

## POLICY NOTE OF WORKING PAPER 3.17

# ACADEMIC BRAIN DRAIN AND ITS IMPLICATIONS FOR SCIENTIFIC MANPOWER REPRODUCTION IN RUSSIA

May 2013

#### **OBJECTIVE**

The paper looks into Russian researcher migration to the EU supported by international science foundations, by Humboldt Foundation (FRG) in particular. Examination of the specific involvement of highly skilled Russian experts in the current cross-border academic mobility helps answer the following question: does the wide-scale involvement of Russian researchers in international scientific community in the context of growing internationalization and globalization hinder or promote brain drain? It also makes it possible to assess the role of Western foundations in the development of Russian science, in particular, formation, academic development, integration in formal and informal international academic networks of the most skilled Russian researchers. Consideration is given to the factors influencing the current transboundary migration of Russian academics. Special attention is given to the role played by foreign non-commercial science foundations (A.Humboldt Foundations as an example) in formation, academic development, integration in formal and informal international academic networks of the most skilled Russian researchers.

#### **SCIENTIFIC METHODS**

A project "Reproduction of academic elite in Russia: contribution of foreign science foundations (A.Humboldt Foundation case)" supported by Moscow Scientific







Foundation and A.Humboldt Foundation in cooperation with SU HSE was carried out in 2003-2004. The project was the most encompassing empirical study of the causes, mechanisms and effects of highly qualified researcher migration from Russia to EU countries, therefore its findings will largely be drawn upon below.

The outcomes of the project survey suggest a number of conclusions relative to the Humboldt Foundation (and western science foundations at large) as to the mechanism of reproduction of Russia's elite academic talent.

In autumn 2012 in the framework of the SEARCH project additional expert survey was conducted to analyse some selected cases of researchers' circulation between the EU countries (Germany) and Russia and to assess the role of cross-border researchers' interaction in the context of growing internationalization and globalization. The objective was to analyse whether the deep inclusion into international academic community is preventing or stimulating the brain drain in these countries. The case of Russia seemed to be an appropriate case in this context. Basing on a special survey (2004) and expert interviews (2012) it became possible to check the changes in the cross-border mobility and its impact on the academic environment in Russia.

### POLICY VALUE-ADDED

The main hypothesis was that compared to the early 1990s, when a critical in the decision to go abroad were financial considerations, the key factors behind such decisions made in the last decade by highly qualified scientists – thanks to the growing national funding of the major research programs and directions as well as adaptation to the current realities and use of various sources of additional income, come to be purely scientific reasons, primarily fear of impossibility of world level research activities. On the whole, this hypothesis proved true during the field studies, though the financial factor still plays a significant role as regards the decision on leaving for an internship or a job abroad with respect to junior academics.

The analysis indicates that in spite of the generally lower contribution of western foundations to funding science in Russia, they play a significant role in reproduction of national academic elite. That said, participation in their programs is a two-way road





- while promoting, no doubt, emigration of a segment of Russian researchers (primarily young people) it, on the one hand, acts as a major prerequisite for professional advancement and involvement in international scientific community, a safeguard against a potential trend towards provincialism, which is quite realistic given the present day funding and physical infrastructure of Russian science. The relationship between the two facets of international mobility of Russian scientists is no constant: first, the mass "exodus" in 1990s is long gone and, as our survey revealed, the most common strategy pursued by a certain segment of Russian elite researchers in this respect sooner transformed into a kind of "seasonal work" - while working mostly in Russia, take regular opportunities for migrating to the West for short terms so as to conduct studies on a more sophisticated equipment, and improve one's financial circumstances, at that. The involvement with international informal and formal networks permits scientists to be more efficient in Russia - and in this sense, the assistance provided by western foundations to Russian researchers, in terms of international scientific cooperation thereof, helps retain the academic wealth at home, while the fear of loss of such opportunity becomes the strongest motive for brain drain. Hence, since Humboldt Foundation fellowship and other programs guarantee close academic contacts with foreign counterparts then in case they are cleverly and effectively used by Russian scientists, and if meaningful measures are taken by the management of the institution from which the given researcher left for internship to Germany, they enhance retention of highly qualified personnel in this country, i.e. reproduction of the academic elite of Russia.

As a result, the negative balance for the country between the losses incurred from brain drain and gains from higher professional skills of researchers coming back to Russia has somewhat changed.

Secondly, under the circumstances when "the shuttles" become a prerequisite for maintaining and developing human capital of the elite group of scientists, the state of national science gets increasingly dependent upon the level of inter-state relations bearing, for example, upon the toughness of visa requirements. To this extent, Russia is no less and possibly even more then the EU interested in shaping the common humanitarian space (solution of visa problem, in the first place): the more scientists







are sure of the possibility to enter and come back without restriction the fewer reasons they will have for the desire to leave this country for good or for a long term.

Thirdly, one cannot but see the reverse of the medal: "academic seasonal work", work on subcontract without foreign travel – and other forms of Russian scientist attachment to foreign sources of funding being a form of temporary resolution of the most acute problems, affect in the long term both the topics of research carried out by Russian scientists and their academic status – many turn in fact into highly qualified assistants of their foreign partners and employers.

Fourth, the relative financial autonomy, possibility to conduct studies at the expense of outside sources, which emerged thanks to foreign foundations, reduces dependence of elite researchers on hierarchical structures still intact in the national academic research and higher education system and, in their turn, promote shaping and strengthening temporary (project teams) and network forms of interaction. This is an important organizational and cultural innovation, which first emerged largely thanks to foreign science foundations.

Pendency of institutional, financial and organizational problems in the Russian science and the gradual adoption of the Bologna process in the practice of higher education arrangement facilitating student mobility, has led, according to experts' opinions, to the fact that, currently the international mobility became younger – rather students (in particular in order to consolidate in academic community) than advanced researchers go to the West.

Finally, compared with the beginning of the 2000s, to all appearance, a number of researchers working simultaneously in Russia and abroad has decreased due to decisive choice of answer the question "To leave or stay" by most Russian elite scientists.





