

Intellectual Security and Regional Development: Leading Trends in the Globalised World

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Abstract. In the context of ongoing globalization of the world economy and the increasing internationalization of public life, a progressively important place in the regional development is occupied by international labour migration. A natural consequence of these processes is an increase in the interstate migration of scientific personnel and the emergence of a specific phenomenon known as “brain drain”.

Our paper demonstrates that the most significant discrepancies take place in assessments, firstly, on the scale of the emigration flow of scientists and highly qualified specialists, and, secondly, in the consequences of the “brain drain” on the state intellectual security. Numerous politicized speculations on this subject in the world media make this topic particularly debated and highlighted. Our results show that this is largely due to the fact that there are too few analytical works studying migration processes and their impact on regional development. Moreover, there are no unified approaches to assessing the consequences of the “brain drain” due to the active inclusion of its intellectual potential in international migration processes in the 1990s. As a result, we might conclude that there is a lack of sufficient grounds for determining the existing risks from the “brain drain” as a threat to intellectual security and sustainable regional development.

1 Introduction

Globalization and geopolitics are interconnected, since the very idea of creating a global system that is controlled from one centre is essentially a geopolitical idea. In post-industrial civilization, the strategy of geopolitical relations is based more on the geo-economic paradigm that is, on foreign economic competition and managing various threats, challenges and risks from a single centre. A new reproductive structure of the world is being built taking into account the accessibility of developed countries not only to the sources of raw materials and markets for their products, but also to the intellectual potential of other countries. This strategy is aimed at mastering the world space and strengthening its own system of national security by undermining the social, political and economic systems of its opponents (Kovalev 2018)

The most negative consequence of globalization is that it creates advantages for the most developed countries in socio-economic and technological terms. By widening this gap between developed and developing countries, globalization blocks the projects of national modernization of the latter. Globalization leads to the regional disproportions in the consolidation of a world order in which there is a “rich North” and a “poor South” (Sitek 2018).

The ongoing globalization process leaves its mark not only on geo-economic and geopolitical structural changes, but also on the organization and functioning of the national security policy of modern states (Jonas and Moio 2018). Nowadays, the formation of this policy should, as a rule of thumb, take into account the lack of a clear border between the internal and external security of the state. The art of big politics consists precisely in the ability to find the necessary proportions between the internal and external aspects of national security, taking into account the whole spectrum of geopolitical realities (Pamment 2018). Unilateral concern for the external

geopolitical aspects of national security, for example, its military aspect, with the oblivion of its internal aspects (economy, level and quality of life of the people, degree of democratization of society, etc.) can bring down the entire state security system (Chapman 2018).

Under these conditions, the need for rethinking the conceptual foundations of national security, reassessing the resources and mechanisms for ensuring it, identifying and articulating national interests, and clearly prioritizing domestic and foreign policies is becoming more relevant. A particular consequence of solving these problems is the problem of researching such an important component of the national security of the state as its intellectual security.

Despite the significant theoretical and methodological basis for the study of the intellectual potential of society, a very limited number of works has been devoted to the problems of its intellectual safety and regional development. The problems of intellectual security in general and the problem of the impact of globalization on the degree of sustainability of intellectual security, in particular, remain “*quaestio unexplored*” in the economic and management science.

2 Literature review

The development of human potential is ensured by a high level of material well-being of the population and its life expectancy, the quality of education and health care, and the observance of democratic freedoms and the rights of citizens (Bellamy and Lacey 2018; Strielkowski et al. 2019). Achieving this result is impossible without increasing investment in the development of the most important component of human potential – an intellectual resource (Asiaei and Jusoh 2015; Bontis et al. 2015). Including the factor of formation of intellectual potential in the state policy of creating and using new knowledge, technologies, information as sources of economic growth, social and spiritual development, involving the entire population in the innovation process, the state thereby provides its economy with a real advantage in global competition (Coccia 2017; Audretsch 2018; or Bereznoy 2019).

Based on the typology of countries proposed by the Rakitov (1990), all currently existing states can be divided into two types. The first type includes states in which highly developed science exists, high technologies are developed, and high-tech products are created. These leading states determine the main directions of global processes. The second type includes states that are lagging behind in their technological and economic development. They are trying to accelerate the development of their economies and overcome technological lag due to the import of high technologies from developed countries.

Thus, globalization can be seen as a kind of instrument of the struggle of the first type of states for world intellectual potential, as a form of fierce geo-economic competition for world leadership in various fields of science, engineering, technology, as a way of geopolitical struggle for world domination. Under these conditions, the development and protection of Russia's intellectual potential from external and internal threats and risks becomes one of the most important directions of the state policy of ensuring the national security of the country. All of the above is especially relevant for Russia. Due to the vastness of the territory, the wealth of natural resources, the centuries-old political tradition, the unique multi-ethnic culture and being a kind of “bridge between the West and the East”, Russia cannot leave the geopolitical arena and lose the opportunity to become one of the poles of the emerging multipolar world (Dienes 2002; Shnirelman 2009).

The real answer to the challenges posed by the recent development for Russia can only be a radical large-scale reconstruction of the country on innovative approaches to all strategic directions of its development. The decisive role in the implementation of this task belongs to intensive development factors: research and development, embodied in new products and technologies. Scientific, technological and innovative development of society can be ensured only by a high level of development of intellectual potential. For the countries which intellectual potential decreased significantly at the turn of the 20th and 21st centuries, and the rent-and-raw nature of its economy has an extreme degree of dependence on external factors, this circumstance might be of particular importance.

3 Intellectual security and economic development: a case of Russia

Intellectual security of a society is determined by quantitative and qualitative characteristics of its intellectual potential. The level and quality of development of intellectual potential depends on the action of many factors. The most important of them are the number of the country's population, the achieved level of its economic well-being and the quality of its life. The impact of these factors implies the study of a very wide range of problems that cannot be placed in the limited framework of this research.

The intellectual potential of society in the narrower sense of the content of this concept is a combination of human, material and financial resources that determine the state of two closely related key areas are science and education, the measured value of which reflects the ability created and accumulated in society for creative creation of new knowledge, technologies, products. Science is a system-forming element in the reproduction of

an intellectual resource in this tandem. Its special role in the accumulation and development of the intellectual potential of society is determined by the fact that today it is science that determines the level of socio-economic development, genuine independence, authority and power of any state.

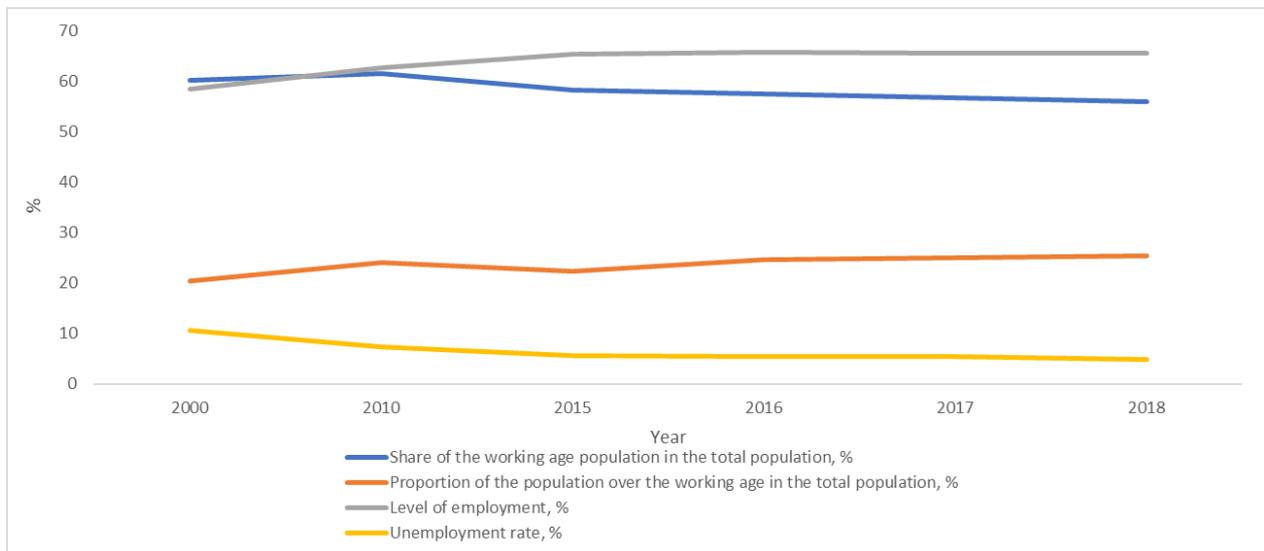


Fig. 1. Demographics and personnel security in the Russian Federation (2000-2018)

Source: Federal State Statistics Service (2018)

In the conditions of increasing globalization, the basis of a country's competitiveness is its ability to create a “knowledge society” that is capable of intensively producing and effectively using its intellectual resource. Intensive development of an intellectual resource is achieved mainly due to quantitative and qualitative indicators characterizing the level of development of science and its personnel potential. Of particular interest in this case is the problem of “brain drain” and its impact on the intellectual security of the state.

In general, one can observe that Russia that underwent drastic developments related to migration, “brain drain” and, as a result, negative implications for the regional development (Fursov et al, 2018). In general, demographic and personnel situation in Russia is improving (see Figure 1 above), however the country faces recession and downturn in its regional economic development. One of the factors leading to this situation might be the “brain drain” of its most valuable human resources.

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In addition, the massive unemployment of scientists has given rise to a new phenomenon in Russia, called “brain drain”. This term was first used in the British press in the early 1950s to describe the process of the massive migration of Western European scientists after World War II in the United States. It is remarkable that some of these scientists originated from Nazi Germany, occupied high ranks in the national-socialist party and were, in fact, war criminals, but were pardoned by the Americans due to their scientific value and potential (Carson 1999).

Russian “brain drain” was not the first or the most profound one. There are similar processes that can be observed all around the world. There are more than 1.5 million Brits, 620 thousand French and 600 American scientists and specialists with higher education working abroad (OECD 2019). However, in Russia, this issue became to be a matter of social unrest. The “brain drain” problem has been the subject of fierce controversy in the Russian media for nearly thirty years. This polemic gives rise to all sorts of speculative assessments of the quantitative and qualitative parameters of this phenomenon. In this regard, we note that the conflicting data existing in the public discourse on the number of Russian emigrants who left from Russia for the West since 1992 reflects approximate estimates based mainly not on academic sources (Herbst and Erofeev 2019). Therefore, the opinions of Russian scientists about this phenomenon and the negative consequences caused by it with regard to the country's scientific potential, which can be classified as expert assessments, are very interesting.

In the 1990s and the first decade of the 21st century, in addition to leading scientists and highly qualified specialists, up to 15% of university graduates left Russia annually. The above assessments and opinions characterize the personnel situation in Russian science during these years as a real threat to the state's intellectual

security. To verify these estimates, it is necessary to analyse the problem of “brain drain” from Russia in subsequent years.

Absolutely accurate official information on the extent of the real "brain drain" from Russia for the first two decades of the 21st century is missing. This is due to the following circumstances. First, many Russian scientists do not formally emigrate abroad, but leave for work under a labour contract. The temporary status of such work often develops into a permanent job abroad without changing Russian citizenship. Secondly, the methodologies for population accounting in statistical agencies of Russia and those of the Organization for Economic Co-operation and Development (OECD) are very different. Thirdly, assessments of the consequences of the “brain drain” depend on which categories of emigrants are included in this notion: only scientists, or all persons with higher education in general, or only those who continue to work in their specialty.

According to Ryazantsev and Pismennaya (2013), the real losses from the “brain drain” from Russia for the period 2002–2010 ranged from 750 thousand to 1 million people with higher education, including about 1.2 – 1.6 thousand doctors and candidates of sciences. These figures indicate that the scale of emigration of people with higher education from Russia in these years was higher than the data provided by official statistics. At the same time, the number of specialists with advanced degrees was only 16% of their total number. All of these impacted on the regional development of the country by hampering its pace and dynamics.

Over the past 15 years, the emigration outflow from Russia outside the former Soviet Union has noticeably changed in terms of volume, reasons and characteristics of emigrants. On the one hand, the overall flow of emigrants from Russia was significantly reduced. On the other hand, since 2005, the proportion of people with a high level of education and qualification has gradually increased in the emigration flow. According to the Federal State Statistics Service (2019), from 30 to 70% of emigrants to Western countries are specialists with higher education.

4 Conclusions

All in all, intellectual security appears to be linked to the regional development and state security. This security can be undermined by the migration of highly qualified specialists and professionals. The positive contribution of international migrations of “brains” is weakened if migration flows become one-sided and really turn into a “leak”. But in general, international experience shows that the losses from the “brain drain” are not estimated by the number of people who left, and the problems caused by such a “brain drain” are not solved by various restrictions or prohibitions on leaving. The unilateral outflow of qualified specialists is reduced when the native country creates the conditions for full work, a decent and safe life, and most importantly – their self-realization. And the risks associated with such an outflow naturally decrease if it is opposed by a more or less equivalent influx of qualified specialists from other countries.

Speaking about the Russian case, it becomes apparent that massive emigration of scientists and highly qualified specialists from post-Soviet space in the 1990s acquired the features of a “brain drain”. However, we cannot argue that it really poses a serious threat to modern Russia's intellectual security. The basis for such a statement is the fact that controversial consequences of the “brain drain” on Russia's intellectual security have not been adequately studied by specialists. Much attention is paid to this topic in the media and public discussions, but there is practically no substantial scientific research on this issue. In addition, the shortcomings of discussions of this problem should also be noted: firstly, non-critical handling of data on migration in the media; secondly, the underestimation of the general state of the Russian labour market and academic science.

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