

WAYS OF RETURN OF EDUCATIONAL MIGRANTS, MINIMIZING LOSSES OF INTELLECTUAL CAPITAL AND INNOVATIVE POTENTIAL AS A RESULT OF THE WAR*

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Wars cause a number of socio-economic changes in the usual position of countries that have both instant effects and long-term influence on them. These changes include educational migration problems, intellectual capital losses, and innovative potential. The purpose of the article is to determine the necessary conditions for the return of educational migrants, minimizing the losses of intellectual capital and innovation potential due to the influence of war on the basis of the experiences of different countries. Scientific publications were investigated for the realization of the goal, which discussed the importance of adapting national institutions to the needs of the injured society, the role of human capital in ensuring international competitiveness in the postwar period, and the importance of intellectual potential to restore countries. In the course of the study, it was outlined that the encouragement of educational migrants to return can occur by creating the conditions of application of knowledge gained in different cultural environments, in practice, through the quality development of government and support of private institutions. In addition, measures were identified for the systematic restructuring of national science relations with society, government, and business to ensure the maximum benefit on its part for the development of the post-war economy. Particular attention was paid to the importance of the reintegration of military persons into civilian life. Given the modern vector of development of the world economy, an analysis of ways of minimizing the loss of intellectual capital and preserving innovative potential was carried out, taking into account the experience of the Russian-Ukrainian war and the development of Military Tech. It was also to consider the role of supporting the internal intellectual property market to stimulate the return of entrepreneurs to the country and to leave it. The importance of instant response to socio-economic changes to minimize their impact on the country, in the long run, is emphasized.

Keywords: war, socioeconomic influence, educational migration, innovative potential, intellectual capital.

JEL Classification: I25, J60, O34

Formulation of the problem. Wars become a point of change for the socio-cultural and economic situation of countries: a point of overload or no return. Since the current stage of the development of the world economy positions intellectual capital as one of the most important components for maintaining the international competitiveness of states, the lack of this resource can be felt especially acutely in countries where, due to the war, ordinary citizens and national businesses are forced to choose: to stay or emigrate, and later - or it is advisable to return. The negative long-term impact on economies from a rapid decrease in human capital leads to a long process of rebuilding national economies, which in turn forces states to look for ways to minimize the loss of citizens and develop incentives for their return.

Analysis of recent research and publications.

The importance of preserving and returning intellectual resources for the reconstruction and long-term development of countries that have suffered losses due to military actions determines numerous studies in the world scientific discourse. Therefore, Arenliu A. and Weine S.M. analyzed the problem of state institutions' unpreparedness for the needs of returned migrants, using the example of post-war Kosovo [1]. The microeconomic impact of the civil war on the civilian population of Guatemala was studied in the work of scientists Chamarbagwala R. and Moran H.E. [2]. The correlation between the economic success of immigrants in the country of destination, the reasons for leaving their home country and their education was analyzed in their work by Dustmann K. and Glitz A.

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[3] Koshechkin A. assessed the role of human capital in ensuring the international competitiveness of Ukraine in the post-war period [4]. Belyakov T. wrote about the positive structural shifts in the economy and society that generate innovations and their importance for the development of entrepreneurship in wartime and postwar periods [5]. Meanwhile, in the work of I. Koval, the role of intellectual property and the need to modify the legislation for the most effective use of intellectual potential for the socio-economic recovery of the country from the damage caused by the war were investigated [6].

The purpose of research. The purpose of the article is to find mechanisms and ways of creating opportunities for the return of educational migrants, minimizing the loss of intellectual capital and innovative potential due to the impact of war, based on the experiences of different countries.

Presentation of the main research material. Effective implementation of the post-war reconstruction of the economy of any country requires considerable resources, particularly intellectual ones. Uncertainty in the possibility of carrying out a full-fledged educational process, its quality, and the search for better prospects cause educational migration, which has a negative time lag on the economy.

Stimulation of the return of educational migrants can take place due to the creation of conditions and opportunities for the application of knowledge acquired in another administrative and cultural plane, in practice thanks to the development of the state and support of private institutions. The post-war national economy usually needs a solid entrepreneurial movement and new ideas to intensively rebuild the damaged economy. With this in mind, the state should create conditions for the unimpeded return of educational migrants from the bureaucracy. It should encourage them by developing loyal legislation and providing assistance for business creation. It is also worth noting that special attention should be paid to the modernization of the education system in general and teaching methods and reassessment of the competencies of education providers.

Due to the relevance of the problem of return and reintegration of migrants, it was included in the national development strategy of Moldova. To realize this goal, a number of measures were implemented by the state, in particular:

- providing migrants with information about return options, labor market needs, access to further education, bank lending, etc.;
- development of programs for professional training and development of entrepreneurial abilities for returned migrant workers; support for reintegration through counseling, recognition of qualifications obtained while working abroad, initiating the opening of one's own business;
- the implementation of joint initiatives with the countries where migrants are staying, which would facilitate the return of migrant workers to the labor market

in their homeland; development and development in cooperation with countries receiving migrants of programs for attracting migrants' funds to investment projects, development of mechanisms for investing funds earned by migrants in economic activity;

- promotion of the voluntary return of migrants;
- diversification of models of participation of migrants in the replenishment of social funds in order to ensure social security;
- development of special programs for the reintegration of the most vulnerable categories [7, pp. 9–10].

International aid provided to countries during hostilities and post-war reconstruction should be directed in particular to the development of the creative economy. Statistics show that creative industries employ more people aged 15–29 than any other sector, and around half of these workers are women. The development of this direction can stimulate the return of educational migrants because the creative economy positions itself at the intersection of the economy (contribution to GDP), innovation (promotion of growth and competition in traditional activities), social value (stimulation of knowledge and talents) and sustainability (dependence on unlimited contribution creativity and intellectual capital) [8].

Today dictates the conditions under which human resources are the foundation for economic growth and sustainable development. And along with educational migration, countries with recessions and fragile national security positions are also seeing a loss of overall intellectual capital.

Labor migration leads to a "brain drain", which in turn negatively affects the long-term economic outlook. With this in mind, countries are directing efforts to the development and implementation of various mechanisms to minimize the loss of intellectual resources. Thus, the experience of the countries of the Middle East and North Africa shows that in order to reduce the depreciation of human capital, it is advisable to invest in health care, modernization, and improvement of the quality of the education system, strengthening food security, ensuring decent working conditions – especially for educated youth and women. Such measures will help prepare displaced persons for their return, laying the foundation for economic development and inclusive growth in their homeland [9].

In addition, using the example of the Russian-Ukrainian war, scientists identified directions for rebuilding human capital. Among which, the quantity and quality of school education are determined as key factors in the growth of human capital in a country that has felt the consequences of the war. The need to develop appropriate educational programs and their adaptation to realities is emphasized; and provision of resources for teachers and school infrastructure. The quality of higher education is also positioned as a direction of building intellectual capital, while researchers pay attention to the expediency of increased study and application of future skills [10, pp. 6–8].

In turn, Belyalov T. wrote that in order for national science to bring maximum benefit to the future post-war

economy, a systematic restructuring of its relations with society, state power and business is necessary. According to him, the constituent elements of this transformation should be:

- formation and implementation of a comprehensive state policy for the development of science and innovation stimulation, legislative provision of relevant processes, and control over its compliance;
- integration of the domestic scientific sector into the framework of the future post-war economy to ensure the possibility of involving its achievements in the justification of national development priorities;
- focus of the post-war economic reconstruction program on the technological modernization of the production sector, which will create demand for innovative and scientific products;
- introduction of European standards in the field of organization of implementation and financing of scientific research;
- formation (revival or modernization) of a network of research and innovation infrastructure centers;
- creation of appropriate financial incentives for the productive work of researchers as people with deep specialized knowledge. Formation of new personnel potential of the scientific sector;
- popularization of domestic science, raising the social status and prestige of researchers in the environment of national business and society in general [5, p. 67].

In addition, in the post-war economy, many of the usual jobs will be replaced by new ones, which in turn will require the development of training and retraining programs for adults. The purpose of this direction is to determine priority professions and skills for the post-war economy and to establish training and retraining centers for adult migrants. This includes construction, civil engineering, health care, and information technology, agriculture.

Also, inclusive infrastructure and revised workplace policies that take into account the needs of people with disabilities can empower them and facilitate their participation in the country's post-war reconstruction and development. Another important aspect is the availability of qualified psychological help to all segments of the population suffering from post-traumatic stress disorder. Separate attention should be paid to the programs for the reintegration of military personnel into civilian life.

Based on the experience of many wars, it was concluded that economic, social, and political recovery will depend not only on the return of refugees and the reconstruction of markets and infrastructure but also on ensuring social unity and increasing the level of trust in the institution [10, pp. 6–8].

The newest vector of the development of the world economy is imprinted in the opinion of experts on the modern post-war restoration of countries: advanced technologies and goods and services with high value-added help economies to show growth rates faster. Along with the minimization of the loss of intellectual capital, the priority goal of the state seeking to maintain a chance for

development, in the long run, is also the preservation of innovative capital.

That is why the director of the Ukrainian startup fund (USF) Kartashov P. stressed that innovative decisions could give Ukraine a chance for a new future in regenerating the national economy [6, p. 110]. The influence of the Russian-Ukrainian war on high-tech entrepreneurship shows the possibility of its use in critical situations. Thus, the Ukrainian startup fund, created in 2018, has become one of the key organizations in the country that helps technology startups to raise funds in the early stages and launch their own projects – thus minimizing the loss of innovation potential as a result of war. After the start of a full-scale invasion, the institution's activities were rebuilt entirely, shifting the focus of assistance to the direction that will help restore the state and strengthen its defense capability: for the first time, systemic financial support for military-tech has been launched in Ukraine. In general, the Fund's activities are divided into four directions:

- financial support for startups in the form of grants;
- providing access to mentors and supporting services;
- creation of conditions for access to acceleration programs;
- establishing coordination between participants of ecosystem starters [11].

At the same time, the scientist Koval I., relying on the experience of Ukraine, noted that "the realization of the economic role of intellectual property rights requires more tangible support from institutions than in a peaceful period." It is said that at the state level, there should be a comprehensive understanding of economic and legal mechanisms that will allow during the unfinished war stage to create the basis for the expected economic effect of intellectual property participation in renewable processes.

It is advisable to offer incentives in the form of preferential loans, a special regime of taxation and targeted state financing of scientific and technical developments to minimize human and innovative capital losses. Among economists, there is also an opinion about the expediency of introducing a special type of insurance for so-called military risks for all who invest in the development of the economy.

In addition, it was emphasized that for a country that suggests significant losses for the national economy, priority should be the creation of the necessary conditions for the effective use and commercialization of intellectual property rights, taking into account the private interests of creators, investors, producers of competitive goods and services. In view of this, the interaction of the state and business on the principle of public-private partnership, concession agreements, and the system of government orders for certain types of development may be successful [6, pp. 111–113]. Such measures are aimed at supporting the internal market of intellectual property, which can stimulate the return of some entrepreneurs to the country and persuade others to be expedient and in the future remain in it. In addition, with the limited resources, comprehensive support of the scientific and technical sector stimulates the production of high-cost goods and services.

Conclusion. Summarizing, it is necessary to emphasize the significant impact of hostilities on socioeconomic processes that violate the planned course of state development and cause the need for rapid response to the challenges to minimize losses. Particularly important for the countries that have been detrimental to the war is the conservation of human capital, the return of migrants, and the preservation of innovation. In order to achieve it, special mechanisms to prevent further

intellectual losses are developed, the features of which in turn depend both on the individual needs of each country and on the analysis of previous experiences of other states. Response to these challenges involves the modernization of educational and wellness institutions, support of scientific and technical direction, development of social programs to improve the process of reintegration, promote the development of a creative economy and entrepreneurship.

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ШЛЯХИ ПОВЕРНЕННЯ ОСВІТНІХ МІГРАНТІВ, МІНІМІЗАЦІЯ ВТРАТ ІНТЕЛЕКТУАЛЬНОГО КАПІТАЛУ ТА ІННОВАЦІЙНОГО ПОТЕНЦІАЛУ ВНАСЛІДОК ВІЙНИ

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Війни спричиняють ряд соціо-економічних змін у звичному становищі країн, які мають як і миттєвий ефект, так і довгостроковий вплив на них. До цих перемін можна віднести проблеми освітньої міграції, втрати інтелектуального капіталу та інноваційного потенціалу. Мета статті полягає у визначенні необхідних умов для повернення освітніх мігрантів, мінімізації втрат інтелектуального капіталу та інноваційного потенціалу внаслідок впливу війни на основі досвіду різних країн. Для реалізації поставленої мети було досліджено наукові публікації, у яких йшлося про важливість адаптації національних інституцій до потреб травмованого війною суспільства, роль людського капіталу в забезпеченні міжнародної конкурентоспроможності у післявоєнний період, значення інновацій у контексті можливостей розвитку підприємництва в екстремальних умовах та необхідності модифікації законодавства для ефективного використання інтелектуального потенціалу для відновлення країн. У процесі дослідження було окреслено, що заохочення освітніх мігрантів до повернення може відбуватися шляхом створення умов застосування знань, отриманих у різних культурних середовищах, на практиці завдяки якісній розбудові державних та підтримки приватних установ. Окрім цього, було визначено заходи для системної перебудови відносин національної науки з суспільством, владою та бізнесом для забезпечення максимальної користі з її боку для розвитку повоєнної економіки. Особливу увагу було звернено на важливість програм реінтеграції військових осіб у цивільне життя. З огляду на сучасний вектор розвитку світового господарства, був проведений аналіз шляхів мінімізації втрат інтелектуального капіталу та збереження інноваційного потенціалу, враховуючи досвід російсько-української війни та розвитку military tech. Також було розглянуто роль підтримки внутрішнього ринку інтелектуальної власності задля стимулювати повернення підприємців до країни та залишання в ній. Підкреслено важливість миттєвого реагування на соціо-економічні зміни задля мінімізації їх впливу на країну в довгостроковій перспективі.

Ключові слова: війна, соціо-економічний вплив, освітня міграція, інноваційний потенціал, інтелектуальний капітал.

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