## RUSSIAN-LITHUANIAN INNOVATIVE COOPERATION

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## A COMPARATIVE ASSESSMENT OF THE INNOVATION POTENTIAL OF THE BALTIC SEA REGION COUNTRIES

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This article offers a comparative assessment of the Baltic region countries on the basis of three groups of indicators – indicators of economic and research potential, indicators of dynamics of economic and research potential development, and indicators of economic and innovation potential of the states of the region. The author emphasises the need for Russia to cooperate with other countries of the region in the field of innovations as well as the possible role for the Immanuel Kant Baltic Federal University in this process.

*Key words:* Baltic region, Baltic region sates, research and technologies, innovations, research and innovation potential, Immanuel Kant Baltic Federal University, international cooperation.

The regionalization of the world, intensified by globalization, leads to stronger cooperation in different areas between the countries seeking to strengthen their position in the world economy. The Baltic Sea region is one of the world macro-regions that increase the competitiveness of its member states on the world arena due to growing international cooperation. An established system of various international organizations provides for cooperation between administrative and municipal bodies of all the Baltic Sea region countries, except Russia, which is not in the EU and is much less active.

Despite the fact that there are no international innovation-oriented organizations in the Baltic Sea region, the corresponding issues are tackled by a number of organizations, including the Council of the Baltic Sea states, the Conference of the Baltic Sea RegionUniversity Rectors, the Working GroupEconomic Cooperation, the Baltic Sea Business Advisory Council, the Baltic Development Forum, etc. Education and research are among priorities of the VASAB action plan ("Vision and Strategies for the Baltic Sea Region"), a major trans-border project financed by the EU-funded programme "Interreg". Nearly two thousand local, regional and national government bodies, research, education and culture institutions, as well as NGOs take part in this action plan. The most active Russian participants are representatives from Saint-Petersburg and the Kaliningrad region.

In the Baltic Sea region there are five more economically developed states with traditional market economy— Germany and four Nordic countries

(Sweden, Denmark, Finland, and Norway). And there are also five postsocialist countries with the lower level of economic development — Russia, Poland and three Baltic countries (Lithuania, Latvia, and Estonia). The postsoviet countries, especially Russia, showed a higher pace of their economic growth in 2005—2008 owing to relatively high prices for oil and natural gas. Due to the same reason Norway had the highest indicatorsamong the more economically developed countries (fig.1).



Fig.1 The correlation between the level and pace of economic development of the Baltic Sea region countries

Source: [12; 14].

All post-socialist countries with a lower level of economic development are much behind the countries having traditional market economy in research and development investment as well as their innovation potential (fig. 2). Due to the potential accumulated during the Soviet period, the number of researchers per ten thousand people is now approaching the number of researchers in Germany (although its indicator is lower than that of the Nordic countries) and is surpassing Poland and the Baltic Sea region countries. However, Russia'sshare of the GDP spent on R&D is quite low (42% from the amount spent by Germany). If calculated per capita, this ratio will be even lower — 24%. However, Russia's investment in research and development and innovations are higher than in other post-socialist countries of the region, with the except of Estonia.



Fig. 2. Correlation between innovation potential indicators of the Baltic Sea region countries

The gap between Russia and Germany, and especially the gap between Russia and the Nordic countries, are becoming even wider when it comes tothe innovation potential effectiveness and the introduction of innovation technologies in Russia's economy. Moreover, the percentage of enterprises, introducing technology innovations, in the total number of manufacturing and service enterprises in Russia is much lower than in Poland and the Baltic countries, especially Estonia, having indicators similar tothose of the more economically developed countries (fig. 3).



Fig. 3. The introduction of innovations in the Baltic Sea region countries *Source*: [8—14; 17—21].

Thus, despite a considerable innovation potential including a developed network of higher education institutions and R&D organizations, a big number of scientists and specialists in various research and technology fields, Russia is still falling behind other countries of the Baltic sea region (not only economically developed and having a traditional market economy, but post-socialist countries as well) in the introduction of innovations in manufacturing.

For a period of time the Russian government has been trying to turn the country into a country of innovations and development; it resulted in the increase in R&D investment. However, the rate of investment growth in 2002—2008 was lower than in all other post-socialist countries (half of the investment in research and innovations in Estonia), and lower than in Sweden and Norway (fig. 4).



Fig. 4 The growth of investment in research and development per capita in the Baltic Sea region, 2008 in% to 2002

Source: [8; 14].

Having a considerable and fast growing innovation potential, the Baltic Sea region is of great interest for Russia and the EU, developing cooperation in the fields of manufacturing and the introduction of innovations. In connection with this,particular scientific research works, aimed at determining possibilities and areas of cooperation, are gaining importance. The setting up of the Immanuel Kant Baltic Federal University at the beginning of 2011 on the basis of the Immanuel Kant State University of Russia (before 2005 — Kaliningrad State University) provides additional possibilities for doing research and putting its results to practice.

The research of the Baltic Sea region has been held at the I. Kant Baltic Federal University since the 1990s (more in 1). Originally, the Baltic Sea region was studied in the context of developing cooperation between the Kaliningrad region of the Russian Federation and the regions of the

neighboring states. The experience of these countries (first and foremost, Lithuania and Poland, countries with transitional economy) in reformingtheir economic and social sphere could have been adapted to the needs of the exclave region of Russia. Later such fields of study as the analysis of the socio-economic development of the Baltic sea region, the comparative analysis of the Baltic Sea region states (including North-West Russia), research into various aspects of transborder cooperation in the Baltic Sea region [2—7 et al.] emerged. For further development of these studies a research and education center "The Institute of the Baltic Sea region" was founded in 2009 in the I. Kant Baltic Federal University.

However, until recently, in the general scope of research themes, insufficient attention has been paid to the development of research, technology, innovation and (to a lesser extent) education. At the same time the integration of the Russian Federation into these common spaces is one of the necessary conditions for the modernization of our country and strengthening its competitiveness on the global arena. In this context the Baltic region states are of great interest due to the reason that they, on the one hand, have competitive clusters in a number of fields of research and technology, and on the other hand — are located in close proximity to Russia (or have common borders with it), and already activelycooperate with our country.

But to be successful, the integration between the Russian Federation and the Baltic Sea region countries should rest upon the analysis and forecast for research and technology development of the Baltic region countries and their national innovation systems.

Hence, the Immanuel Kant Baltic Federal University is intensifying itsresearch activities in technology, research and innovation, and education fields in the Baltic Sea region. The University is trying to give these activities a more comprehensive and systematic character. A significant role is played by such departments of the University as the "The Institute of the Baltic Sea region", or the Baltic Inter-regional Institute of Social Sciences (BaltMion). A number of research projects have already been launched, including those which are held in the framework of the federal target programme "Research, scientific and pedagogical human resoursesof the Innovative Russia in 2009—2013".

The Immanuel Kant Baltic Federal University must and can become one of the leading Russian centres for studying international innovation systems (those of the Baltic Sea region countries and others) and for transferring cutting-edge innovation experience from outside Russia. The increase and qualitative improvement of networking between the Immanuel Kant Baltic Federal University, universities and R&D centers of other countries in science and technology, innovation and education will foster the realization of the main function of the University as an innovation, research and technology hub on the all-Russian and, in the future, on the European scale.

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