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Andreeva, Elena L.; Ratner, Artem V.; Myslyakova, Yuliya G.; Glukhikh, Pavel L.

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THE EXTERNAL ECONOMIC FACTOR IN THE DEVELOPMENT OF NORTHWESTERN REGIONS: INSTITUTIONAL SUPPORT AND AN IMPACT ASSESSMENT

E. L. Andreeva<sup>1, 2</sup> A. V. Ratner<sup>1</sup> Yu. G. Myslyakova<sup>1, 2</sup> P. L. Glukhikh<sup>1</sup>

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 <sup>1</sup> Institute of Economics of the Ural Branch of Russian Academyof Sciences,
29 Moskovskaya Str., Yekaterinburg,
620014, Russia.

<sup>2</sup> Ural State University of Economics,
62 8 Marta St., Yekaterinburg,
620144, Russia.

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This research is warranted, since the Northwestern Federal District accounts for a significant proportion of Russia's exports. The study aims to reveal the connection between the federal district's external and internal economic development and to identify the extent to which institutional support for international economic cooperation facilitates brisk international trade. The authors consider international trade from the perspective of its procedural and institutional components. The study stresses dependence between the total international trade and internal economic performance of Russia's North-West. Another focus is an analysis of institutional support for the development factors and the levels and areas of international economic cooperation. The analysis shows that the Northwestern regions' external and internal economic development is interdependent and there is considerable support for international cooperation at different levels and in different areas. To a degree, this is explained by the federal district's geographical position and transport connections, the 'Nordic' character of the economy shared by the Russian and neighbouring territories, and the multitier nature of the institutional framework for international economic cooperation in the international region.

*Keywords:* external economic development factor, institutional support, Russia's North-West, international interregional cooperation, Nordic Europe, features of Nordic regions

### Introduction

Home to 9.46% of Russia's population, the Northwestern Federal District (NWFD) accounts for 9.85% of the country's total area. In 2016, the district ranked first on its contribution to Russia's international trade (14%), followed by the Volga (10.2%) and Siberian (7%) federal districts (calculated based on [24]). In 2015, the top 200 of Russian exporters featured 28 companies from the NWFD (again, 14%).

What is the connection between the district's economic development and international trade? How does brisk international trade affect the district's economic development? What encourages Northwestern regions to take an active part in international economic cooperation? We can safely assume that there is such a connection and that the driving force behind the regions' foreign economic activities is a developed institutional framework for international cooperation.

This article examines how international trade affects the socioeconomic development of Russia's North-West and what institutional incentives exist in the field.

### Theoretical Approaches to International Trade as a Regional Development Factor

There is ample research literature on regional foreign economic potential. The effect of interregional cooperation on the socioeconomic development of a region has been studied in detail [1]. A set of performance indicators has been proposed to analyse regional export potential. These include a region's role in the international division of labour, transport system, membership in international organisations, compliance with international rules and standards, etc. [12, p. 8]. S. P. Zemtsov and V. A. Baburin have introduced the notion of 'international economic and geographical position', which identifies the coasts of the Black and Baltic Seas and the Sea of Japan as Russia's most favourable territories [7, p. 126]. A. A. Maltsev has studied international trade in the Urals [5].

Other works evaluate the effect of export on GRP, using the logarithmic function. L. M. Kapustina studies how Russia's openness to the world economy affects national security. The research considers such indicators as changes in GDP, investment as a percentage of GDP, public expenditure on education, the proportion of imports in national consumption, the proportion of low-income earners, income gap, foreign investment as a percentage of total investment, etc. [8, p. 259—278]. Based on international trading performance, experts evaluate risks, threats, and the degree to which border regions benefit from their position [10, p. 5]. Authors have proposed methodologies for assessing the regions' readiness for Russia's WTO membership (L.E. Strovsky [9, p. 3], A.F. Linetsky [11]) as well as techniques for analysing models of regional international economic ties in the context of the possible consequences of the country's WTO accession (E.D. Frolov [30]). V.G. Prudsky, G.A. Demin

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[23, p. 49]; Zh. A. Mingaleva, E. D. Oborina [16, p. 57—59], and others have addressed national institutional support for federal and regional collaborations. For instance, N.N. Evchenko addresses [6, p. 26] international cooperation agreements as an instrument for managing regional international trade. However, the available studies of regions' economic development and international trade are not exhaustive. Moreover, such researches often overlook the features of institutional support for individual regions.

### Characteristics of Russia's Northwestern Regions

The following features of the Northwestern regions affect international cooperation at different levels and across different fields:

— the border and coastal position, a high level of development of the transport infrastructure (partly owing to the historical past);

— local cities' considerable research and educational potential — Saint Petersburg is the district's administrative centre with enormous academic potential, Arkhangelsk and Kaliningrad are home to federal universities; this potential translates into international research and academic collaborations [31] and networking;

— the common 'Nordic' specialisation of different industries, which means common problems and, as a result, the need to share experience and expertise in environmental protection, sustainable forest management, etc. Other common issues include the development of transport infrastructure on sparsely populated territories in harsh climates, the need for a developed energy sector or the purchase of fuel (necessitated once again by the severe climate), the ways to develop agriculture in extreme conditions, support for entrepreneurship (particularly, among the youth), training of specialists familiar with the north, the development of tourism in unique locations, and the creation of social infrastructure on sparsely populated territories;

— proximity to the Nordic countries and other EU member states an arena for multilateral international interregional cooperation boasting a strong institutional framework for funding international programmes for sustainable socioeconomic development and transport infrastructure enhancement. The Nordic macroregion strives to develop a transregional identity;

— the diversity of institutional frameworks for international cooperation in the macroregion. The study's geographical focus is the space of international economic cooperation, where Russia's North-West plays an important role.

Russia's North-West has forged economic ties with member states of various associations and macroregions — the Barents Euro-Arctic region (BEAR), the Baltics, the Baltic Region, the Council of the Baltic Sea States (CBSS), the Northern Dimension (ND), and the Arctic Council.

The BEAR brings together Russia, Norway, Sweden, Finland, Denmark, and Iceland. Russia, Denmark, Sweden, Finland, Lithuania, Latvia, Estonia, Poland, and Germany — the countries that have shorelines along the Baltic Sea — comprise the Baltic region. These states, Norway, and Iceland are members of the Council of the Baltic Sea States. Having an even wider membership, the Northern Dimension is a political concept designed 'to draw the EU's attention to northern Europe and to develop cooperation especially with northwest Russia'. At a practical level, the Northern Dimension means 'projects launched by the EU and individual countries, groups of countries, the Commission, organizations, regions and local actors in the ND region'. The ND's geographical area is described as 'an open circle from the Barents Sea to northern Germany. The open circle highlights the fact that Iceland, the USA and Canada as well as seven more remote Arctic regions are also involved in the Northern Dimension' [29, p. 5—7] (fig. 1).



Fig. 1. The geographical scope of alliances in Nordic Europe and their cooperation with Russia

Source: the websites of the Norwegian Barents Secretariat (http://barents. no/en/barents-region-0) [20] and the Council of the Baltic Sea States (http:// www.cbss.org/council/); [29, p. 6–7].

Similar climate and topography, which translated into similar economies, and long-standing economic and cultural ties between Russia's North-West and the bordering regions of Northern Europe necessitate international economic partnership and collaborations, including those at the regional level. In the Barents Sea Region, Russia accounts for most of the territory and population. The area's largest cities are also Russian, which emphasises how important the role of Russia and its NWFD in the region is (table 1).

Table 1

Country		Proportion	Proportion		
	Region	in the region's total	in the region's total		
		population, %	area, %		
	Republic of Karelia	12.0	10.3		
	Republic of Komi	16.3	23.7		
	Arkhangelsk region (and				
Russia	Nenets autonomous re-				
	gion)	22.4	33.5		
	Murmansk region	14.5	8.2		
	Total	65.3 %	75.7 %		
	Lapland	3.4	5.3		
	Kainuu	1.4	1.1		
Finland	Northern Ostrobothnia	7.8	2.1		
	North Karelia	3.1	1.0		
	Total	15.8 %	9.5 %		
	Norrbotten	4.8	5.5		
Sweden	Västerbotten	5.1	3.1		
	Total	9.8 %	8.6 %		
Norway	Nordland	4.6	2.1		
	Finnmark	1.4	2.6		
	Troms	3.1	1.4		
	Total	9.0 %	6.1 %		

### The proportion of the Barents Regional Council member states in the region's total area and population

Overall, 5,244 thousand people live in the member states of the Barents Regional Council, on a territory of 1,764 thousand sq km.

Compiled and calculated based on data from the statistics services of Russia [24], Norway (http://www.ssb.no/a/english/aarbok/tab/tab-050.html) [38], Sweden (http://www.statistikdatabasen.scb.se/pxweb/en/ssd/) [37], Finland (http:// www.stat.fi/tup/suoluk/suoluk\_vaesto\_en.html) [35] (accessed 07.07.2017). The data are relevant as of 2016 (Russia and Sweden), Norway (2013), and Finland (2017). If one considers the BEAR and even the CBSS countries in whole, Russia will account for a significant proportion of the total GDP, population, and exports. As to the Arctic Council, Russia's share is more modest but still significant. The Council brings together the BEAR states and two G7 members — the US and Canada (table 2).

Table 2

Association	GDP, USD (prices current)	Population, people	Exports, m USD (prices current)	
Barents Euro-Arctic region	48.8	84.5	45.8	
Council of the Baltic Sea States	20.3	48.6	14.7	
Arctic Council	6.1	29.3	12.8	

## Russia's proportion in selected associations, % (compiled and calculated based on [34; 40])

According to Russia's Strategy for the Development of Seaport Infrastructure until 2030, the capacity of the national Arctic ports will increase 1.6—2.8-fold after the construction of new and the redevelopment of existing port facilities have been completed. This is forecast in the energy carrier/raw material and innovation-focused scenarios, based on 2013 data. The port of Murmansk may become one of the largest transhipment centres for both international trade and Arctic cargoes [28].

## A Model for Assessing the Effect of International Trade on Regional Socioeconomic Development

To evaluate the effect of international trade on regional socioeconomic development, it is convenient to divide the international trade factor into procedural and institutional components. The procedural component includes such elements as the degree of development of international trade ties — namely trade in goods, services, and technology, — international investment, and international labour migration. The institutional component comprises international economic cooperation agreements of different levels.

The effect of the procedural component is evaluated by calculating the coefficient of correlation between the region's internal economic development (x) and international trade (y),  $(y(x) = y_n(x_n))$ . International trade turnover is an accurate measure of international trade. Measures of production, raw material, investment, intellectual, and other potentials were taken into account:

 $x_1$  — the scale of regional economy (gross regional product, USD million);

 $x_2$  — specialisation (volume of goods shipped (locally produced by the manufacturing industries), USD million);

 $x_3$  — mineral resource potential (the region's contribution to the national mineral extraction,%);

 $x_4$  — labour potential (number of the employed, people);

 $x_5$  — transportation potential (cargo traffic and cargo moved by road, rail, sea, and air, million tonnes);

 $x_6$  — technological potential (innovative goods produced and services provided, USD million);

 $x_7$  — intellectual potential (number of university graduates, people);

 $x_8$  — internal R&D expenditure, USD million;

 $x_9$  — entrepreneurial potential (small businesses' turnover, USD million);

 $x_{10}$  — investment potential (fixed asset investment, USD million).

Hence,  $y(x) = y_n(x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8, x_9, x_{10}).$ 

In view of the dramatic effect the 2008—2009 financial crisis had on development trends, it is reasonable to confine the analysis to 2010—2015.

The coefficient will demonstrate the correlation between y and x. The Chaddock scale will be used: 0.1—0.3 suggests weak, 0.5 moderate, 0.5—0.7 significant, 0.7—0.9 strong, and 0.9—0.99 very strong correlation.

### The Case of the NWFD regions: Testing the Model

Our model was tested in the case of the NWFD (table 3). A strong correlation between changes in the selected parameters — namely the GRP, the volume of goods shipped (locally produced by the manufacturing industries), innovative production, and internal R&D spending — and international trade turnover exists in Saint Petersburg. This result confirms the city's position as a major industrial, innovative, and academic centre of Russia's economy. In the case of the Pskov, Novgorod, and Vologda regions, a strong correlation exists between international trade and such measures as the GRP, manufacturing industry produce, the number of the employed, and small businesses' turnover. This proves the efficiency of the current regional SME and industry support policy.

In the Republic of Karelia and the Arkhangelsk and Nenets regions, the strongest correlation was observed between international trade and the contribution to the national mineral extraction. Unlike the other two regions, Karelia has a high volume of goods shipped (produced locally by the manufacturing industries).

Table 3

	GRP	Volume of goods shipped (locally produced by the manufacturing industries)	Contribution to the national mineral extraction	Average annual employment	Cargo moved by road and rail	Innovative goods and services	Number of university graduates (bachelor's and master's degrees)	Internal R&D spending	Small businesses' turnover	Fixed asset investment
Saint Peters-										
burg	0.97	0.98	- 0.19	0.04	0.52	0.92	- 0.16	0.94	0.77	0.47
Republic of Karelia	0.46	0.95	0.98	0.93	- 0.10	0.60	0.87	0.23	0.44	0.62
Republic of										
Komi	0.61	0.80	-0.74	-0.24	0.78	0.63	- 0.58	0.76	0.30	0.63
Arkhangelsk										
region	0.03	- 0.34	0.92	0.82	-0.84	-0.38	0.92	-0.48	- 0.18	- 0.03
Nenets auto- nomous re- gion	0.49	- 0.64	0.78	- 0.97	- 0.39	0.91	no data	- 0.19	0.13	- 0.84
Kaliningrad										
region	0.60	0.81	- 0.56	0.86	0.77	- 0.03	- 0.42	- 0.32	- 0.50	0.02
Leningrad re- gion	0.77	0.76	0.07	0.70	0.64	0.26	- 0.09	0.73	0.85	0.57
Murmansk region	0.52	0.02	0.16	0.01	- 0.17	0.04	- 0.05	0.28	0.37	0.54
Vologda re-										
gion	0.88	0.88	- 0.22	0.14	0.56	- 0.49	0.45	0.64	0.91	0.88
Novgorod re-										
gion	0.92	0.83	- 0.15	- 0.03	0.48	- 0.44	- 0.20	0.67	0.97	0.74
Pskov region	0.94	0.94	no data	0.91	0.84	0.59	0.47	- 0.21	0.98	0.89

The coefficients of correlation between international trade and regional economic development in the Northwestern federal district, 2010—2015 (calculated based on [24])

Overall, a strong or moderate correlation was most often observed between international trade and two of the indicators examined. These are the GRP and the manufacturing industry output (eight out of eleven regions). The second strongest correlation was demonstrated by fixed asset investment (seven regions), cargo traffic (six regions), employment, innovative goods, R&D spending, and small businesses' turnover (five regions each). The weakest correlation is associated with the number of graduates, which is explained by a low birth rate in the late 1980s/early 1990s. Eight out of 10 measures have a strong correlation with international trade. Therefore, there is a close link between economic development and international trade in Russia's North-West. Moreover, an increase in international trade will contribute to the regions' socioeconomic development.

### Evaluation of Institutional Support for International Trade in Russia's North-West

Brisk international trade observed in the NWFD prompts a study into the institutional framework and international cooperation tools behind it.

The institutional framework for international economic collaborations in the Northwestern regions was analysed by examining relevant cooperation agreements. A major economic centre, Saint Petersburg boasts firm institutional support for international trade. The city has concluded bilateral cooperation agreements with 93 cities and 25 regions across the globe (http://gov.spb.ru/gov/otrasl/c foreign/statistic/) [27]. The Kaliningrad region, which has entered into 19 international agreements, has a strong institutional framework for international cooperation. The Leningrad region has concluded 16 agreements on economic and other types of cooperation with regional and federal authorities of foreign states (official website of Russia's Ministry of Foreign Affairs [4]). The Republic Karelia has forged partnerships with regions of eleven countries (http:// www.gov.karelia.ru/gov/Leader/inter5.html) [18]. The Murmansk and Arkhangelsk regions also boast a strong institutional framework for international trade. The region's core partners — members of the Council of the Baltic Sea States and the Northern Dimension — belong to the studied geographical area, some of them are located in the Arctic. We classified the international agreements concluded by the NWFD regions and identified the following levels of cooperation.

*Multilateral intergovernmental economic cooperation*. Russia has entered into a number of international agreements and joined several organisations contributing to Arctic exploration and development. In 2013, Russia instigated the establishment of the International Expert Council on Cooperation in the Arctic — an organisation that brings together research associations from the five polar countries (Russia, Denmark, Canada, Norway, and the US). Obviously, the Arctic initiatives engage the northernmost regions. The Presidential decree of May 02, 2014, N 296, identified the Republic of Komi, and the Murmansk, Arkhangelsk, and Nenets regions as Arctic territories. At this level, Russian territories cooperate within the BEAR, which was established in 1993 to promote international partnerships. The BEAR consists of five working groups that are accountable to the Barents Euro-Arctic Council (http://www. barentscooperation. org/en). The Working Group of Indigenous People also functions in close collaboration with the Council (beac-russia. com/) [20]. Forums are a promising mode of cooperation. The BEAR is working to organise an event akin to the annual Davos Forum.

Bilateral intergovernmental economic cooperation. In this case, institutional support is possible at a regional level. For instance, the Nenets autonomous region is a member of the *Finnish-Nenets Subgroup* of the Interregional Cooperation Working Group under the *Finnish-Russian In*tergovernmental Commission for Economic, Industrial, and Research Cooperation (website of Russia's Ministry of Foreign Affairs [4]).

Agreements of this level include *programmes for Russia-EU crossborder cooperation until 2020.* These are 'South-East Finland — Russia' (Saint Petersburg, Leningrad region, and the Republic of Karelia), 'Karelia' (Russia (Republic of Karelia, Saint Petersburg, and the Leningrad, Murmansk, and Arkhangelsk regions) — Finland), 'Russia — Estonia', and 'Russia — Latvia' (the Leningrad and Pskov regions, Saint Petersburg) programmes.

The Northern Dimension initiative is another regional-level programme promoting transboundary cooperation in environmental protection, transport infrastructure development, and other areas [3, p. 55].

*Multilateral transnational international economic cooperation* brings together bordering countries within the same region. A vivid example is a collaboration between the regions of the fourteen BEAR member states in the framework of the Barents Regional Council. The BEAR serves as a platform for cooperation at two levels. In the Council, Russia is represented by the Republics of Karelia and Komi, and the Arkhangelsk, Murmansk, and Nenets regions — all constituents of the NWFD. The Council includes three working groups. The Republic of Karelia collaborates with three Norwegian counties. The collaboration is supported by the Norwegian Barents Secretariat. Nineteen projects worth NOK 3.4 m were implemented in 2015 (website of Russia's Ministry of Foreign Affairs [4]).

Another example is the *Northern Forum* — an international nongovernmental organisation bringing together governors of northern regions. The Forum is an observer on the Arctic Council. The Yakutsk Declaration was signed by the Forum in 2015. The signees included Russian territories — the Republic of Yakutia and the Chukotka, Nenets, Khanty-Mansiysk, Krasnoyarsk, and Yamal-Nenets regions — and international partners (Iceland's city of Akureyri and the South Korean Gangwon Province). The focus of the Declaration is the Forum's stronger position in the Arctic Council and closer collaborations with the Council's working groups and structures to solve the urgent problems of Northern development (https://mvs.sakha.gov.ru/mezhdunarodnoe-sotrudniche stvo) [14]. The Nenets autonomous region is a member of the Northern Forum and the Republic of Komi contributes to the implementation of the Forum's projects.

The *Kolarctic* cross-border cooperation programme brings together the Cap of the North (Finland, Sweden, Norway) and Russia's North-West (Saint Petersburg, the Murmansk, Arkhangelsk, Leningrad, and Nenets regions, and the Republic of Karelia) (http://www.ved.gov.ru/interreg\_ cooperation/cooperation\_program/cooperation\_new/) [22].

Some *Euroregions* — transboundary collaborations between European countries — include Russian northwestern territories. For instance, the Kaliningrad region is a member of five Euroregions — Baltic, Neman, etc.

*Bilateral international interregional economic cooperation.* The Kaliningrad region has signed long-term international cooperation agreements with five Lithuanian, four Polish, and three Belarusian regions. Partnerships have been established with two Danish, two Swedish, and two German territories (website of Russia's Ministry of Foreign Affairs [3]). Since 2008, Kaliningrad has hosted a forum of partner regions. The Murmansk region has signed agreements with Nordic regions — Norway's Finnmark (a 25-year partner of the Arkhangelsk region), Troms, and Rogaland, Finland's Oulu, Lapland, and Northern Ostrobothnia, and Sweden's Norrbotten (http://minec.gov-murman.ru/activities/intercoop/) [15]. The Leningrad region has concluded agreements on economic and other types of partnership with the regional and federal authorities of Finland (two regions), Norway, Belarus (four regions), and other countries (http://inter. lenobl. ru/programm/mprog) [26].

Inter-city international cooperation (sister cities). Saint Petersburg has signed agreements on bilateral cooperation with 93 foreign cities. Cities of the Novgorod, Kaliningrad, Vologda, Pskov, and Leningrad regions are members of the Hanseatic League of New Time, which brings together 187 cities from 16 countries. The League promotes trade, economic, and cultural ties among its members (hanse. org) [36]. Partnerships have been established between bordering sister cities (Narva — Ivangorod, Imatra — Svetogorsk, etc.) that share a common history [2, p. 29—30].

The agreements promote cooperation within the following areas.

*Economic cooperation* covers a wide range of possible areas — trade, investment, etc. [32]. Economic agreements are concluded at all the levels described above. The BEAR has an intergovernmental group for economic cooperation and an interregional one for investment and economic

cooperation. The Northern Forum launched a programme for sustainable economic development — a network of northern and circumpolar business associations. The Kolarctic programme supports socioeconomic development in the partner regions and promotes the free movement of goods, capital, and people (http://kolarctic.info/ru/kolarctic-2014-2020-ru) [19]. In this context, an important aspect is the development of entrepreneurship and business environment. These issues have been addressed by the Forum of the Kaliningrad Partner Regions. The Republic of Karelia has forged a partnership with the Swedish province of Västerbotten. The Swedish-Karelian Business and Information Centre is a product of this collaboration.

Many agreements cover multiple areas of cooperation. In the case of the agreements between the Murmansk region and Norwegian, Finnish, and Swedish territories, these include trade, industrial cooperation, foreign direct investment, fairs and exhibitions, meetings and symposia, partnerships between associations and foundations, and information exchange (http://minec.gov-murman.ru/activities/intercoop/) [15].

*Environmental protection* is among the most popular cooperation areas [39]. The BEAR has environmental working groups at both an interregional and intergovernmental level. The organisation also promotes collaborations in the field of forest protection. The Kolarctic programme is committed to solving common problems in environmental protection and healthcare (http://kolarctic.info/ru/kolarctic-2014-2020-ru/) [19]. Within the programme, the Nenets autonomous region submitted an application for an alternative energy project (ARCsynopsis) (http://invest.adm-nao. ru/nao/international/) [13].

In 2014—2015, the Republic of Karelia and Sweden's Västerbotten collaborated in such fields as renewable energy sources, eco-efficient communities, and energy conservation technology.

*Transport infrastructure.* The BEAR includes an intergovernmental working group on transport and an interregional group on transport and logistics. Euroregions also promote cooperation in the field of transportation. A vivid example is a joint project between the Republic of Komi and Finland. The aim of the project is the construction of a railroad from Oulu to Perm via Arkhangelsk and Syktyvkar (http://www.rkomi.ru/page/424). Another focus of international infrastructure development is the Northeast Passage — Russia's historical integration transportation system in the Arctic. This route was studied by Mikhail Lomonosov, who wrote *A Brief Description of Various Voyages in Northern Seas and Indication of a Possible Passage through the Siberian Ocean to East India.* The 'industrial' marine passage approaching the North Pole was envisioned by Dmitry Mendeleev, who contributed to the design of icebreakers (http://www.muctr.ru/about/history/mendel/). In 2016, a record vol-

ume of cargo was transported via the Northeast Passage — the most impressive results of the Soviet time were surpassed. The State Commission on Arctic Development believes that the cargo carried via the route can increase tenfold in 2014—2020 (http://special.tass.ru/ekonomika/4134 998). LNG production on the Yamal Peninsula, which will be launched in the near future, will contribute to the growing importance of the route (http://special.tass.ru/ekonomika/885773). According to Chinese estimates, the route may handle up to one-seventh of the country's international cargo in 2020. South Korea also strives for leadership in marine transport operations in the polar regions.

Other areas of cooperation include tourism, research and education, support for indigenous peoples, emergency operations (BEAR), culture, etc. Within the BEAR, the Nenets autonomous region is involved in projects in the fields of telemedicine (the 'Innovations for a better life in the High North' Russian-Norwegian project was launched in 2017), environmental protection, support for minor indigenous peoples, tourism, etc. (http://invest.adm-nao.ru/nao/international/) [13]. The Republic of Komi has forged a partnership with Finland to develop agriculture, deer farming, forestry, tourism, etc. (http://www.rkomi.ru/page/424) [17]. Within the BEAR, the Arkhangelsk is going to organise business excursions to Arkhangelsk for the Norwegian members of the Arctic Marine Cluster (https://dvinaland.ru [21]). Committed to excellence in education and research, the region makes a significant contribution to international Arctic studies. Home to the Immanuel Kant Baltic Federal University, the Kaliningrad region also boasts considerable academic potential. Multilateral academic cooperation is the focus of the Barents Cross-Border University Network, which brings together higher education institutions of Canada, Denmark, and Greenland and Russia's Mikhail Lomonosov Northern Arctic Federal University [25].

### Conclusions

The above analysis draws a number of conclusions:

— the economic development and international trade are closely connected in Russia's North-West. Brisk international trade will contribute to the region's socioeconomic development;

— there is a strong institutional framework for international trade as a development factor in the Northwestern regions. Covering a wide range of areas, cooperation agreements have been concluded at different levels. The regions are involved in multilateral and bilateral intergovernmental economic cooperation, cross-border collaborations between Russia and the EU, multilateral and bilateral transnational interregional economic cooperation, and inter-city international cooperation. Collaborations in investment, trade, and information exchange extend to a wide range of areas — industry, environmental protection, transport, tourism, science, education, etc.;

— developed international trade and a strong institutional framework for economic collaborations are a product of the NWFD's obvious advantages. These include a unique geographical position, the 'Nordic' specialisation of different industries, shared with the bordering countries (accounted for by the severe climate), proximity to European countries an arena for multilateral international interregional cooperation, and the diversity of institutional frameworks for international cooperation in the macroregion, where Russia's North-West plays an important role.

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#### The authors

*Prof. Elena L. Andreeva*, Head of the Centre for Regional Comparative Research, Institute of Economics, Ural Branch of the Russian Academy of Sciences, Russia; Professor, Ural State University of Economics, Russia.

E-mail: elenandr@mail.ru

*Dr Artem V. Ratner*, Research Fellow, Institute of Economics, Ural Branch of the Russian Academy of Sciences, Russia.

E-mail: aratner@inbox.ru

*Dr Yuliya G. Myslyakova*, Senior Research Fellow, Institute of Economics, Ural Branch of the Russian Academy of Sciences; Ural State University of Economics, Russia.

E-mail: jul\_jul@inbox.ru

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*Dr Pavel L. Glukhikh*, Research Fellow, Institute of Economics, Ural Branch of the Russian Academy of Sciences, Russia.

E-mail: gluchih\_p\_l@mail. ru

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