foreigners underlies the functioning of a number of industries in developed countries. For example, in Belgium, immigrants make up half of all workers in the mining sector, in Switzerland – 40% of construction workers, in the USA – 70% of those employed in the agrarian sector. The newest branches of the economy in developed countries, on the other hand, are now being

upheld in large part by attracting a qualified foreign labor force. Thus, in the sphere of information technology in the US, 18.3% of the employed are migrants. 60% of the authors of the most cited works on physics are of foreign origin and 30% – in other natural sciences in the United States. About a quarter of the founders or presidents of US biotechnology companies were also natives of other countries. Migration has an ambiguous effect on the ratio of the working and non-working population. Everything depends on the number of dependents per unit of labor force entering the country (children, spouses, non-working parents) (Colombo, 1998). A vivid example is Germany in the 1970s and 1980s. In 1972, which was the peak of labor migration, the share of employed foreigners was 65%. However, in 1981, against the background of the cessation of migration inflow, this indicator fell to 17%, while for Germans it was 44%. Risks coming from migrants mainly concern unskilled local workers, the already present migrants, who are entrenched in the labor market and strive to increase the cost of their payment, as well as women. Thus, the results of French studies indicate the negative impact of the Maghreb countries natives on the employment of local women workers and their earnings (Borjas 2006).

Those who lose their jobs due to immigrants, turn to the state for benefits (The Economist e-Journal, 2016). As a result, pressure on the state budget of the host country remains. Immigration, the key part of which consists of low-skilled workers, helps to reduce the level of payment for their labor as compared with the payment of skilled workers. However, this factor has the opposite effect: increasing the number of specialists at any level leads to a decrease in the cost of services, which favors society as a whole, but threatens the local labor force (The Economist e-Journal, 2016) In the worst conditions for low-skilled categories of workers, migration contributes to the improvement of the situation of more qualified groups of workers (Card, 2005).

Migration also has an ambiguous impact on the national budget. According to a number of American studies, the average immigrant receives less in social benefits and pays more in taxes and contributions than the average native (Blau, Donehower, 2017). However, the impact on the budget depends on the length of stay of the foreigner in the host country and the dynamics of immigration. Newly arrived foreigners have a short-term negative impact on the country's budget, as they need employment or strengthened government support. As the length of stay in the country and the income of migrants increase, their payments to the budget grow, and the benefits they receive are reduced. Accordingly, the state of the budget is beneficially affected by the increase in the proportion of highly educated migrants. This applies to a lesser extent to workers of medium qualification (Richwine, 2016).

However, coming to developed countries (part from internal migration in the EU) are mainly low-skilled labor, and therefore impact on the state budget is more negative. With the help of migration it is impossible to solve future budget problems related to population aging. Migrants, regardless of age, are definitely not able to compensate for the corresponding losses in the treasury. In this regard, selective immigration policy can be used here only as an additional economic tool. Despite attempts to regulate migration by host countries, as well as to their attempts to filter these flows qualitatively, a significant proportion of migrants continue to be accepted for humanitarian reasons, to arrive illegally without being screened and controlled, or to enter family reunification programs. 70–80% of migrants in the United States, Sweden and Denmark account for people arriving under the programs of family reunification, which deprives the state of the opportunity to regulate the quality of labor resources, and hence their impact on the economy. Due to the low proportion of workers, for whom the work is the main motivation to move (only 10–15%), the volume and immigration structure does not always correspond to the economic needs of the host society. Hence, the economic effect of migration has a dual character and poorly predicted long-term consequences.

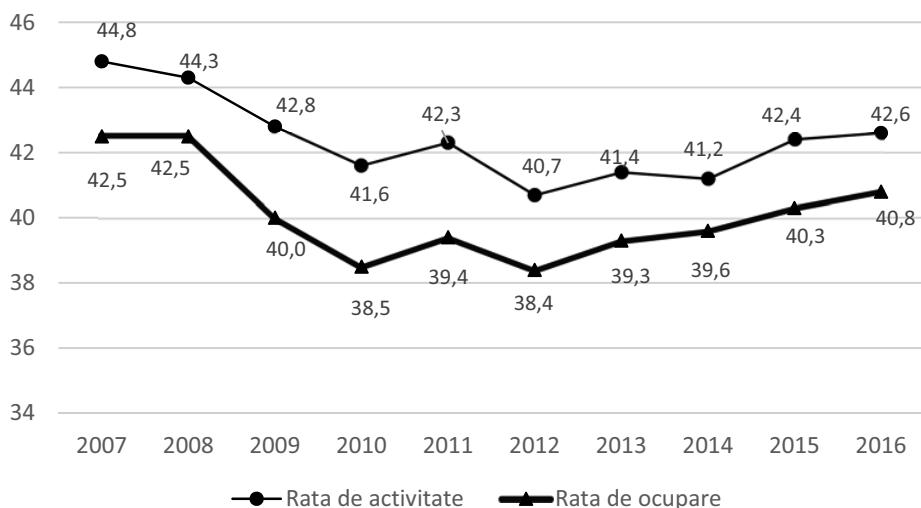
2. Labor Market in the Republic of Moldova

Analysis of the labor market in Moldova in recent years reflects a continued reduction of the workforce, including the highly skilled, which negatively affects the national economy of the country. In 2016 the economically active population of the R. Moldova constituted 1272.8 thousand people, without any change in terms of 2015. The rate of the population activity for 15 years old and over stood at 42.6%, being practically at the level of 2015 (42.4%). This indicator reached higher values among the male population – 45.4%, compared to the female – 40.1%. In the age group 15–29 this indicator had the value of 30.9%, and in the age group 15–64 – 47.2%. The rate of activity of the elderly working population according to national legislation (16–56 years among females and 16–61 years old among men) was 50.0%. The employed population constituted 1219.5 thousand persons, with no significant changes compared to 2015 (+ 1.3%).

As in the case of the economically active population, there were no disparities between the sexes (50.3% females and 49.7% males), while the percentage of men in rural areas was higher compared to the number of people in the urban sphere (relatively 54.1% of the rural population and 45.9% of the urban sprawl).

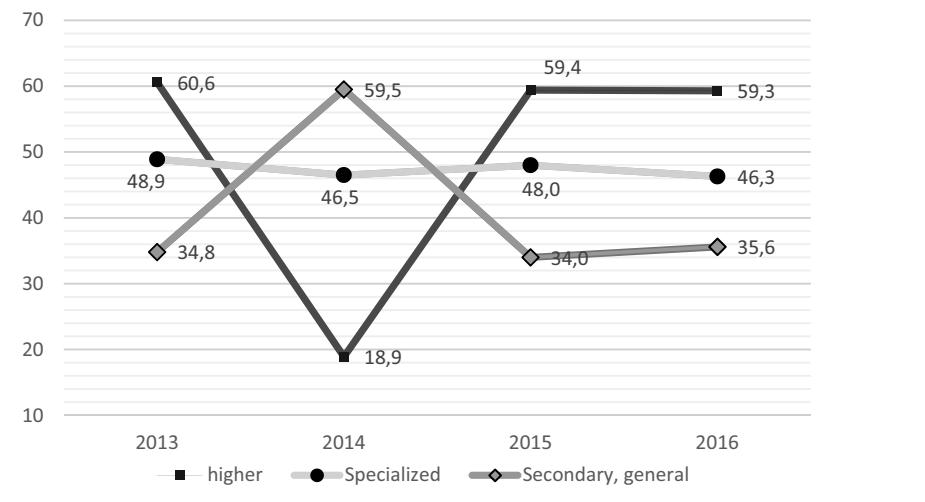
The rate of occupation of the population at the age of 15 years and older (the proportion of employed persons aged 15 and the total population of each age group) was 40.8% (+0.5 pp). The male occupancy rate (43.0%) was higher compared to that of females (39.0%). The rate of employment of the working age population (16–56 for women/61 for men) was 47.7%, the age group 15–64 years – 45.2%, and in the age group 15–29 years this indicator has a value of 28.4% (National Bureau of Statistic of the Republic of Moldova, 2017).

Figure 1: Evolution of the number of workers and occupations (%)



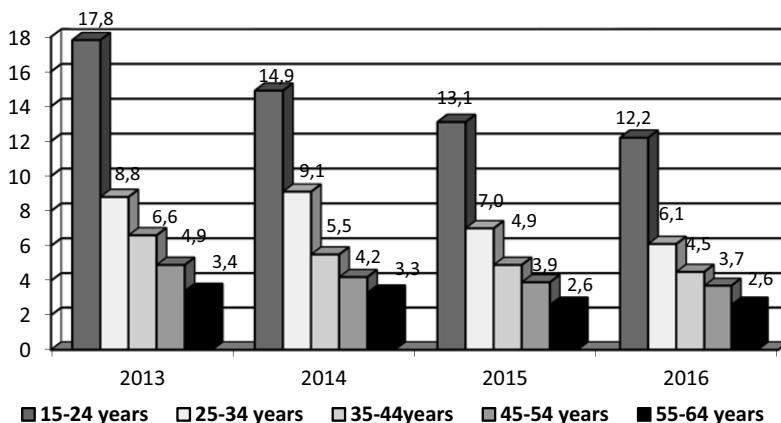
Source: National Bureau of Statistic of the Republic of Moldova, 2017.

Unusually, the very modest success of the economy is hampering the growth of jobs. An inalienable role is also attributed to the incompatibility of demand in the labor market with the academic training of highly qualified specialists. The employment rate for people graduating from higher education institution and specialized secondary schools is higher, because with the skills the possibility of placement on the labor market also increases. Unemployed people are often offered jobs beyond their level of training, so the existing workforce is under-prepared and less compatible with labor market requirements. The inadequacy of the quality and competitiveness of the human potential with the high needs and demands of training and qualification in the jobs declared by the economic agents leads to the poor alignment of the nature of demand to the offer on the labor market (National Bureau of Statistic of the Republic of Moldova, 2017).

Figure 2: Employment rate of labor force by educational level (%)

Source: National Bureau of Statistic of the Republic of Moldova, 2017.

Highly skilled labor remains disappointed by the monotonous nature of the relationship between labor supply and demand. As a result, unskilled labor finds its place in the labor market rather than the highly qualified one, the latter becoming more vulnerable to migration. Unemployment increases virginaly in relation to employment, and factors such as low salaries or lack of experience determine the vulnerability of the highly skilled labor force in the Moldovan labor market.

Figure 3: Unemployment rate by age category

Source: National Bureau of Statistic of the Republic of Moldova, 2017.

Upon analyzing Figure 3 (National Birou of Statistic, Moldova, 2017) it is observed that among the young people (15–24 years old) the unemployment rate is the highest, which is determined by the fact that young people in the Republic of Moldova face difficulties in finding their employment after completing their studies. On the one hand, lack of experience and seniority in work and, on the other hand, the lack of activities aimed at encouraging young people's participation creates a precarious situation. Employment is paramount for social integration. With a quality job, young people are stimulated to increase their economic potential, learn continually and contribute to the socio-economic development of the countries. In Moldova the path of young people from the studies to the workplace is aggravated by the fact that the young population is decreasing and so many young people choose to emigrate abroad to work. In the same way, but to some extent the same reasons, there is also highly skilled labor migration (National Bureau of Statistic of the Republic of Moldova, 2017).

Starting with the first years of independence, in the 1990s, the Republic of Moldova faced the generic phenomenon called "brain drain". Its essence lies in highly qualified people leaving the country to live abroad, in a very significant number and indefinitely. In the overwhelming majority of cases, these are people with higher education (graduate or undergoing training) and possibly with professional experience in the field of specialization. The extremely low salary levels, the degradation and the lack of a modern material base adapted to the developments in the field, the budget cuts for the respective institutions – all these factors led to the gradual devaluation of academic and scientific activity. Under these circumstances, some intellectuals in post-Soviet space in general and in Moldova in particular emigrated in search of an acceptable standard of living and well-deserved social recognition. The extremely unfortunate migration phenomenon in the case of Moldova is accentuated by the depressed situation, characterized by the unstable pace of macroeconomic indicators development in recent years. The main dysfunction of the labor market is the discrepancy between demand and supply of labor. At the same time, there is a shortage of skilled labor, which is reflected in two aspects: the lack of qualified staff and the high fluctuation in certain occupational segments. On the other hand, there is a saturation of the labor force, especially in the wholesale and retail trade and the public administration. Labor productivity fluctuations are generated by low wages that do not even meet the primary needs of employees, as a result, employees are either looking for a better paid job or choosing to work abroad, where wages are well above those offered in Moldova (Moraru, 2011).

At the same time, Moldovan economic agents face a shortage of staff, due to emigration, as well as because of the low qualification of the labor force. 85% of companies report that they are facing the problem of lack of skilled labor, businesses require a higher level of professionalism or specific skills from workers. Most often, the economic agents mention that they are confronted with the significant gap between their needs and the professional knowledge of the graduates of the educational institutions. Experts argue that although some mechanisms to mitigate labor market problems have made an impact, they are not noticeable, largely since human capital is not sufficiently capitalized. Human capital is a constraint for the development of the national economy and the problems in this field are determined by developments in education and health (Moraru, 2011).

In the case of the Republic of Moldova, the situation of young people on the labor market differs from that of the EU, this being a dilemma on the labor market over the last decade. On the one hand, the academic training of young specialists reduces their compatibility with the demand in the labor market, thus creating serious disparities in the process of employing them. On the other hand, their professional training is in many cases questioned by employers in the absence of practical specialized knowledge (Monitor social, 2016). Also, what makes young people vulnerable to the labor market in terms of a highly skilled workforce is the attitude shown by young people due to lack of interest in studies, which in turn is influenced by the unattractive jobs in the job market in Moldova. In the Republic of Moldova the creation of the labor supply is conditioned especially by the demographic processes, the economic and political situation. Unemployment among young people is largely due to low wages in the employment provided by employment agencies. This leads to the real loss of human capital and the emergence of a shortage of highly qualified cadres capable of applying their intellectual potential. Assessing the knowledge potential and trying to work at the workplace would increase productivity, but in fact many young specialists are sceptical about their employment opportunities and then working conditions.

3. Global and National Action and Solutions to Stem the Brain Drain

The source countries of the brain drain phenomenon, because they are negatively influenced, are looking for measures to limit it, while welcoming countries are

interested in encouraging this, bringing them all kinds of benefits, primarily economic. One of the main causes of brain drain amplification process is the lack of jobs and poor-quality jobs. The European Union has approved a 75% employment target for men and women for the 20–64 age group by 2020: an ambitious commitment to the sustainability of the European social model, social welfare systems, economic growth and public finances. It will not be easy to achieve the goal. The crisis has reduced employment to 69% and increased unemployment to 10%; assuming that the labor market is stabilizing. Thus, achieving a 75% employment by 2020 will require an average increase in employment slightly above 1% per year. (Jeff, Chu, 2004)

Decreased fertility caused the EU working age population (15–64) to decline already in 2012, even if immigration flows continue. Labor force is an essential value for development of a competitive, sustainable and innovative economy under the Europe 2020 objectives. In times of budgetary constraints and global competitive pressures, EU policies on employment and skills that help shape the transition to a green, smart and innovative economy, must be a priority. The EU can solve all these problems and can substantially increase the employment of women, young people and older workers, but only through decisive action, focused on four key priorities (Jeff, Chu, 2004):

- First, better functioning of labor markets. Chronic high unemployment is an unacceptable loss of human capital: it discourages workers and leads to a premature withdrawal from the labor market and social exclusion. Flexicurity policies are the best tool for modernizing labor markets: they accelerate the pace of reform, reduce labor market segmentation, promote gender equality, as well as take advantage of transitions.
- Secondly, a more competent workforce capable of contributing and adapting to technological change through new patterns of work organization. Investing in education and training systems, anticipating the skills needed, dissonance and guidance services are fundamental factors in increasing productivity and competitiveness, accelerating economic growth and, finally, increasing employment.;
- Third, better job quality and working conditions. There is no compromise between quality and quantity of employment: high levels of job quality in the EU are associated with equally high labor productivity and participation in employment. Working conditions and the physical and mental health of workers must be taken into account to meet the demands of the professional careers of the present, characterized by more transitions between more intense and demanding jobs and new forms of work organization;

- Fourthly, stronger policies to promote job creation and labor demand. Economic recovery must be based on job-generating growth. Suitable conditions for creating more jobs, including high-performance companies and business models based on intensive research and development must be achieved. Policies that enable the capitalization of key sources of job creation and the promotion of entrepreneurship and self-employment are also essential to the growth of employment (Communication from the Commission, 2010).

Support for job creation and (re)allocation of employment should be targeted at sustainable and growing businesses, especially among SMEs. Policy initiatives must continue to seek both to improve productivity and employment by helping to allocate human resources to the economic and social needs identified by the Europe 2020 strategy and to achieve the optimal balance between trade and non-commercial sectors. It should also improve the labor market situation of more vulnerable groups such as young people, women, low-skilled workers, elderly workers and minority groups. In order to respond to the main structural economic challenges facing Europe, transversal measures need to be complemented by specific actions in sectors with a particularly high potential for job-creating growth. Employment policies to help to create favorable conditions for job creation (Jauer, Liebig, Martin and Puhani, 2014). For this, they can mobilize the EU budget (in particular the European Social Fund). In addition to the measures on offer, such as investment in skills and labor activation, and services for linking supply and demand, there are a number of tools that have a positive effect on the demand for labor:

- Targeting employment subsidies to new jobs. Creating adequate incentives and employment subsidies should motivate employers to make new net recruitment, creating jobs that would not otherwise be created;
- Reduce the fiscal burden on labor cost in a budget-neutral way by moving to environmental taxes, consumer or property taxes, with adequate redistribution effects. However, preparation and implementation need to be carefully planned so that they do not have a negative effect on the employment prospects of the groups (immediately) below the eligibility threshold;
- Promoting and supporting independent activities, social enterprises and new businesses. Encouraging entrepreneurship, greater availability of new business support services and microfinance, and mechanisms for transforming unemployment benefits into grants for start-ups play an important role in stimulating self-employment and creating new jobs. Social economy and social enterprise actors are important factors in creating inclusive and socially inclusive

- jobs and require specific support, for example through public procurement and access to finance;
- Transforming informal or undeclared work into a regulated employment. Undeclared work is illegal. It also has serious budgetary implications, by reducing tax revenues and social security contributions. It has a negative impact on productivity and working standards, skills development and lifelong learning. It also does not provide a solid basis for pension rights and access to healthcare. Preventing and combating undeclared work, full application of Directive 2009/52 /EC on sanctions and illegal workers and measures to help workers who are not declared to be integrated into the labor market contribute to the fiscal consolidation process, creating a level playing field for businesses and improving the quality of jobs.

Stimulating net wages. A higher net salary is an incentive for hiring lower-skilled workers, as reducing wage pressure will allow employers to offer vacant jobs more easily. However, income replenishment should be designed in such a way as to avoid the “low wage trap”. These benefits have positive effects when there is a significant pay gap in the bottom of the income scale;

Modernize wage setting systems to align salary levels with productivity developments and encourage job creation. The existence of wage setting systems to ensure that real wage growth reflects the evolution of labor productivity and labor market conditions is a prerequisite for ensuring that increased production leads to a corresponding increase in demand for labor and job creation. The evolution of wages must take into account, according to national collective bargaining practices, the competitive position of the Member States. While salary moderation or adjustment may be necessary in some sectors or Member States, where wages have remained significant as a result of productivity developments, targeted wage increases could be expected to contribute to aggregate demand (Collett, 2015).

Measures adopted internationally to attract and retain human capital in general and scientists in particular are very diverse. One of the main strategies used to attract and retain high-skilled labor at national and international level is to increase investment in research, i.e. to allocate additional resources for technical-material endowment and the salaries of researchers.

In the case of the Republic of Moldova, the return of the highly qualified labor force would entail enormous costs related to the modernization of the research and innovation infrastructure to create conditions like those in the West, to reduce the wage gap, to insure the privileged conditions in the institutional hierarchy, etc. (Borodak, Piracha, 2010). An alternative to this long-lasting process would be the

creation of scientific diasporas abroad, which could be an intermediate stage of the return process in the country of origin. The Academy of Sciences of Moldova launched in 2008 the initiative “Development of cooperation within the scientific Diaspora of the Republic of Moldova”. The initiative aims primarily at creating a platform for interaction between the scientific Diaspora and the Moldovan scientific community through the phased creation of the Scientific Diaspora Network of the Republic of Moldova. A practical example in this respect is the official launch on 30 April 2010 of the Joint Research Project on “Connecting the Scientific Diaspora of the Republic of Moldova to the Scientific and Economic Development of the Country of Origin” funded by the Swiss National Science Foundation and the Swiss Development Agency. The overall objective of this research project is to promote knowledge-based data on the Moldovan Diaspora in the main destination countries and to provide a set of recommendations of the Government of Moldova, the scientific community and the scientific Diaspora of the Republic of Moldova, recommendations which can boost the development of the potential of the scientific community.

The Expert Return Program, implemented by the International Center for Migration and Development (CMD) by the German Federal Ministry of Economics, Cooperation and Development, supports the professional reintegration of university graduates and experienced experts from the developing countries and who have completed their professional training in Germany and are interested in returning to their home country. Priority for the Program is the placement of those experts who have skills in areas relevant to development policies in their native country. Besides support in the process of identifying and providing job placement services a free consultation program financially supports interested experts to return home (Returning Experts Program) (Bratu, 2015). In October 2010, the International Organization for Migration, Mission to Moldova (IOM), in partnership with the Ministry of Youth and Sports, the Ministry of Education and the Employment Agency, announced the launch of a pilot program to promote and support temporary or permanent return in Moldova, 30 young Moldovan graduates from abroad to engage in private/public institutions in Moldova to exchange experience and implement abilities. This program is implemented within the framework of the project “Support to the implementation of the migration and development component of the EU-Moldova Mobility Partnership”, funded by the EU and implemented by the IOM in cooperation with the Government of the Republic of Moldova.

There is a wide range of possible Diaspora activities that potentially can contribute to Moldova’s development and may merit public support in the future.

Their development impact should be evaluated rigorously because either government or donor funding would be involved.

All of the above is promoted by the Pilot Program PARE 1 + 1, operating in Moldova, to attract money transfers of migrants in businesses. The main goal is to mobilize the human and financial resources of Moldovan migrants for the sustainable economic development of the Republic of Moldova by stimulating the creation and development of small and medium-sized enterprises. The program operates according to the rule of “1 + 1”, that is, each invested Moldovan leu earned abroad will be supplemented by 1 leu (MDL) in the form of a grant from the Program budget. (Bratu, 2015)

Within this program, the entrepreneurs have started and developed new business ideas, which had not been implemented in Moldova. The PARE 1 +1 enterprises were among the first to develop businesses in the biomass field (pellets and briquettes, green energy), exotic animal farming (chinchilla, ostriches, vipers), grow milk thistle, paulownias, rising added value to agricultural products by creating greenhouses, refrigerators, mills, snail farm, agricultural tourism, etc.

From the economic point of view, this program proved to be effective both by a large number of open enterprises and by the fact that each leu invested by the state attracted private investments of 3–4 lei. The figures confirm this effectiveness. During the last 7 years, under the PARE 1 + 1 program, 927 businessmen received grants. They created about 3000 new jobs and 8 million euros were reinvested in the business. The PARE 1 + 1 program aims to mobilize the human and financial resources of Moldovan labor migrants in Moldova’s sustainable economic development by encouraging the creation and development of small and medium-sized enterprises by migrant workers and remittance recipients. Recipients of assistance are labor migrants, recipients of their remittances, relatives of the first degree of kinship. At the same time, the experience of Moldova is studied by other countries, in which there are many migrant citizens. An example is Serbia, which is intensively studying the Moldovan experience of implementing such a project in its country. The aforementioned projects aimed to address the phenomenon of brain drain by promoting the transfer of new ideas and skills in migration of young and highly qualified labor force mobility.

Conclusions

The source countries of the brain drain phenomenon, because they are negatively influenced, are looking for measures to limit it, while welcoming countries are interested in encouraging this trend, bringing them all kinds of benefits, primarily economic. One of the main causes of brain drain amplification process is the lack and poor-quality jobs. In times of budgetary constraints and global competitive pressures, EU policies on employment and skills that help shape the transition to a green, smart and innovative economy, must be a priority. The EU can solve all the problems and can substantially increase the employment of women, young people and older workers, but only through decisive action, focused on four key priorities: better functioning of labor markets; more competent workforce capable of contributing and adapting to technological change through new patterns of work organization; better job quality and working conditions; stronger policies to promote job creation and labor demand.

Measures adopted internationally to attract and retain human capital in general and scientists in particular are very diverse. One of the main strategies used to attract and retain high-skilled labor at national and international level is to increase investment in research, i.e. to allocate additional resources for technical-material endowment and salary of researchers.

In the case of the Republic of Moldova, the return of the highly qualified labor force would entail enormous costs related to the modernization of the research and innovation infrastructure to create conditions similar to those in the West, to reduce the wage gap, to insure the privileged conditions in the institutional hierarchy, etc. In the opinion of certain Moldovan experts, an alternative to this long-lasting process would be the creation of scientific diasporas abroad, which could be an intermediate stage of the return process in the country of origin. Taking into consideration these circumstances and recognizing the necessity of involvement of the scientific Diaspora of the Republic of Moldova, the Academy of Sciences of Moldova launched in 2008 the initiative "Development of cooperation within the scientific Diaspora of the Republic of Moldova".

The initiative aims primarily at creating a platform for interaction between the scientific Diaspora and the Moldovan scientific community through the phased creation of the Scientific Diaspora Network of the Republic of Moldova.

The Pilot Program PARE 1 + 1, operating in Moldova, aimed to attract money transfers of migrants in businesses. This program is one of the most successful national programs supported by the government and the best platform for cooperation between government and business. Along with the fact that it has a very strong component on training entrepreneurs for business development, the program promotes the development of small and medium businesses in rural areas, the development of villages in various regions of the country. The main goal is to mobilize the human and financial resources of Moldovan migrants for the sustainable economic development of the Republic of Moldova by stimulating the creation and development of small and medium-sized enterprises. Within this program, the entrepreneurs have started and developed new business ideas, which had not been implemented in Moldova. This is the best practice of Moldova and therefore is studied by other countries where there are many migrant citizens. For example, Serbia is intensively studying the Moldovan experience of implementing such a project in its country.

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