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Editorial

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This issue of the journal is thematic. It is part of the follow-up to the research forum of the Baltic University Programme, which took place in August 2020¹.

A long-standing partner in the programme, the Immanuel Kant Baltic Federal University has assumed the role of a media outlet of the forum to publish the finest of its proceedings. Like the forum itself, the issue is devoted to sustainable development, as pursued in the Baltic Region.

The Baltic University Programme [1; 2] defines the Baltic Sea Region as countries in the catchment areas of rivers discharging into the namesake sea, including the Czech Republic, Slovakia, Ukraine, and Belarus. This definition follows the ecological approach based on the postulate that the quality of the Baltic Sea influenced the cleanness of rivers draining into the sea. Vital factors here are the environmental attitudes of people living in the area and the environmental laws in effect in their countries. A series of studies conducted under the aegis of the Baltic University Programme has extended the definition of the region to include not only its traditional constituents that have access to the Baltic Sea but also the Czech Republic, Slovakia, Ukraine, and Belarus.

Sustainable development is more than a mere combination of the ecological, economic and social dimensions. Sustainable approaches become effective only when underpinned by ethical principles. As early as 1987, the Brundtland Commission introduced the idea of sustainable development, presented in the Brundtland report. Three decades later, sustainable development is an established concept. Agenda 21 for the Baltic Sea Region was approved in 1998 by the Council of the Baltic Sea States (CBSS) of which the Russian Federation is a member². The document lays down the principles of sustainable development for different sectors of the Baltic Sea economies. Recognized by all the countries of the region, this programme provides an institutional framework for sustainable development in the Baltic Sea Region.

¹ Research and Innovation for a Sustainable Baltic Sea Region, 2020, *BUP Symposium 2020*, available at: <http://www.bupsymposium2020.se/> (accessed 10.05.2021).

² Agenda 21 for the Baltic Sea Region, 1998, adopted at the 7th Ministerial Session of the Council of the Baltic Sea States, Nyborg, June 22–23, *European Union – the United Nations*, available at: <http://www.un.org/esa/agenda21/natlinfo/action/baltic.htm> (accessed 10.05.2021).

The 2030 Agenda, adopted by all United Nations Member States in 2015, promotes sustainable development goals³. In the Baltic Sea Region, the 2030 Vision for the Baltic Sea Region⁴, supported by the CBSS, has categorized the 17 UN sustainability goals into six focus areas: sustainable and resilient cities, climate action, equality and social well-being, transition to a sustainable economy, quality education and life-long learning, and partnerships for sustainable development.

Articles in this issue concentrate on these six priorities.

Goran Roos, Natalia Kubina, and Yulia Farafonova (Roos G., Kubina, N. Ye., Farafonova, Y. Yu. 'Ensuring sustainable economic development of coastal areas of the Baltic Sea region in the context of digital transformation') demonstrate the dependence of sustainable economic development on openness to digital innovation. In coastal regions, the **transition to a sustainable economy** is also closely connected to blue economy sectors. The authors conclude that this transition requires digital infrastructure and conditions for new technologies to generate new products and services.

Tourism, one of the greenest industries, is the focus of the contribution by Larysa Satyr, Ruslana Zadorozhna, and Leonid Stadnik (Satyr, L. M., Zadorozhna, R. P., Stadnik, L. I. 'Statistical analysis of tourist flows between Ukraine and the Baltic Sea region countries in 2012–2019'). In investigating tourist flows between Ukraine and the Baltic region states, the authors emphasise an increase in the popularity among Ukrainians. This change affects demand for tourism services in the region and stimulates sustainable **economic cooperation**.

Anniya Apsite (Apsite, A. 'In search of a theoretical framework for factors influencing work and life balance') outlines an important determinant of the quality of life, which relates to sustainability in terms of a healthy society. Work and life balance has grown into a major problem during the pandemic when ubiquitous teleworking has changed the roles of stakeholders. For example, workplace and workflow management is not any more the sole responsibility of the employer, but the employee has to contribute their organisational talent as well. Remote working both brings about a shift in work-life balance and **contributes to more sustainable development of cities and communities**: lighter traffic levels mean a reduction in the use of fossil fuels and lower emission rates.

Varvara Altunina and Inobbat Alieva examine a national model of green financing and reveal the role of green investment in achieving sustainable development goals (Altunina, V. V. Alieva, I. A. 'Current trends in the development of a green finance system: methodology and practice). The authors focus on Russian institutions active in the market of climate bonds. The proceeds from the sale of such bonds to investors (governments, banks, municipalities, and corporations)

³ Sustainable Development Goals, 2020, *United Nations*, available at: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (accessed 10.05.2021).

⁴ Vision for the Baltic Sea Region 2030, 2018, *Vision and Strategies Around the Baltic Sea*, available at: <https://vasab.org/wp-content/uploads/2018/06/Achievement-of-the-2030-Agenda-in-the-BSR.pdf> (accessed 10.05.2021).

are to be used for projects aimed at **climate conservation**, renewable energy, ecosystem support, energy conservation, a low-carbon economy, green transport, etc. Thus, green investment has a principal role in **climate protection**.

Problems caused by social disparities result in various forms of inequality and depopulation of rural regions. Even in the protected areas of coastal Lithuania with unique and diverse natural and cultural sites some villages are losing the population due to not developed social-economic infrastructure, lack of entrepreneurship skills, ecological education, and restrictions of farming and management. Daiva Verkulevičiūtė-Kriukienė, Angelija Bučienė, and Erika Čepienė from Klaipėda University look into this problem and propose ways to improve the situation by creating new jobs in a sustainable area such as rural tourism and suggest rethinking the ecological restrictions. This solution is in line with the **'equality and social well-being'** priority (*Verkulevičiūtė-Kriukienė, D., Bučienė, A., Čepienė, E. 'The depopulation of rural coastal Lithuania: do regional parks stabilize the situation or not?'*). **Partnerships** are the key to attaining **sustainable development goals**. Cross-border cooperation programmes, which have been actively developing in the Baltic Sea Region, are a prime instrument of cooperation between the EU and Russia. Commitment to sustainable development is a principle laid down in all the programme documents. Some programmes identify the conservation of natural and cultural heritage as a priority. One of the projects run as part of the Russia-Lithuania 2014–2020 cross-border cooperation programme led to the development of a new ecological route — the Geological and Geomorphological Chronicle of the Baltic Sea Region. The collaborative use of the Curonian Spit, a UNESCO site, for ecological initiatives and tourism is a perfect example of a partnership for sustainable development. Aleksey Anokhin, Elena Kropinova, and Eduardas Spiriajevas analyze the project results (*Anokhin A. Yu., Kropinova E., Spiriajevas E. Development of geotourism based on the use of geoheritage (on the example of the Curonian Spit — a UNESCO site)*).

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1. Sörlin, S. A. 1997, *Sustainable Baltic Region. Session 1*, Uppsala, The Baltic University Programme, Uppsala University.
2. Ryden, L., Migula, P., Andersson, M. (eds.) 2003, Environmental Science, *The Baltic University publication*, available at: <https://www.balticuniv.uu.se/publications/text-books-and-publications/environmental-science/> (accessed 10.05.2021).

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OPPORTUNITIES FOR SUSTAINABLE ECONOMIC DEVELOPMENT OF THE COASTAL TERRITORIES OF THE BALTIC SEA REGION IN THE CONTEXT OF DIGITAL TRANSFORMATION

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The article explores opportunities for the sustainable economic development of coastal territories in the Baltic Sea region (BSR) arising in blue economy sectors in the framework of digital transformation. The study argues that a more active commercialisation of territorial resources can facilitate the sustainable economic development of the BSR coastal territories, following digitally-driven innovations. The paper provides an overview of methodological approaches to territorial sustainability. It also assesses the 2009–2018 level of the socio-economic development of the BSR coastal territories, underpins the importance of the blue economy and highlights the role of digital transformation in reaching the UN Sustainable Development Goals (SDGs) in the BSR through digitally-driven innovations. A comparative and problem-targeted statistics analyses show significant differences in the level and dynamics of socio-economic development in the BSR coastal territories with their GRP per capita being generally lower than the national or macroregional average. A review of literature on sustainable development in the BSR has shown that a more active use of unique resources of the coastal territories along with a technology-driven growth of blue economy sectors can counterbalance the negative impact of the territories' uneven development on the progress towards the SDGs in the BSR. Increasing the competitiveness of the BSR coastal territories requires investment in digital solutions in the blue economy sectors and the creation of a communication infrastructure. The review of key innovations in the blue economy sectors shows that their implementation gives impetus to other industries by reducing costs, creating new jobs, and improving the quality of products and services.

Keywords:

Baltic Sea Region, sustainable development, blue economy, digitalisation

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Introduction

The Baltic Sea Region (BSR) comes into focus of research for many reasons, including the border position of its member countries and regions [1–3], their coastal location [4; 5] and long historical ties [6]. The region is also of interest since it is a pilot one for several EU projects. It is the first EU macro-region with its own strategy [7–9]. Researchers note that the impetus for its development came from the realization of the fact that the ecosystem of the Baltic Sea is under considerable stress, which can be removed only through concerted efforts at the interstate and supra-territorial levels [10]. Special attention is paid to the issues of sustainable development, often viewed together with the blue economy – the use of marine resources aimed to ensure economic growth, improve the living and working conditions of the population, as well as the state of the ocean ecosystem¹ [see. for example, 8; 11–15].

The term *sustainable development* was introduced in 1987 in a report of the World Commission on Environment and Development. According to the presented definition, it is “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs².” The UN³ 2030 Agenda, adopted in 2015, sets 17 sustainable development goals for three interdependent areas: economic growth, social development and environmental protection. Sustainable development is generally understood as the development sustaining the balance of these three components [see e. g. 16; 17, etc.]. Some authors also add a political one to this group [18; 19].

In this study, sustainable economic development is considered as a comprehensive process aimed at solving socio-economic problems, improving the living conditions of the region’s population and the state of the environment by achieving a balance between the social and economic spheres.

Although the Sustainable Development Goals (SDGs) are not legally binding, many supranational and national strategies are developed in line with them. For example, Russia’s national development goals through 2030⁴, adopted in

¹ What is the Blue Economy? 2017, *World Bank*, June 6, available at: <https://www.worldbank.org/en/news/infographic/2017/06/06/blue-economy> (accessed: 03.15.2021).

² Report of the World Commission on Environment and Development: Our Common Future, 1987, *UN*, available at: https://sustainabledevelopment.un.org/content/documents/5987_our-common-future.pdf (accessed 20.12.2020).

³ Transforming our world: The 2030 Agenda for Sustainable Development. Resolution by the UN General Assembly dated 25.09.2015 No. A/RES/70/1, 2015, *UN*, available at: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=R (accessed 18.12.2020).

⁴ *On the national development goals of the Russian Federation through 2030*, 2020, Decree of the President of the Russian Federation of July 21, 2020 No. 474, available at: http://www.consultant.ru/document/cons_doc_LAW_357927/ (accessed 19.12.2020).

June 2020, almost completely coincide with the UN SDGs. In the EU, the SDGs must be incorporated into all strategic documents⁵. The SDG Goal 14 (conserve and sustainably use the oceans, seas and marine resources⁶) is especially relevant for coastal countries and territories. In the EU, its importance is reflected in the Blue Growth Strategy⁷, and in the BSR — in the EU Strategy for this macroregion⁸.

Appeals for work towards the SDGs in the BSR based on developing the potential of the blue economy are contradictory since the increased economic activity in the maritime sectors and industries results in greater environmental pressure on the marine ecosystem. However, digital transformation can provide means for resolving this contradiction.

As follows from a recent study on the use of big data and artificial intelligence in the maritime industry [20], the concept of *digital transformation* is the most suitable for characterizing not only the change in the quality of business models based on digital technologies but also the relationship between various stakeholders directly or indirectly involved in the production of products and services in the blue economy. Digital transformation provides for consistency of these relations and the universality required to drive concerted actions to achieve the SDGs in the Baltic Sea region.

Digital transformation is not a new phenomenon, however, the Covid-19 pandemic served as a catalyst for it [21 – 26]. When holidaymaking, business trips, physical presence in the workplace and real-life communication with clients, colleagues, partners turned out to be impossible, many enterprises faced the choice of either leaving the market or adapting to the new conditions. The latter required the accelerated introduction of digital technologies (big data, artificial intelligence, cloud technologies, RFID) and the restructuring of business models to promptly respond to unforeseen situations and reduce costs [27]. When the pandemic is over, businesses and territories, which by that time have reached ‘digital maturity’ will find themselves in a more advantageous position [28]. The acceleration of digital transformation, as well as the competitive advantages that it provides, should be taken into account when developing both national and regional development strategies.

⁵ EU Approach to sustainable development, 2020, *European Commission*, available at: https://ec.europa.eu/info/strategy/international-strategies/sustainable-development-goals/eu-approach-sustainable-development_en (accessed 19.12.2020).

⁶ Goal 14: Conserve and sustainably use the oceans, seas and marine resources, 2020, *UN, Sustainable Development Goals*, available at: <https://www.un.org/sustainabledevelopment/ru/oceans/> (accessed 19.12.2020).

⁷ Blue Growth, 2020, *European commission*, available at: https://ec.europa.eu/maritimeaffairs/policy/blue_growth_en (date accessed: 20.12).

⁸ EU Strategy for the Baltic Sea Region. URL: <https://www.balticsea-region-strategy.eu/> (accessed 23.12.2020).

It should be noted that the majority of research on the BSR consider either whole countries or coastal territories of the NUTS3 level⁹ and Russian regions, depending on the interpretation of the term the *Baltic Sea region* [29]. In this work, the BSR is used in its narrow meaning and includes only territories located directly on the seacoast since these territorial objects are under the maximum influence of the proximity of the sea as a factor determining the sustainability of their socio-economic development [18].

In this article, the term *coastal territory* refers to an administrative-territorial unit of the meso-level adjacent to the internal seawaters and (or) the territorial sea of a country. Thus, the concept of *coastal territories of the Baltic Sea region* covers territorial objects of the region in its narrow sense: “located on the coast of the Baltic sea or in direct proximity to it” [29]. These are three coastal subjects of the Russian Federation (St. Petersburg, Leningrad region, Kaliningrad region) and 21 EU territories. The EU defines coastal regions as units of the NUTS 3 level, whereas this paper considers units of the NUTS 2 level and in some cases NUTS 1 (whole countries), since it is this level that is formally comparable to the Russian Baltic regions — the Kaliningrad region, Leningrad region and St. Petersburg with the population of 1,002.2, 1,847.9 and 5,383.9 thousand people, respectively¹⁰.

Approaches to assessing the sustainability of a territory’s development

On 6 July 2017, as part of its Sustainable Development Strategy, the UN adopted 169 targets and 231 indicators to achieve the 17 goals¹¹. The EU uses 100 indicators to track the achievement of the 17 UN SDGs. EU countries monitor their progress only on the indicators that are most important to them. For example, Germany uses only 65 indicators¹². Russia submits a voluntary report on 90 indicators whilst its national projects cover 107 out of 169 SDG targets¹³.

⁹ Coastal, island and outermost regions, 2020, *Eurostat*, available at: <https://ec.europa.eu/eurostat/web/coastal-island-outermost-regions/background> (accessed 24.01.20).

¹⁰ Regions of Russia. Social and economic indicators 2019, 2019, Stat. Sat. Rosstat, Moscow, available at: <https://gks.ru/folder/210/document/13205> (accessed 24.01.2020).

¹¹ *Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development*, 2017, Resolution adopted by the General Assembly on July 6, 2017 No. A/RES/71/313, available at: <https://undocs.org/ru/A/RES/71/313> (accessed 21.12.2020).

¹² Sustainable development indicators, 2020, *Destatis*, available at: https://www.destatis.de/EN/Themes/Society-Environment/Sustainable-Development-Indicators/_node.html (accessed 06.01.2021).

¹³ Voluntary National Review of the Implementation of the 2030 Agenda for Sustainable Development. RF, 2020, *United Nations, Department of Economic and Social Affairs: Sustainable Development*, available at: https://sustainabledevelopment.un.org/content/documents/26421VNR_2020_Russia_Report_Russian.pdf (accessed 28.12.2020).

Currently, monitoring the achievement of the SDGs in individual regions and territories is more of an exception, but the importance of implementing a sustainable development strategy not only at the national but also at the subnational levels has already been recognized. For example, the Organization for Economic Cooperation and Development (OECD) indicates that 65% of the SDGs' targets cannot be achieved without local and regional governments' proper involvement¹⁴. In this regard, it is likely that soon regions will also start reporting on their progress towards the SDGs.

To assess the level of sustainability of the socio-economic development of territories, most authors propose to use synthetic indicators that take into account economic, social and environmental components, developed on the basis of the UN indices [13; 17; 30–33]. Usually, such assessments apply a comparative analysis methodology, including data envelopment analysis [34; 35], an evaluation based on distance from the average solution [36]. Unfortunately, it is not possible to use such indicators in this work due to the lack of statistical data on territories of the EU and the Russian Federation.

The most common indicator used to measure the sustainability of socio-economic development is GDP per capita. An alternative to it is Sustainable Economic Wellbeing Index (ISEW), proposed by Daley and Cobb [37]. This index is used both at the national [38; 39] and subnational levels [40]. It should be noted that it rather complements than replaces GDP per capita (it relies on personal consumption data as well, however, it also takes into account inequality in income, costs associated with crime, environmental degradation, loss of leisure along with the benefits of consumer durables, public infrastructure, volunteering and free housework [41]). GRP per capita remains the key indicator in economic research to characterize the socio-economic development of a region.

Assessment of the socio-economic development of the coastal territories of the BSR

To compare the coastal territories, the research applies GRP per capita based on purchasing power parity. For analytical purposes, the calculation of the indicator's values was done for 2009–2018 followed by the calculation of the average annual growth rate (the geometric mean method) and accession rate for each territory (by subtracting one hundred per cent from the previously calculated values). The resulting data allow us to compare the level and dynamics of the socio-economic development of the coastal territories of the Baltic Sea region (Fig. 1).

¹⁴ A Territorial Approach to the Sustainable Development Goals: Synthesis report, 2020, *OECD*, available at: <https://www.oecd-ilibrary.org/sites/e86fa715-en/index.html?itemId=/content/publication/e86fa715-en> (accessed 30.12.2020).

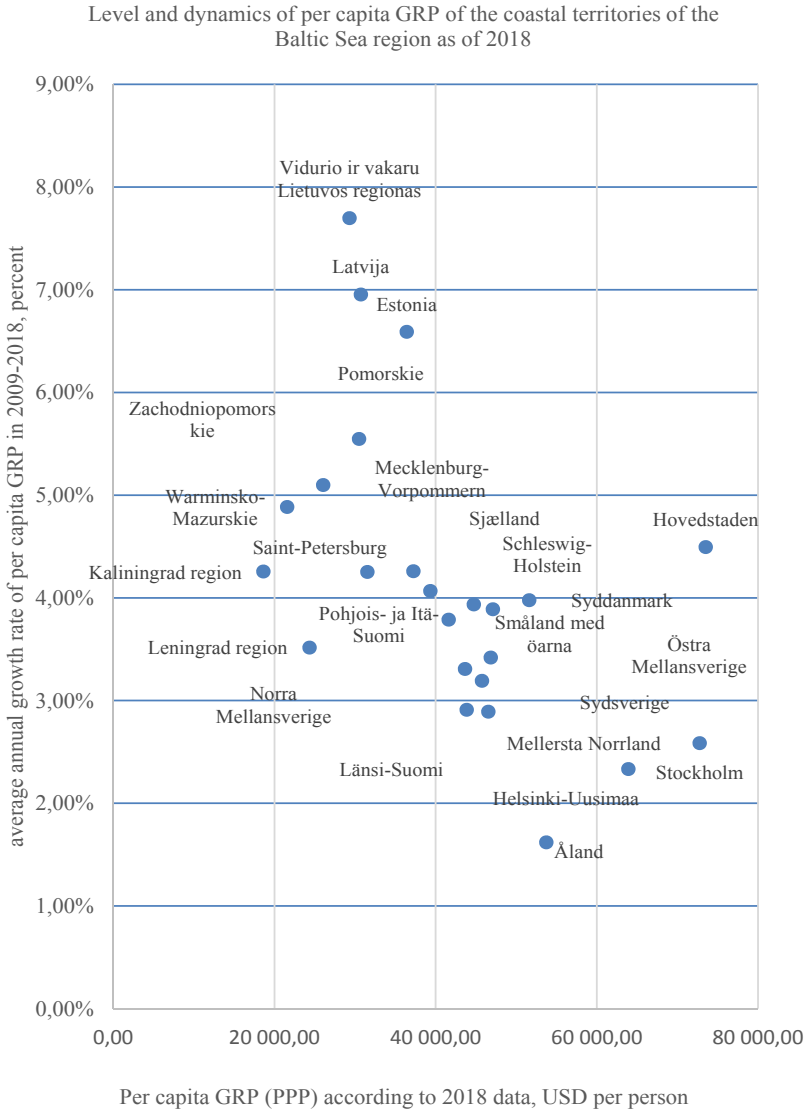


Fig. 1. Level and dynamics of per capita GRP in the coastal territories of the Baltic Sea region as of 2018

Source: authors' calculations based on data from Rosstat¹⁵, Eurostat¹⁷, OECD¹⁸

¹⁵ Purchasing Power Parity, 2020, Assessment of Russia's GDP in a Single Currency Based on the Results of International Comparisons, Rosstat, 8 Apr 2020, available at: https://rosstat.gov.ru/free_doc/new_site/vvp/ocena-vvp.htm (accessed 09.01.2021).

¹⁶ Gross regional product per capita, 2020, EMISS, available at: <https://fedstat.ru/indikator/42928> (accessed 09.01.2021).

¹⁷ Euro / ECU exchange rates annual data, Gross domestic product (GDP) at current market prices by NUTS 3 regions, Average annual population to calculate regional GDP data (thousand persons) by NUTS 3 regions, 2020, Eurostat, available at: <https://ec.europa.eu/eurostat/data/database> (accessed 30.08.2020).

¹⁸ Purchasing power parities (PPP), 2020, OECD iLibrary. doi: 10.1787/1290ee5a-en (accessed 18.10.2020).

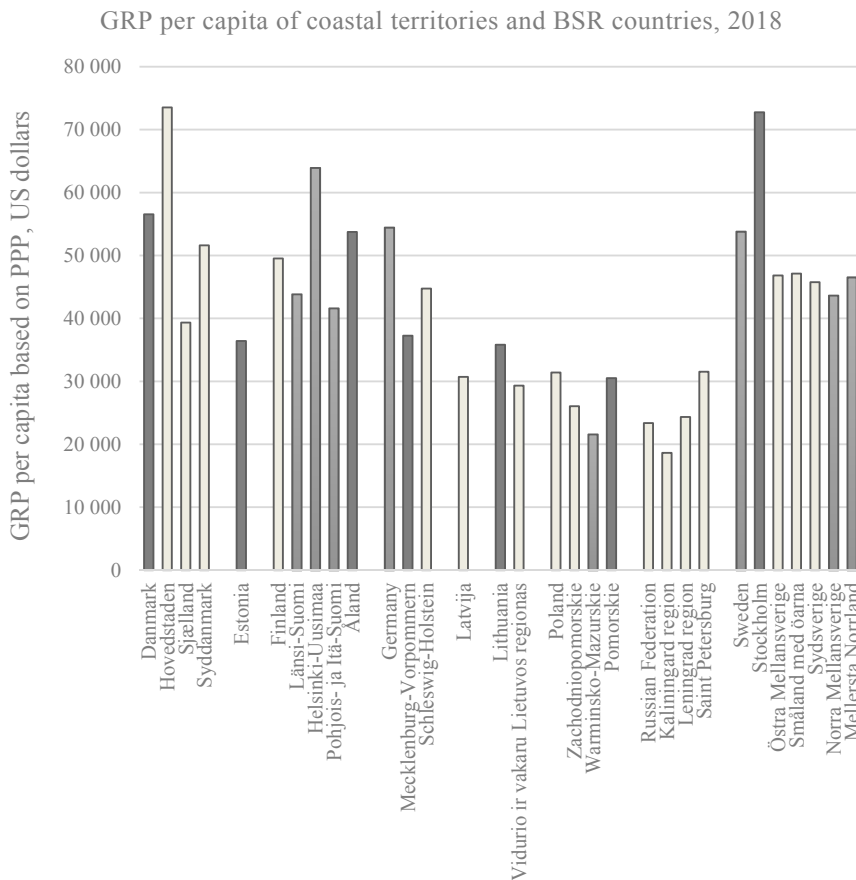


Fig. 2. GRP per capita in coastal territories and countries of the Baltic Sea region, 2018, USD

Source: authors' calculations based on data from Rosstat¹⁹,²⁰ Eurostat²¹, OECD²²

To calculate the indicator for the constituent entities of the Russian Federation, the GRP value was adjusted for purchasing power parity (PPP) index (Russian roubles per US dollar). To calculate the indicator values for the EU, the OECD PPP index (euro per the US dollar) was adjusted for the exchange rate of national currencies (for Denmark, Poland and Sweden).

¹⁹ Purchasing Power Parity, 2020, Assessment of Russia's GDP in a Single Currency Based on the Results of International Comparisons, *Rosstat*, 8 Apr 2020, available at: https://rosstat.gov.ru/free_doc/new_site/vvp/ocenka-vvp.htm (accessed 09.01.2021).

²⁰ Gross regional product per capita, 2020, *EMISS*, available at: <https://fedstat.ru/indikator/42928> (accessed 09.01.2021).

²¹ ECU exchange rates annual data, Gross domestic product (GDP) at current market prices by NUTS 3 regions, Average annual population to calculate regional GDP data (thousand persons) by NUTS 3 regions, 2020, *Eurostat*, available at: <https://ec.europa.eu/eurostat/data/database> (accessed 30.08.2020).

²² Purchasing power parities (PPP), 2020, *OECD*.doi: 10.1787/1290ee5a-en (accessed 18.10.2020).

For the study, the development level of the coastal territories was compared to the national average. The basis for comparison was PPP-adjusted per capita GRP as of 2018 (Fig.2).

The comparative analysis based on the per capita GRP reveals significant differences in the level and dynamics of economic development of the coastal territories in the BSR. Those of the Baltic States, Poland and the Russian Federation have the lowest level of PPP-adjusted GRP. For instance, in the Kaliningrad region (Russia), its value is almost 4 times less than in the Danish region of Hovedstaden (as of 2018). However, in the Baltics and Poland, its growth rates were the highest, while the coastal territories of Scandinavia had the lowest, which stems from the differences in the baseline values for the indicator.

At the same time, with the exception of the territories home to cities which historically played a major economic role (St. Petersburg, Hovedstaden (Copenhagen), Stockholm, Helsinki) and the Åland region, the PPP-adjusted GRP per capita in the coastal territories of the BSR is significantly lower than the average for the corresponding country or macroregion.

This indicates that economic activities are mainly taking place in the inland, landlocked territories of the BSR countries. This contradicts the idea of the positive impact of the coastal location and direct access to the sea on the economic growth and development of territories, proved in a recent study based on the maritime shipping data [42].

A possible explanation for this situation is the fact that most of the coastal territories of the BSR are peripheral and mainly rural. They are characterized by a low and continuing decline in the population, as well as a relatively high level of unemployment. Employment opportunities for medium and highly skilled professionals there are extremely limited. A probable explanation is that the local sectors of the blue economy could not withstand international competition in the context of globalization (in particular, sea freight and shipbuilding). A significant part of industries produces goods having low added value (for example, fishing and fish processing)²⁵.

The revealed lag in the level and rate of economic development of the coastal territories of the Russian Federation, the Baltic States and Poland poses a threat to their sustainability and the sustainability of the Baltic Sea Region in general. This should stimulate the adoption of coordinated measures on the accelerated transfer of the BSR industries to new digital-based technologies. As Cetin, Irak and Kahyaoglu emphasize, increasing the role of the blue economy

²⁵ Eurostat regional yearbook 2020, 2020, *Eurostat*, available at: <https://ec.europa.eu/eurostat/documents/3217494/11348978/KS-HA-20-001-EN-N.pdf/f1ac43ea-cb38-3ffb-ce1f-f0255876b670> (accessed 08.01.2020).

in achieving the SDGs, which the authors call ‘maritimization’, requires systematic planning and management [43], the organizational and technological basis of which is digital transformation.

Sources of sustainable economic development in the BSR

The stability of the economic development of a territory is largely determined by its unique features and resources [18; 44]. For coastal territories, these are primarily coastal-marine ones: aquatic biological, mineral, tourist and recreational resources, ice-free ports. They provide opportunities for the development of maritime activities, or the blue economy. Both Russian^{24,25} and EU legislation emphasize its significance. For instance, it is one of the directions of the future EU Horizon Europe Strategy²⁶, blue economy industries are the main areas of activity in the BSR strategy²⁷.

As of 2018, in the EU, the blue economy sectors accounted for about 2.2% of the total employment, and the gross value added was 1.5% of the European average²⁸. At the same time, the blue economy is promising in terms of value added and employment. The blue economy sectors include²⁹ marine living resources (fishing, aquaculture, processing, distribution), marine non-living resources (oil, gas, other minerals), marine renewable energy (offshore wind energy), port activities (cargo and warehousing, port facilities, infrastructure projects), shipbuilding and repair, maritime transport (passenger, freight transport and services), coastal tourism (accommodation, transport, other services); ocean energy (floating offshore wind, wave and tidal energy, floating solar pho-

²⁴ *On Methodological Recommendations for the Development of the Coastal-Sea Component of the Strategy for Socio-Economic Development of the Primorsky Subject of the Russian Federation.* <Letter> Ministry of Economic Development of Russia dated 11.10.2013 ND17i-904, 2013, available at: <http://www.consultant.ru/cons/cgi/online.cgi?base=EXP&dst=100001&n=568765&req=doc#03239287579437973> (accessed 31.08.2020).

²⁵ *On the Strategy for the Development of Maritime Activities of the Russian Federation until 2030.* Order of the Government of the Russian Federation of August 30, 2019 No. 1930-r. 2019, available at: <http://static.kremlin.ru/media/acts/files/0001201705100002.pdf> (accessed 30.08.2020).

²⁶ The EU Blue Economy Report 2020, 2020, *European Union*, Luxembourg. doi: 10.2771 / 363293.

²⁷ *EU Strategy for the Baltic Sea Region*, 2020, available at: <https://www.balticsea-region-strategy.eu/about/implementation> (accessed 26.12.20)

²⁸ The EU Blue Economy Report 2020, 2020, *European Union*, Luxembourg. doi: 10.2771 / 363293.

²⁹ The EU Blue Economy Report.2020, 2020, *European Union*, Luxembourg. doi: 10.2771 / 363293.

tovoltaic energy and offshore hydrogen generation), blue bioeconomy and biotechnology, marine minerals (deep seabed mining), marine engineering (submarine cables).

The successful development of all these sectors requires innovations, they are currently the key to the competitiveness and hence economic sustainability of a territory [45]. For example, blockchain technology is now increasingly used to improve the efficiency of logistics and to increase the transparency of financial transactions in maritime transportation. The Internet of Things is used to manage port traffic and warehouses [46]. Researchers call digital transformation a major driver of port development [47; 48]. In coastal tourism, the augmented reality technology expands the possibilities of cultural and historical tourism, and the development of ‘smart destinations’ creates new business opportunities and new jobs [49]. In marine engineering, autonomous vessels are an efficient and safe option for monitoring submarine pipelines. Fishing harnesses artificial intelligence in acoustic and video technologies. A detailed overview of digital technologies and innovative solutions created on their basis in the blue economy sectors, presented in the OECD report⁵⁰, indicates that their implementation can significantly increase the sustainability of the economic development in the BSR. By accelerating the implementation of all business processes, rationalizing logistics and optimizing the spatial movement of resources and products, they can considerably lower costs, improve the quality of services, create new jobs, as well as substantially reduce harmful emissions minimizing the carbon footprint of transport operations.

The benefits of digital transformation in the blue economy drive interconnected innovations across industries and sectors. For example, the development of offshore wind energy (floating platforms) and the introduction of digital solutions in this area will have a positive impact on port and shipbuilding activities, as well as on marine equipment suppliers and operators⁵¹. Innovations in aquaculture farming leading to increased productivity while minimizing negative environmental effects will have a beneficial economic impact on the downstream and upstream activities — the fish processing industry and production of aquaculture feed. These sectors will grow creating new jobs and contributing substantially to the regional budget. It is planned to move aquaculture farms further off the coast to reduce their negative impact on the environment and

⁵⁰ Rethinking Innovation for a Sustainable Ocean Economy, 2020, *OECD*, Paris. 2020. doi: 10.1787/9789264311053-en.

⁵¹ Powering the next generation of green energy in the Baltic Sea Region, 2020, *European Commission*, available at: https://ec.europa.eu/regional_policy/en/projects/Estonia/powering-the-next-generation-of-green-energy-in-the-baltic-sea-region (accessed 29.12.2020).

because of the competition for territory with other sectors [50]. Consequently, there is a need for designing new stable structures that would provide access to the facilities for monitoring, harvesting and maintenance, which will also require the development of autonomous vessels.

Several studies have indicated that there is a lack of comprehensive research into the cross-sector impact of digital technologies in the blue economy [51,52]. However, as the above examples show, the sustainable development of the blue economy sectors, and, accordingly, of coastal territories, turns out to be directly related to their readiness to implement digitally-driven innovations³².

A prerequisite for the dissemination of digital solutions in business and personal consumption is the development of the information and communication technology (ICT) infrastructure in the coastal territories of the BSR and the connection of users to relevant services. The level of digitalization is assessed using composite indicators, including the Digital Economy and Society Index (DESI)³³, the IMD World Digital Competitiveness framework³⁴, the National Digital Economy Development Index³⁵ and others³⁶. However, they cannot be used within this study as the required data are mostly provided at the national level rather than subnational.

Due to the specifics of the EU statistics, currently, it is only possible to compare the digitalization levels of the coastal territories of the BSR using data on the share of households having access to broadband Internet (although the data for the Polish coastal territories are not available) (see Table1).

³² Towards a blue-green economy in the Baltic Sea Region, 2020, *SUBMARINER* Network, available at: <https://www.submariner-network.eu/submariner-roadmap> (accessed 07.01.2021).

³³ Digital Economy and Society Index (DESI) 2020, 2020, *EU4Digital*, available at: <https://eu-fordigital.eu/ru/library/digital-economy-and-society-index-desi-2020/> (accessed 14.12.2020).

³⁴ *The IMD World Digital Competitiveness Ranking 2020 results. Methodology* IMD, 2020, available at: <https://www.imd.org/wcc/world-competitiveness-center-rankings/world-digital-competitiveness-rankings-2020/> (accessed 14.12.2020).

³⁵ National Index of Digital Economy Development, 2020, *Digital Economy 2024*, available at: <https://digital.ac.gov.ru/poleznaya-informaciya/4210/> (accessed 18.12.2020).

³⁶ Abdrakhmanova, G. I., Vishnevsky, K. O., Gokhberg, L. M. et al (eds.) 2019, *Indicators of the digital economy: 2020: statistical collection*, Nat researched University "Higher School of Economics", Moscow, p. 42, available at: <https://www.hse.ru/primarydata/ice2020> (accessed 16.12.2020).

Table 1

**Share of households having broadband Internet
(percentage, value of the indicator for a year), 2009-2018**

Territory	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<i>Danmark</i>	76	80	84	85	87	85	84	92	92	90
Hovedstaden	80	83	86	86	87	89	83	93	93	91
Sjælland	71	76	82	84	86	86	86	91	89	89
Syddanmark	74	80	80	81	85	82	87	89	92	88
<i>Estonia</i>	61	64	65	73	78	81	87	85	87	89
<i>Finland</i>	74	76	81	85	88	89	90	91	93	93
Manner-Suomi	74	76	81	85	88	89	90	91	93	93
Länsi-Suomi	69	72	80	84	85	88	87	88	92	93
Helsinki-Uusimaa	N/A	N/A	N/A	90	92	93	95	95	98	96
Etelä-Suomi	N/A	N/A	N/A	83	88	88	86	93	91	91
Pohjois- ja Itä-Suomi	70	75	79	81	86	86	88	89	92	91
Åland	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Germany	65	75	78	82	85	87	88	90	92	90
Mecklenburg-Vorpommern	56	57	67	71	75	78	84	89	85	89
Schleswig-Holstein	71	81	79	80	86	88	89	90	88	90
Latvija	50	53	59	67	70	73	74	75	76	79
Lithuania	50	54	56	60	64	65	67	71	75	78
Vidurio ir vakaru Lietuvos regionas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	77
Poland	51	57	61	67	69	71	71	76	78	79
Makroregion Północno-Zachodni	55	61	67	68	71	70	70	76	78	81

Makroregion Pólnocny	53	59	61	65	70	72	70	74	79	82
Russian Federation	57	57	57	57	57	64	67	71	73	73
Northwestern Federal District	73	73	73	73	73	73	77	77	75	77
Kaliningrad Region	73	73	73	73	73	73	71	74	76	71
Leningrad region	74	74	74	74	74	74	74	73	68	73
St Petersburg	84	84	84	84	84	84	86	85	83	85
Sweden	79	83	86	87	N/A	87	83	89	93	91
Östra Sverige	82	85	89	88	N/A	88	84	90	95	92
Stockholm	84	87	91	89	N/A	88	85	90	96	93
Östra Mellansverige	79	82	86	85	N/A	88	82	89	93	91
Södra Sverige	79	82	84	87	N/A	87	82	89	91	93
Småland med öarna	75	78	84	86	N/A	85	76	83	89	91
Sydsverige	80	84	87	88	N/A	85	80	93	90	94
Norra Sverige	76	79	82	85	N/A	81	83	85	94	87
Norra Mellansverige	78	80	80	83	N/A	78	78	87	88	89
Mellersta Norrland	73	75	82	84	N/A	84	85	82	100	80

Source: Rosstat³⁷, Eurostat³⁸.

Note: italic is used for country data, bold for macroregions.

³⁷ *Socio-economic indicators for the constituent entities of the Russian Federation: app. to stat. collection. Regions of Russia. Social and economic indicators Rosstat, 2020, available at: <https://www.gks.ru/folder/210/document/47652> (accessed 14.08.2020).*

³⁸ *Eurostat, 2020, available at: <https://ec.europa.eu/eurostat/data/database> (accessed 25.08.2020).*

The data in Table 1 show that in the last decade the share of households having broadband Internet access in the coastal territories of the EU has significantly increased due to considerable investments into infrastructure development. This work will be continued within the framework of the Digital Europe project³⁹. Estonia, Latvia, Lithuania, the Swedish region of Mellestra Norland as well as the coastal regions of the Russian Federation had the lowest indicator values. Although there has been a positive trend in the indicator in the first four territories since 2007, in the coastal territories of the RF (unlike the rest of the country) the share of households with broadband Internet access remained the same. A possible reason for this is a continuous population growth (despite the natural decline) due to a positive migration balance, a significant part of which is accounted for by those arriving from other regions of the country⁴⁰. In addition, there has been an increase in the number of Internet connections via smartphones in Russia⁴¹. However, statistics on the use of mobile Internet in individual NUTS2 territories in the EU are not currently available.

Since digitalization creates technological conditions for greater sustainability of the BSR's economic development, its further growth, including the development of digital infrastructure, which allows the introduction of flexible and adaptive technologies aimed at the careful use of natural resources, should be a priority for the territories.

Conclusion

The current period of increased uncertainty makes monitoring the achievement of sustainable development goals at the meso-level especially important. This is corroborated by the EU and the RF legislation.

³⁹ The Digital Europe Programme, 2020, *European Commission*, available at: <https://digital-strategy.ec.europa.eu/en/activities/digital-programme/> (accessed 06.01.2021).

⁴⁰ Regions of Russia. Social and economic indicators Rosstat, 2020, available at: https://gks.ru/bgd/regl/b20_14p/Main.htm (accessed 30.03.2021).

⁴¹ "Digital Economy: 2021", 2021, *ISSEK HSE. News*, available at: <https://issek.hse.ru/news/420475066.html> (accessed 16.03.2021).

The comparative analysis of the level and changes in the economic development of the coastal territories of the BSR shows that the Polish, Baltic and Russian territories lag in terms of per capita GRP. This poses a threat to the sustainability of these territories and the BSR in general. To overcome the gap and create the prerequisites for future sustainability, it is necessary to harness the potential of the blue economy.

As the review of publications has shown, to date, numerous digital solutions and innovative developments aimed at increasing the competitiveness of economic entities in the blue economy in the BSR have been implemented. This results in its increased contribution to the creation of added value and new jobs, including those in related industries and sectors. At the same time, digital transformation optimizes the movement of resources and products and helps to reduce carbon footprint. Thus, it allows resolving the conflict between the current production of goods and the preservation of resource potential for the future, thus contributing to the achievement of the SDGs.

The analysis of literature shows that digital transformation has the following beneficial effects on the competitiveness of the blue economy sectors: cost reduction through, for example, the use of the Internet of Things in port management, improved quality of products and services, in particular, due to the use of augmented reality in tourism or distributed ledger in maritime transport and logistics, improved life safety through, for example, the use of autonomous vessels to monitor the condition of aquafarms and underwater pipelines.

The analysis of data characterizing the prerequisites for the dissemination of digital solutions among users living in the coastal territories of the BSR shows that accelerated investment in the development of ICT infrastructure and comprehensive support for the development of new products and services should be considered among the most important measures aimed at accelerating the digital transformation of industries and sectors of the territories.

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STATISTICAL ANALYSIS OF TOURISM FLOWS BETWEEN UKRAINE AND THE BALTIC SEA REGION COUNTRIES IN 2012–2019

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This article explores the features and trends in inbound and outbound tourism flows between Ukraine and the Baltic Sea region (BSR) countries in 2012–2019. The research question is whether inbound or outbound tourism prevailed and how visa-free travel to the Schengen Area affected the number of Ukrainians travelling to the Baltic Sea Region. Two data sources were used in the study. These are the Travel and Tourism Competitiveness Index of the World Economic Forum and data from the State Border Guard Service of Ukraine on the number of foreign citizens visiting Ukraine and the number of Ukrainians travelling abroad. The study employs the statistical methods of structural shifts analysis, time series analysis, and graphical visualisation. The findings indicate that Ukrainian outbound tourism was growing steadily over the study period, whilst visa-free travel to the Schengen Area had no statistically significant impact on the number of outbound tourists from Ukraine to the BSR. Outbound tourism flow prevailed over inbound. The number of inbound tourists to Ukraine sharply declined after 2013 because of the socio-political situation in the country. The analysis reveals significant changes in inbound and outbound tourism flow structures. The COVID-19 pandemic is shown to be a critical factor influencing the current state and prospects of the tourism industry.

Keywords:

inbound tourism, outbound tourism, international tourism, Travel and Tourism Competitiveness Index, Baltic Sea Region, Ukraine, COVID-19

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Introduction

Modern life is unthinkable without travelling. In recent decades, tourism flows have steadily increased, driven by globalisation [1–2] and advances in technology [3–10]. Journeys have become more affordable, and travel times have shortened.

Tourism is now a strategic area of the global economy [11–13]. Its share in world GDP was 10.4 per cent in 2018, which was comparable to the industry's contribution to employment that year.¹ The revenue generated by international tourism in 2018 totalled USD 1.649tn, compared to USD 485.178bn in 1995. It increased almost 3.4-fold, growing throughout the period except for 2009 and 2015.² The percentage of international tourism in total exports was the highest in 1995 (8.6 per cent) and the lowest in 2011 (5.6 per cent); a strong uptrend continued from 2011 to 2016 (6.8 per cent).³

The benefits of tourism have been described in the literature. Bogdan Sofronov points out that tourism '...drives economic growth, creates jobs, improves social development and promotes peace' [14, p. 123]. Elena Kropinova has a similar vision: '...tourism is the best way to achieve sustainable development' [15, p. 13].

It is hard to overestimate the importance of tourism in achieving the UN Sustainable Development Goals, namely Goal 8 'Decent work and economic growth'. Tourism has enormous potential as a sustainable development tool as it supports employment and generates financial flows sufficient to meet economic challenges. Sustainable tourism, in its turn, should take 'full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities'.⁴

One of the consequences of post-Soviet republics gaining independence was the ample travel opportunities opening up for their citizens. Amongst these countries were Ukraine and some states of the Baltic Sea region, namely

¹ The Travel and Tourism Competitiveness Report 2019, 2019, *World Economic Forum*, Geneva, available at: <https://reports.weforum.org/travel-and-tourism-competitiveness-report-2019/> (accessed 20.08.2020).

² International tourism, receipts (current US\$), 2021, *The World Bank*, available at: <https://data.worldbank.org/indicator/ST.INT.RCPT.CD> (accessed 22.01.2021).

³ International tourism, receipts (percentage of total exports), 2021, *The World Bank*, available at: <https://data.worldbank.org/indicator/ST.INT.RCPT.XP.ZS>, (accessed 22.01.2021).

⁴ Tourism and the Sustainable Development Goals — Journey to 2030, 2017, *World Tourism Organization and United Nations Development Programme*, Madrid, available at: <https://www.e-unwto.org/doi/book/10.18111/9789284419401> (accessed 20.01.2021).

Russia, Estonia, Latvia, and Lithuania. The latter three were popular domestic destinations in the USSR, whilst visits to Western Europe were impossible for most Soviet citizens due to political reasons. Today, however, Ukrainian tourists can easily travel to Estonia, Latvia, Lithuania, and all other EU member states. European countries are amongst the most sought-after destinations by Ukrainians.

The Baltic Sea macroregion is ‘...the most advanced in terms of transnational tourism development’ in the EU [16, p. 128]. Moreover, it was the first in the Union to declare tourism development a strategic priority [16, p. 127]. Thus, a study of tourism flows between Ukraine and the Baltic Sea states is of practical value for understanding how Ukrainians have become integrated into international tourism flows and measuring Ukraine’s potential for inbound tourism, particularly for welcoming visitors from the BSR.

International and cross-border tourism in the Baltic Sea region has grown into an area of scientific research in its own right [15–24]. For instance, Kropinova urges BSR countries to consolidate their best practices in sustainable tourism development to promote a joint brand — Baltic Sustainable Tourism — as a model embracing all sustainable development elements [15, p. 14].

Nevertheless, Tara Freude conclusively shows that, as of today, tourism remains insufficiently sustainable [25, p. 10]. Sustainable tourism is still a niche in the tourism sector rather than a universal practice. Despite all the benefits of tourism development, increased tourism flows incur social and ecological risks.

Growing tourism flows have given rise to the overtourism phenomenon [26–28]. This term describes the negative influence of an excessive number of tourists on locals and visitors. In other words, it is ‘... the impact of tourism on a destination, or parts thereof, that excessively influences the perceived quality of life of citizens and/or quality of visitors experiences in a negative way’.⁵

According to Alberto Amore, Martin Falk, and Bailey Ashton Adie, Venice is the world’s most overtouristed city, with a museum visitor to resident ratio of 83:1 [29, p. 124]. It is followed by Florence, Seville, Lisbon, and Amsterdam [29, p. 126].

The causes of overtourism are low-cost airline tickets, accommodations made available by the Airbnb service, and the emergence of a tourist consumer culture.

An increase in tourist traffic in the most visited places means problems and inconveniences for both travellers and residents. Tourists have to wait in queues

⁵ ‘Overtourism’? Understanding and managing urban tourism growth beyond perceptions, 2018, Madrid, *UNWTO*, available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284420070> (accessed 01.01.2020). doi: 10.18111/9789284420070.

and experience overcrowded attractions, where visiting time is often limited. All this leads to disappointment with the trip. Host communities, in their turn, suffer from increased pressure on the infrastructure, rising costs of living, growing crime rates, threats to local ecosystems, and the interests of tourists put above their own.

Despite the economic benefits of tourism, the discomfort experienced by residents and the decline in the quality of life makes locals discontent with visitors. Social tension builds up, which is the exact opposite of what travellers and hosts expect.

An increase in tourism is also associated with carbon pollution [30]. Lenzen et al. estimate the industry's contribution to global greenhouse gas emissions at about 8 per cent [31, p. 522].

The carbon footprint of tourism adds to global warming and environmental pollution. It may lead to irreversible negative changes in the climate. The Paris Agreement was developed and signed in 2016 to tackle the climate change problem. The treaty aims to mitigate risks by keeping the rise in global average temperature to well below 2 °C above pre-industrial levels.

Gössling and Higham argue that the tourism industry should adopt destination management practices based on the low-carbon imperative to prevent irreversible climate change [32].

As Freude shows, even sustainable tourism and its contribution to the Sustainable Development Goals do not eliminate carbon pollution [25, p. 10]. In addition, there is a risk of transferring the responsibility for reducing emissions to the consumer. Thus, it is essential to unite the efforts of all stakeholders to reduce carbon emissions.

This state of affairs brings to the fore questions concerning corporate social responsibility in tourism, which are actively investigated now [33–37]. For instance, Oxenswärdh [38, p. 35] emphasises the importance of collective learning as a tool for corporate managers and other leaders to optimise the efforts of tourism organisations to promote sustainability in the industry.

COVID-19 restrictions have posed a radical challenge to tourism sustainability. As the UN WTO reported in May 2020, 100–120m direct tourism jobs might disappear in the wake of the pandemic.⁶ This job displacement would be the worst in international tourism since 1950. In late January 2021, the UN WTO World Tourism Barometer estimated the 2020 decrease in international arrivals at 1bn or 74 per cent compared to 2019.⁷ The collapse in the tourism industry meant an export revenues loss of USD 1.3tn. It is more than 11 times the industry's losses caused by the 2009 global economic crisis.

⁶ Impact assessment of the COVID-19 outbreak on international tourism, 2020, *UNWTO*, available at: <https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism> (accessed 02.09.2020).

⁷ 2020: worst year in tourism history with one billion fewer international arrivals, 2021, *UNWTO*, available at: <https://www.unwto.org/taxonomy/term/347> (accessed 24.02.2021).

This dramatic decline has encouraged many COVID-focused studies [39–41], which constitute the most relevant area of tourism research under current conditions.

Data and Methods

The Travel and Tourism Competitiveness Index (TTCI) is an effective tool to evaluate a country's attractiveness for visitors. The TTCI has been calculated since 2007 and published biennially since 2009 as part of the Travel and Tourism Competitiveness Report of the World Economic Forum.

This indicator uses a combination of sources — statistics from international organisations, which account for two-thirds of the data, and the annual Executive Opinion Survey. The latter is a poll of over 16,000 industry experts — business executives and business leaders.

The TTCI groups 90 individual indicators into 14 variables called pillars, which comprise four subindices — Enabling Environment, T&T Policy and Enabling Conditions, Infrastructure, and Natural and Cultural Resources. A national rank and score are computed for each economy included in the Travel and Tourism Competitiveness Report.

The Ukrainian statistics approach is similar to the European one in defining tourism as trips taken to a destination outside one's usual environment for less than a year. This definition covers private, leisure and business trips, as well as visits to see family and friends.⁸ No matter the purpose of the visit, consumption patterns remain the same.

In Ukraine, statistics on outbound and inbound tourism flows can be obtained from two sources. Primary data on overseas residents' visits to Ukraine and Ukrainian residents' travel abroad are collected by the country's State Border Guard Service. The State Statistics Service of Ukraine uses this data to obtain statistics on the development of tourism as an economic sector.

There are several approaches to defining the BSR, and various criteria are used for this purpose. Klemeshev et al. [42, p. 10–11] distinguish geographical, historical, political, economic, sociological, and legal interdisciplinary criteria, which can be applied individually or in a combination to delineate the Baltic Sea Region. Thus, the BSR can be viewed from a narrow, extended, and broad perspective.

According to the narrow definition, the region includes Sweden, Denmark, Finland, Lithuania, Latvia, and Estonia and the coastal parts of Russia, Germany, and Poland. The rest of Poland, most Russian and German regions, Belarus,

⁸ Tourism statistics at regional level, 2019, *Eurostat*, available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Tourism_statistics_at_regional_level (accessed 03.09.2020).

and Norway are added within the extended definition. The broad definition also includes Iceland, some other territories of Russia, Germany, the Czech Republic, Slovakia, and Ukraine into the Baltic region.

Although this point of view seems valid in many respects, this study will define the BSR as comprising nine countries located along the coastline of the Baltic Sea — Denmark, Estonia, Latvia, Finland, Germany, Lithuania, Poland, Russia, and Sweden. Such an approach makes it possible to compensate for the lack of statistical information.

The Wilcoxon signed-rank test and the SPSS Statistics software were used to estimate the impact of visa-free travel to the Schengen Area on tourism flows from Ukraine to the BSR. This nonparametric test was chosen because of the need to compare data from two related samples (before and after the introduction of visa-free travel). The method helps overcome deficiencies such as the small size of samples and lack of normality in the data.

The null hypothesis holds that the median difference between pairs of observations is zero. In our case, the null hypothesis reads as follows: ‘There is no difference in the number of outbound tourists from Ukraine to the Baltic Sea Region before and after the introduction of visa-free travel’.

The linear coefficient of ‘absolute’ structural shifts for n periods was used to perform a summary assessment of structural changes in tourism flows between Ukraine and BSR countries. It was computed according to Formula 1:

$$\overline{\Delta_{d_1-d_0}^{(n)}} = \frac{\sum_{i=1}^k |d_{in} - d_{i1}|}{k(n-1)}, \quad (1)$$

where d_i is the share of a particular part of the structure, %;

k is the total number of structural parts;

n is the total number of periods.

Formula 2 was used to obtain the ratio (R) of outbound tourism flows to inbound ones:

$$R = \frac{\text{Number of outbound tourists}}{\text{Number of inbound tourists}} \quad (2)$$

R = 1 indicates that outbound and inbound tourism flows are balanced. If R exceeds 1, the outbound flow prevails, and vice versa.

Results and Discussion

In 2019, the Travel and Tourism Competitiveness Index included 140 countries, which generated about 98 per cent of global travel and tourism GDP. The TTCI ranks all the selected nations, thus making it possible to perform cross-country analysis.

As Fig. 1 shows, Germany was the T&T leader in the BSR, having ranked third or higher throughout 2013–2019.

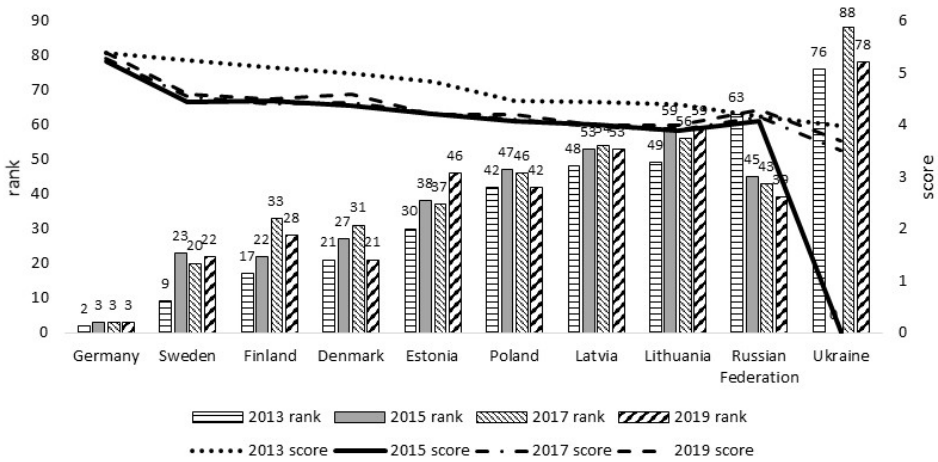


Fig. 1. The TTCI ranking and scores for Baltic Sea Region countries and Ukraine, 2013–2019

Source: prepared by the authors based on The Travel and Tourism Competitiveness Report 2013, 2015, 2017, 2019.

When analysing the chart, one has to remember that the lower the rank, the better the performance of the country.

Russia considerably improved its position, having moved up 24 places — from 63rd in 2013 to 39th in 2019.

Denmark and Poland returned to their 2013 positions in 2019 — 21st and 42nd respectively — after a decline in 2015–2017. The other countries of the region went down in the ranking. Estonia performed the worst — having ranked 30th in 2013, it was only 46th in 2019.

Sweden and Finland are in the top three most competitive countries in the region. Yet Sweden dropped 13 places in the ranking (9th in 2013 to 22nd in 2019) and Finland 11 (17th in 2013 to 28th in 2019).

Lithuania moved down ten places (from 49th to 59th), whilst Latvia's decline in the ranking was less dramatic (48th to 53rd).

Ukraine's position did not change fundamentally between 2013 (76th) and 2019 (78th). However, the country was not included in the global rankings in 2015 due to insufficient data.⁹ In 2017, it dropped to 88th place, illustrating the high sensitivity of tourists to the socio-political situation in the country of destination.

Table 1 shows the number of Ukrainians who visited BSR countries. The region is popular amongst Ukrainians, having received 111,186 of the country's nationals in 2012–2019. Overall, 198,570 travelled internationally over the period.

The intensity of Ukrainian outbound tourism changed considerably in 2012–2019. Lithuania is the absolute leader in the BSR. The number of Ukrainian visitors to the country rose tenfold — from 8,079 in 2012 to 83,354 in 2019.

A steady, more than sevenfold, growth in the number of Ukrainian tourists was observed in Denmark (7.058 times) and Estonia (7.884 times). In 2019, Ukrainians visited Sweden 4.813 times and Latvia 4.419 times more often than in 2012.

Estonia, Latvia, and Lithuania were 'go-to' destinations in the USSR. And these countries remain appealing to Ukrainian citizens.

The total number of outbound tourists from Ukraine to BSR countries rose by 19.8 per cent over the study period. The increase in flows to Finland, Germany, and Poland was slightly above the regional average, reaching 47.9 per cent, 83.9 per cent, and 71.2 per cent respectively.

⁹ The Travel & Tourism Competitiveness Report 2015, 2015, *World Economic Forum*, Geneva, available at: http://www3.weforum.org/docs/TT15/WEF_Global_Travel&Tourism_Report_2015 (accessed 20.08.2020).

Table 1

**Number of outbound tourists from Ukraine to BSR countries
in 2012–2019, people**

	2012	2013	2014	2015	2016	2017	2018	2019	2019 to 2012
Denmark	10,117	60	5,619	66	100	6,351	58,556	71,402	7,058
Estonia	6,136	7,089	6,525	6,751	11,637	14,542	25,358	48,374	7,884
Finland	11,217	13,058	11,135	12,464	13,814	14,146	15,387	16,588	1,479
Germany	380,554	376,316	308,908	294,797	275,987	344,150	533,892	699,792	1,839
Latvia	22,895	21,335	21,620	29,534	39,235	54,831	78,791	101,184	4,419
Lithuania	8,079	16,767	22,611	28,559	57,639	54,867	64,094	83,354	10,317
Poland	5,765,184	6,991,778	7,657,021	9,505,713	10,111,086	9,990,978	10,000,507	9,871,675	1,712
Russia	5,941,305	6,140,406	4,671,321	4,080,414	3,859,820	4,376,423	4,162,697	3,622,715	0,610
Sweden	10,571	113	6,351	11,503	15,570	24,215	31,145	50,878	4,813
BSR total	12,156,058	13,566,922	12,711,111	13,969,801	14,384,888	14,880,503	14,950,427	14,565,962	1,198
Outbound total	21,432,836	23,761,287	22,437,671	23,141,646	24,668,233	26,437,413	27,810,892	28,879,972	1,347

Source: State Border Guard Service of Ukraine; State Statistics Service of Ukraine

Germany and Poland were in the top three countries by the number of Ukrainian tourists. Probably, that is why these states did not show impressive growth in 2012–2019.

Russia deviated from the general trend. The number of Ukrainian visitors to the country has been decreasing since 2014 when the year-on-year reduction was as much as 1,469,085 people or 23.9 per cent. The absolute minimum was observed in 2019 at 3,622,715 people. This number was 41.0 per cent below the 2013 value.

About 21.5m Ukrainians travelled internationally in 2012, and almost 28.9m in 2019, i. e. a 34.7 per cent increase occurred. As Fig. 2 shows, the time plots of the total number of outbound tourists and the number of visitors to the BSR are very similar.

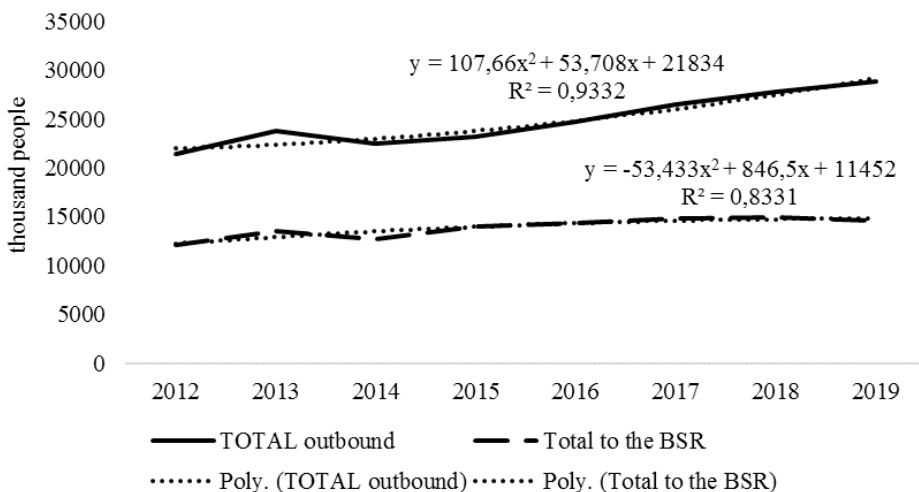


Fig. 2. Trends in outbound tourism flows from Ukraine, 2012–2019

Source: prepared by the authors based on Table 1

A second-degree polynomial function was used to describe the observed trends – for the total number of outbound tourists:

$$Y = 107.66x^2 + 53.708x + 21834,$$

(in 2012–2019, the total number of Ukrainians travelling abroad increased annually by an average of 53.708 thousand people, whilst the average growth acceleration rate was 107.66 thousand people);

– for the total number of tourists travelling to the BSR:

$$Y = -53.443x^2 + 846.5x + 11452,$$

(i. e., in 2012–2019, the total number of Ukrainians travelling to the BSR

was rising annually by an average of 846.5 thousand people, whilst the average growth deceleration rate was 53.443 thousand people).

The coefficient of determination (R^2) was used to estimate the accuracy of the models. Fig. 2 shows the coefficients for each.

The theoretical value of the coefficient of determination $R^2(2;5) = 0.699$ is below those calculated for the two equations. Thus, the obtained models are a good fit for the data. Nonetheless, these models cannot predict the future numbers of Ukrainian travellers because the trends were disrupted in 2020 by the COVID-19 pandemic.

The total number of Ukrainians travelling internationally and those visiting the BSR was increasing at different rates throughout 2012–2019. The total number of outbound Ukrainian tourists was rising more rapidly (by 4.4 per cent annually) than that of visitors to the BSR (2.6 per cent). This difference in growth rates changed the structure of travel: the proportion of visits to the BSR in all Ukrainian international travel dropped by 6.3 percentage points — from 56.7 per cent in 2012 to 50.4 per cent in 2019.

The maximum value was achieved in 2015 (60.4 per cent); about two-thirds of Ukrainians travelling abroad visited the region that year (Fig. 3). Then the proportion of visits to the BSR began to decline. In 2019, it was ten percentage points below the 2015 level.

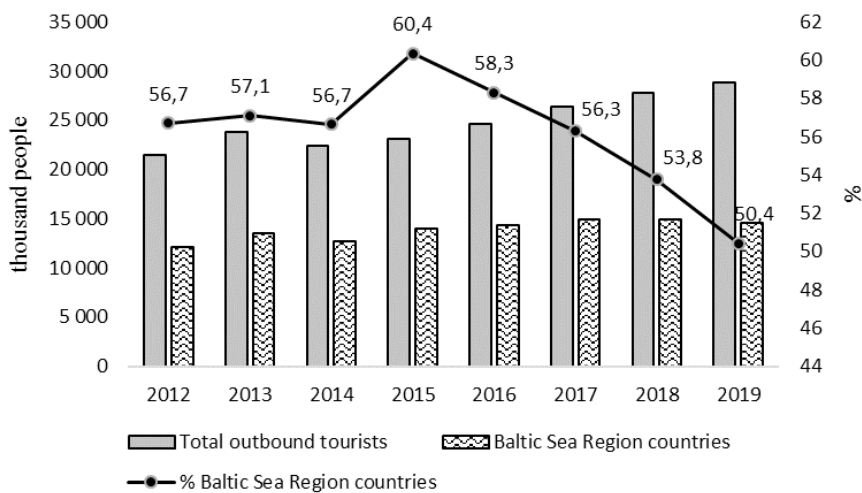


Fig. 3. Outbound tourism flows from Ukraine and the proportion of Ukrainian visits to the Baltic Sea Region countries, 2012–2019

Source: prepared by the authors based on Table 1

Ukrainian citizens were granted visa-free travel to the Schengen Area in summer 2017. All countries of the Baltic Sea region but for the Russian Federation are Schengen countries. Thus, it seemed appropriate to analyse whether visa-free travel affected tourism flows from Ukraine to the BSR.

The Wilcoxon signed-rank test demonstrated no statistically significant difference in the number of outbound tourists from Ukraine to the BSR before and after the introduction of visa-free travel. Previously we compared data for 2017 and 2016 (Table 2). The p-value (0.139) was considered under the null hypothesis.

Table 2

p-value for the Wilcoxon signed-rank test

	2017 to 2016	2018 to 2016	2019 to 2016	2018 to 2017
p-value	0.139	0.066	0.374	0.110

Then data for 2018 and 2016 were examined; 2017 was left out because visa-free travel was valid for only six months that year. The results were very similar. A p-value of 0.066 gave no reason to reject the null hypothesis. The same held for 2018 to 2017 and 2019 to 2016 comparisons.

Therefore, visa-free travel had no statistically significant impact on Ukrainian outbound tourism. As previously stated, there was an upward trend in the number of Ukrainian tourists visiting the BSR in 2012–2019.

The structure of outbound tourism to the BSR by country changed over that period (Fig. 4).

The main destinations for Ukrainian tourists were Russia and Poland. The share of visits to Russia dropped by 24 percentage points (from 48.9 per cent in 2012 to 24.9 per cent in 2019), and that of travel to other countries rose. Poland delivered the most impressive growth; its proportion increased by more than one-fifth (by 20.3 percentage points — from 47.4 per cent in 2012 to 67.8 per

cent in 2019). The share of Germany grew by 1.7 percentage points (from 3.1 per cent in 2012 to 4.8 per cent in 2019). The proportions of the other countries increased by not more than one percentage point.

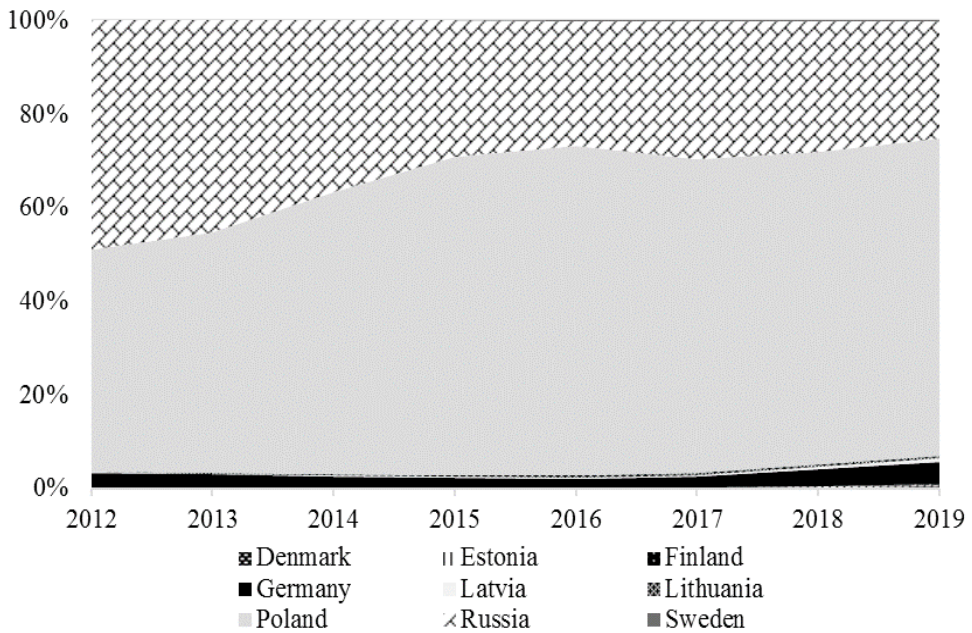


Fig. 4. The structure of outbound tourism flows from Ukraine to BSR countries in 2012–2019, %

Source: prepared by the authors based on Table 1.

The main reason for structural changes was a reduction in the number of inbound tourists to Russia from Ukraine. It decreased by 2,318,590 people (or by 39.0 per cent) in 2019 compared to 2012. Simultaneously, the rest of BSR destinations welcomed more Ukrainian visitors in 2019 than in 2012. In particular, there was an increase in the number of Ukrainian tourists visiting Poland (by 4,106,491 people or 71.2 per cent) and Germany (by 319 238 people or 83.9 per cent). Thus, Russia's share was redistributed among other BSR countries.

The linear coefficient of ‘absolute’ structural changes over the study period equals 0.76 percentage points, i. e. the share of countries visited by Ukrainian tourists changed by 0.76 percentage points on average each year in 2012–2019.

Inbound tourism to Ukraine was less popular than outbound. The total number of international visitors reached 127,928,460 people in 2012–2019, including 41,781,149 from BSR countries (Table 3).

Unfortunately, the tourism flow to Ukraine has decreased sharply since 2013 (Fig. 5) due to the dramatic events that took place in Ukraine. The total number of tourists dropped by 48.5 per cent in 2014 compared to 2013, whilst that of tourists from the BSR declined by 69.1 per cent.

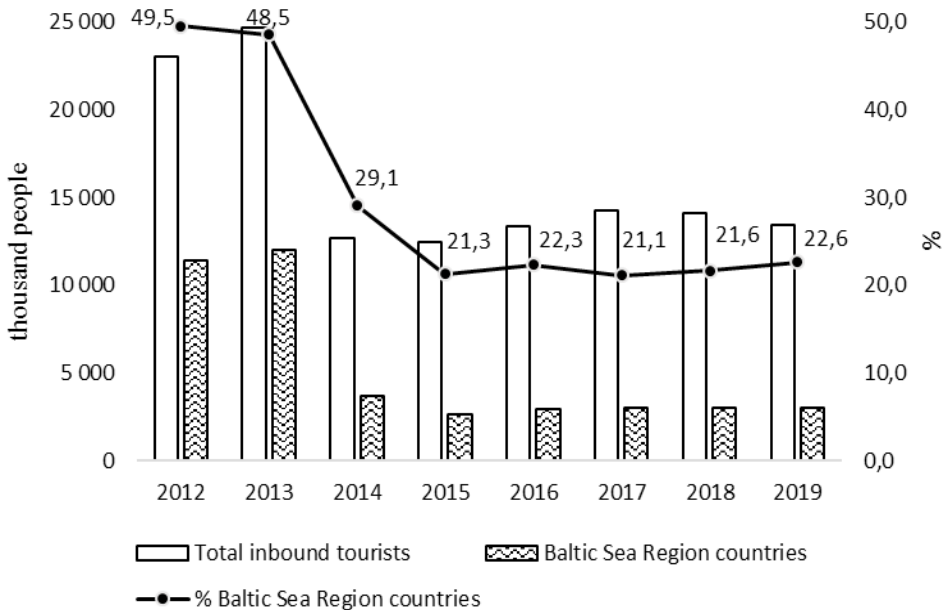


Fig. 5. Inbound tourism flows to Ukraine and the share of visits to Ukraine from the BSR countries, 2012–2019

Source: prepared by the authors based on Table 3.

The number of tourists from Russia far outstripped that from the other BSR states in 2012: the country accounted for over 9,526,695 arrivals (83.6 per cent of the total number of international visitors). In 2019, only 1,386,643 Russians (45.6 per cent of the inbound tourism flow) visited Ukraine.

Table 3

**Inbound tourists from BSR countries to Ukraine
in 2012–2019, people**

Country	2012	2013	2014	2015	2016	2017	2018	2019	2019 to 2012
Denmark	20,498	11,461	8,317	9,383	11,219	13,180	18,435	30,625	1.494
Estonia	19,812	19,456	8,731	10,865	15,759	21,313	26,196	27,782	1.402
Finland	10, 852	10,308	4,567	7,522	9,306	10,733	11,252	12,499	1.154
Germany	274,073	253,318	131,244	154,498	171,118	209,447	237,266	269,271	0.982
Latvia	39,840	37,478	18,118	22,187	29,881	37,591	42,979	48,855	1.226
Lithuania	54,636	85,355	29,466	34,996	52,187	75,622	93,230	117,792	2.156
Poland	1,404,086	1,259,209	1,123,945	1,156,011	1,195,163	1,144,249	1,096,887	1,114,427	0.794
Russian Federation	9,526,695	10,284,782	2,362,982	1,231,035	1,473,633	1,464,764	1,495,650	1,386,643	0.146
Sweden	40, 777	17,542	10,610	14,706	20,126	24,554	30,038	34,136	0.837
Total from the BSR	11,391,249	11,976,909	3,697,980	2,641,203	2,978,392	3,001,453	3,051,933	3,042,030	0.267
TOTAL inbound	23, 012, 823	24,671,227	12,711,507	12,428,286	13,333,096	14,229,642	14,104,087	13,437,792	0.584

Source: State Border Guard Service of Ukraine; State Statistics Service of Ukraine.

The number of Russians visiting Ukraine fell by 86.5 per cent in 2012–2019. The most substantial year-on-year drop (by 77.0 per cent) occurred in 2014.

The number of Polish tourists varied the least during the study period: 1,404,086 Poles visited the country in 2012 and 1,114,427 in 2019. Poland invariably ranked second in terms of the number of visitors to Ukraine during the eight years.

However, the number of Russian travellers was 6.8 and 8.2 times that of their Polish counterparts in 2012 and 2013, whilst this ratio was only 1.2 in 2019. For the rest of the countries, except Germany and Sweden, the 2019/2012 difference ranged between 1.154 (Finland) and 2.156 times (Lithuania).

These changes led to a more than twofold reduction in the proportion of BSR residents in the total number of tourists arriving in Ukraine. It decreased from 49.5 per cent in 2012 to 29.1 per cent in 2014 and 22.6 per cent in 2019. Almost every second tourist arrived in Ukraine from the BSR at the beginning of the study period and only about every fifth at its end.

The structure of inbound tourism flows from BSR countries changed more dramatically than that of outbound tourism. The linear coefficient of ‘absolute’ structural changes in 2012–2019 was 1.21 percentage points. During the study period, the share of international visitors from the BSR to Ukraine increased by 1.21 percentage points on average annually.

The most substantial changes were as follows: the share of visitors from Russia decreased by 38.0 percentage points — from 83.6 per cent in 2012 to 45.6 per cent in 2019 (Fig. 6).

Poland accounted for the most marked increase — by 24.3 percentage points, from 12.3 to 36.6 per cent. The proportion of Germany rose by 6.5 percentage points — from 2.4 to 8.9 per cent. Lithuania’s share grew by 3.39 percentage points, which means that the share of visitors from this country in 2019 was 8.1 times that in 2012.

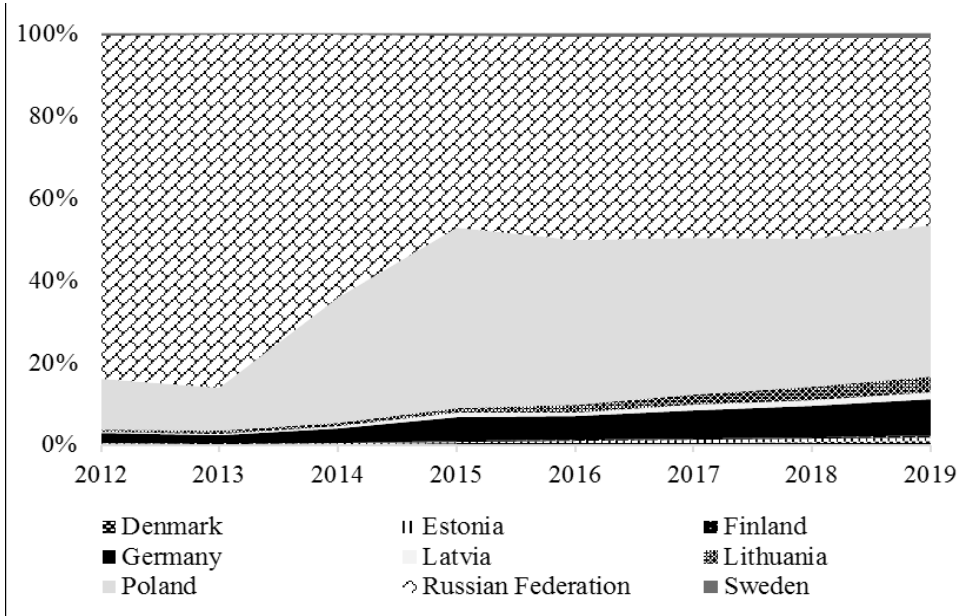


Fig. 6. The structure of inbound tourism flows to Ukraine from BSR countries in 2012–2019,%

Source: prepared by the authors based on Table 3.

Changes in arrivals and departures affect the ratio between outbound and inbound tourism flows (Fig. 7).

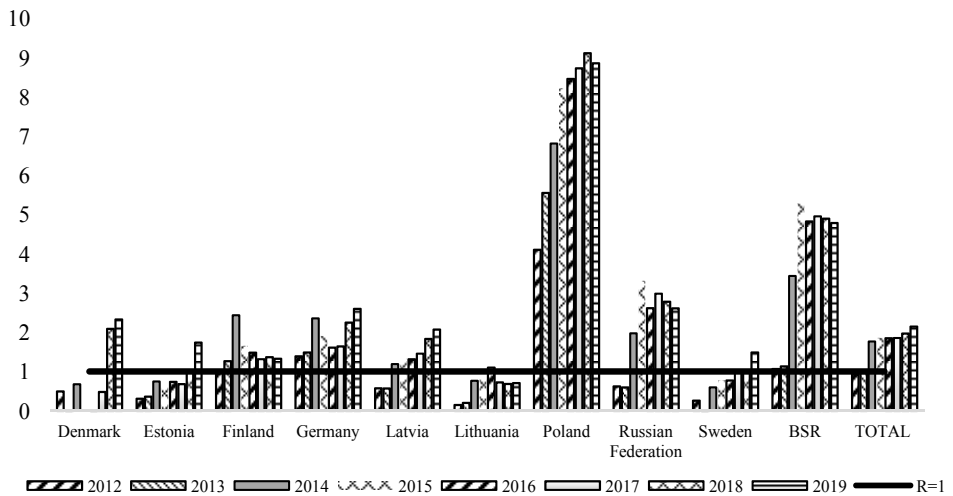


Fig. 7. Outbound to inbound tourism flow ratio in 2012–2019

Source: prepared by the authors based on Table 1 and Table 3.

The flows of travellers arriving in Ukraine and departing from the country were well-balanced in 2012 ($R = 0.931$) and 2013 ($R = 0.963$). After 2014 ($R = 1.765$), the ratio grew to achieve a more than twofold difference ($R = 2.149$) in 2019.

A similar situation was typical of all BSR countries. But after 2015, outbound flows exceeded inbound ones almost fivefold. This increase proves that the region is an attractive destination for Ukrainian citizens. Fig. 7 shows that tourism flows were balanced between Ukraine and Lithuania in 2014–2019 (R varied from 0.767 in 2014 to 1.104 in 2016 and 0.708 in 2019); Ukraine and Estonia in 2014–2018 (from 0.747 in 2014 to 0.968 in 2018); Ukraine and Sweden in 2015–2018 (from 0.782 to 1.037).

Tourism flows between Ukraine and Germany follow the general trends of Ukrainian international travel.

The number of Ukrainians making trips to Russia dropped by 39 per cent in 2019 compared to 2012, and the number of Russians who visited Ukraine in 2019 was 85.4 per cent smaller than in 2012. Thus, the ratio between outbound and inbound tourism flows between these countries rose from 0.624 to 2.613. The maximum R value (3.315) was observed in 2015.

Poland stands out the most in terms of the tourism flow balance. It was the most visited country by Ukrainians from 2013 (see Table 3). In 2015–2019, Ukrainians visited Poland eight-nine times more often than Poles travelled to Ukraine.

Statistical data of the State Border Guard Service of Ukraine helped classify tourism flows by the purpose of visit. Purposes of travel are different for outbound and inbound tourists. The latter come to Ukraine on business trips, as part of tourist groups, and to make private visits (Fig. 8).

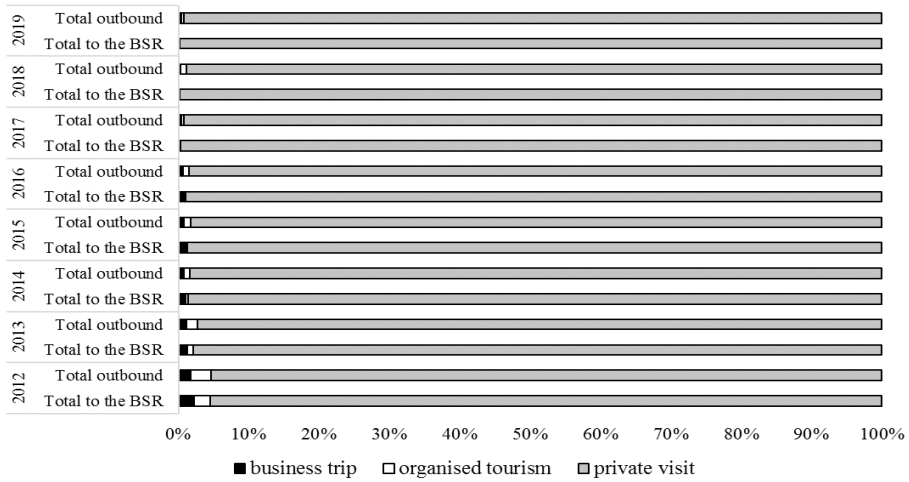


Fig. 8. The structure of outbound tourism flows from Ukraine to the BSR by the purpose of travel in 2012—2019, %

Source: State Border Guard Service of Ukraine; State Statistics Service of Ukraine.

The complete list of inbound travel purposes is as follows: business trips; organised tourism; private visits; education; job placement; immigration; cultural events; sports events; religion; other (Fig. 9).

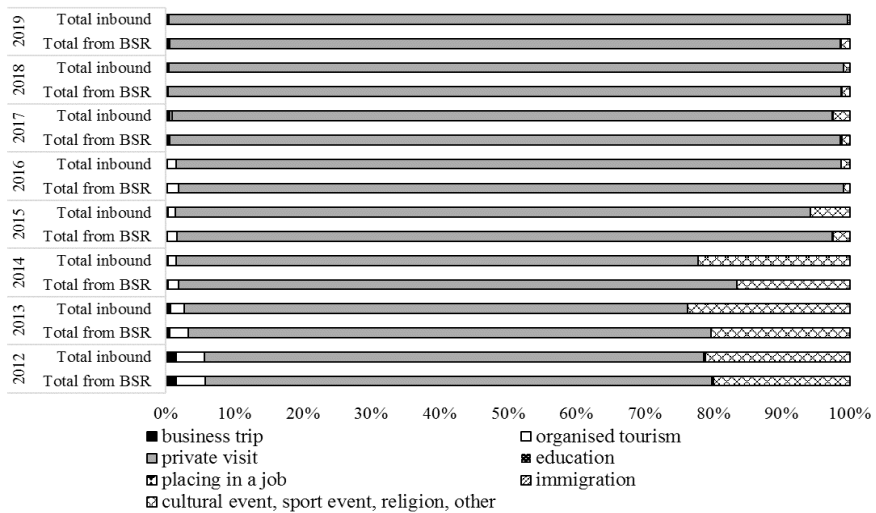


Fig. 9. The structure of inbound tourism flows to Ukraine from the BSR by the purpose of travel in 2012—2019, %

Source: State Border Guard Service of Ukraine; State Statistics Service of Ukraine.

Private visits are the most popular reason for travel for both Ukrainian and international tourists, whilst organised tourism is the least common purpose for visit. This situation was observed throughout the study period for outbound tourism. As for inbound flows, private visits accounted for the most substantial proportion of arrivals in 2014 and after 2016 (they made up 96 per cent of inbound travel).

Cultural and sports events, religion, and other purposes were visible in the structure of inbound tourism flows. Yet, after 2015, their significance drastically decreased. Visits for these purposes peaked in 2013 when they made up 23.7 per cent of all arrivals and 20.3 per cent of those from the BSR.

Tourism was burgeoning in previous years. Tourism flows were growing so rapidly that the term overtourism was coined to denote the industry's negative impact on destinations. The COVID-19 pandemic disrupted this long-term trend. Tourism has been affected the most amongst all sectors of the economy, and countries need to reorganise their industries to restore tourism flows in the new circumstances.

Conclusions

Tourism has contributed a lot to the economy, culture, and prosperity of society in recent decades. Yet tourism development is a controversial issue. On the one hand, it is a driver of economic growth and national competitiveness. And countries of the Baltic Sea region, which have adopted a strategic approach to tourism development, are competitive at the global and regional levels. On the other hand, tourism may adversely affect destinations.

According to the Travel and Tourism Competitiveness Index, Germany, Sweden and Finland performed the best in the Baltic Sea region in 2013–2019. Denmark and Poland held the same positions at the end of the period as they did in 2013.

Russia improved its position, having moved up 24 places. Whilst its rank was the lowest (63rd) in the region in 2013, in 2019, the country ranked 39th, above Estonia (46th), Poland (42nd), Latvia (53rd), and Lithuania (59th).

Analysis of inbound and outbound international tourism flows provides essential information for destination management by governments and businesses.

The Baltic Sea region attracts many Ukrainian tourists. The number of Ukrainians visiting it increased by almost 20 per cent in 2019 compared to 2012. Yet, there was no statistically significant evidence that the increase ensued visa-free travel to the Schengen Area.

Ukrainian outbound tourism is more developed than inbound. Poland is the most visited country by Ukrainians in the region. Nevertheless, Lithuania, Estonia, and Denmark markedly increased their visibility as destinations for Ukrainian tourists.

After 2013, tourism flows to Ukraine dwindled, especially that from the Russian Federation. This reduction affected the scope and structure of tourism flows between Ukraine and the Baltic Sea region. Nevertheless, Russia still accounts for most international arrivals in Ukraine. Poland and Germany rank second and third respectively.

Private visits are the most common purpose for travel for both Ukrainian and international tourists.

The COVID-19 pandemic disrupted all these trends in tourism flows in 2020. According to the UNWTO data, the year was the worst on record for international tourism.

Tourism has suffered severely during the pandemic. The industry is running the risk of delayed achievement of the Sustainable Development Goals, whilst falling tourism revenues pose threats to biodiversity. Heritage conservation may also be in danger. Tourism is expected to recover over the medium term.

Recovery and overcoming the negative effects of the pandemic will require Ukraine, Baltic Sea states and all countries in the world to pool their experience and potential for mutually beneficial cooperation in the future.

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IN SEARCH OF A THEORETICAL FRAMEWORK FOR FACTORS INFLUENCING WORK AND LIFE BALANCE

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Work-life balance (WLB) has gained noticeable attention amid the pandemic. Yet before the outbreak of COVID-19, the increasing pace of life encouraged investigations into individual and organisational aspects of WLB. Physically and mentally healthy people help society develop and grow, whilst health issues caused by work-life imbalance lead to dissatisfaction with work and life. This discontent results in stress and stress-related illnesses, such as burnout. From the organisational point of view, WLB is a factor in the efficiency of an enterprise. Intentional or unintentional absence, high employee turnover, low productivity, higher insurance costs, and low job satisfaction are amongst the consequences of work-life imbalance. WLB has also been examined as part of employer branding, which is coming to the fore as shortage of labour prompts organisations to look for strategies for attracting and retaining employees.

This paper carries out content analysis to provide a theoretical framework for WLB and job satisfaction. It also offers a review of the literature on individual and organisational factors in WLB. Both groups of factors are found to be critical. These are job involvement, tenure, workload and scheduling, organisational culture (leadership, recreational opportunities, flexibility, supervisor support, autonomy, boundary management, alternative working methods etc.), occupational stress, and salary. In diverse fields, these factors have different weight.

Keywords: job satisfaction, work-life balance, factors, burnout, employer branding

Introduction

In the past decade, people have been embracing the values of sustainable actions in business and private lives. Sustainable societies are defined as operating within the ecological limits of nature while living outside them. The resultant tension causes problems for the environment and every living being. Work-life balance is a prerequisite for a sustainable society where humans are part of nature and stay within the ecological limits.

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The topicality of work-life balance has been growing. The fast pace of life and the multiple roles each individual has to play have raised the bar enormously. Even a healthy individual cannot be brilliant in all areas, and more and more people are experiencing the consequences of work-life imbalance. This imbalance results, in its turn, in dissatisfaction with work and life; it leads to greater stress levels and stress-related illnesses. In severe cases, burnout, anxiety and depression are possible. In extreme ones, pressure at work leads to *karoshi* — a phenomenon first registered in the 1970s in Japan. *Karoshi* means ‘overwork death’, which happens after too many hours at work have caused physical and mental devastation [1, p. 209—216; 2, p. 625—641].

The employer does not bear sole responsibility for the work-life balance of its employees. Of course, one must take care of his or her health. Nevertheless, the workplace has a role in balancing life as well. Although employers may think that it is not their problem or something they can influence, this is not true. Furthermore, work-life balance is a relevant factor in analysing the efficiency of an enterprise. WLB imbalance may cause intentional or unintentional absence, high employee turnover, low productivity, higher insurance costs, low job satisfaction, etc. Employers have understood that to attract talents and retain them, they have to think about how potential and existing employees see their company. Thus, an effective employer brand is a must. It has been shown that employees are distressed by conflicts of values at work, and such clashes are likely to increase burnout symptoms [3, pp. 91—134].

Local and international organisations have an interest in this issue. Statistical data from several institutions confirm that the disturbing trend continues. The European Quality of Life Survey (EQLS), which has been carried out four times in the past 16 years by the *European Foundation for the Improvement of Living and Working Conditions*, also confirms the persistent trend. The EQLS attributes the situation to growing workloads, stricter requirements, and the increasing speed of life. Undeniably, the balance between work and private life is the responsibility of an individual. Yet many aspects depend on the employer and its conscious approach to the employees.

This paper aims to explore existing studies of factors affecting work-life balance to reconstruct a theoretical framework. Content analysis is performed to attain this aim.

Methods

The theoretical framework for work-life balance was reconstructed using content analysis. This method was chosen for two reasons. Firstly, there are few literature reviews on work-life balance. Most papers look at individual industries, companies, and countries to identify the main factors under the given circumstances. Secondly, future empirical research necessitates understanding the current theoretical framework.

The Primo Discovery tool was used to search across about 30 scientific paper databases, including Web of Science, Ebsco, Emerald, JSTOR, Science Direct, and others. Search by keywords ‘work-life balance’ and ‘influencing factors’ was performed to understand the scope of the research results. Primo Discovery returned about 370,000 articles with the keywords. Then, the search was narrowed down to articles from top-quality reviewed journals, and 53,000 papers were obtained. Books and chapters from books were excluded from the results, which were further filtered to include only those research articles that focused specifically on work-life balance. This operation significantly reduced the number of papers. Then, only the contributions that identified industry-specific factors were selected since the aim of the article was to provide a general overview of a theoretical framework for factors influencing work-life balance. Finally, 21 research papers were chosen, six of which were considered principal because they reported conflicting findings. The principal papers, all written in the past decade, concentrate on different industries and diverse approaches.

Defining work-life balance

Researchers use several terms to refer to work-life balance. Greenhaus et al. [4, pp. 510–531], Frone [5, pp. 143–162], and Clark [6, pp. 747–770] employ the term work-family balance, whilst Clarke et al. [7, pp. 121–140] prefer work-family fit. Burke, when investigating organisational values in the context of work-life balance [8, pp. 81–87], uses the term work-personal life balance. Grady et al. [9, pp. 158–167] refer to the phenomenon as work-life balance. Work-family balance is often associated with traditional families, i. e. the married-with-children model. Since this study considers households of all types, it will use the term work-life balance to avoid misunderstandings. Work-life balance is a topic widely researched across many fields — management, psychology, sociology, and particularly human resource management.

Clark defines work-life balance as satisfaction and good functioning at work and home, with a minimum of role conflict [6, pp. 747–770]. Clarke et al. [7, pp. 121–140] state that work-life balance (WLB) is maintaining an overall sense of harmony in life, whilst other scholars [4, pp. 510–531] define WLB as the amount of time and the degree of satisfaction with the work and family roles.

I believe that work-life balance should be measured and defined both objectively and subjectively. A subjective measure of work-life balance is personal opinions about work-life balance and its diverse aspects. Objective measures are the physical or mental manifestations of work-life imbalance or burnout [10, pp. 7–25]. Probably, it is best to deal with an objective indicator of work-life balance, which requires detecting and measuring physical and mental imbal-

ance symptoms such as excessive emotional and physical fatigue, irritability, and inability to perform or take on new responsibilities. Sometimes, only one aspect is taken into account when diagnosing burnout. For example, the Copenhagen Burnout Inventory (CBI) focuses solely on the energy dimension, which is essentially assessed based on the answer to the question ‘How often have you been emotionally exhausted?’ [10, pp. 7–25]. However, future research will require a set of professional burnout symptoms to evaluate the level of work-life imbalance.

At the organisational level, work-life balance is a factor affecting intentional or unintentional absence at work, high employee turnover, low productivity, higher insurance costs, low job satisfaction, and other negative consequences causing losses and reducing efficiency. It seems essential to identify the main factors leading to imbalance on the part of employees. Work-life balance is vital for the performance of an organisation, individual well-being, and the functioning of society [9, pp. 158–167].

Several studies look for the main factors in work-life imbalance. Work-life balance and job satisfaction have been shown responsible for employee performance. There is a positive correlation for both [11, pp. 76–81], and in most studies, these factors co-occur. Investigations into work-life balance and job satisfaction are numerous. Although there is still a discussion going on, most researchers agree that work-life balance is a set of internal factors affecting overall job satisfaction [12, pp. 71–80].

Results and Discussion

Thimmapuram et al. distinguish several factors influencing WLB in physicians. The principal ones are **workload, workflow, and scheduling**. In particular, respondents surveyed by the authors complained that there were not enough staff to cover the workload. They also said that they sometimes had to do some work at home because they had no time for it during shifts due to urgent tasks. Some told the researchers that most of their work did not require a medical degree, and they felt that inappropriate work planning led to a waste of their professional competencies. Although Thimmapuram et al. focus on the medical profession, their findings may be extrapolated to other industries to analyse WLB, job satisfaction, motivation to work, and loyalty to the company [13]. The study [13] also examines the effect of **leadership and administration** on WLB. Respondents reported that some workplace rules and initiatives were not evidence-based and thus not effective. They also expressed a wish for leadership built on trust and appreciation of employees. A lack of respect from management for the private time of employees was another issue mentioned by respondents. In particular, they spoke

against meetings, training sessions, or obligatory events outside regular working hours while supporting the idea that management should encourage employees to take holidays to stay fit for work. Another factor discussed in the survey was **recreational facilities** such as rooms for relaxation and meditation. Respondents also mentioned employee empowerment, work-life flexibility, and opportunities to take care of their mental health as desirable workplace elements. In my opinion, although some of the factors may seem industry-specific, all of them are significant to individuals regardless of occupation. In the research in question, most respondents (~60%) experienced moderate or severe burnout symptoms, which are a serious indicator of work-life imbalance [13, pp. 1–8]. Perhaps, the study by Thimmapuram et al. would have benefitted from examining the role of organisational culture. Another shortcoming is that it fails to estimate the role of values in work-life balance.

An industry-specific investigation was conducted in India in 2017. Its authors explore the influence of **occupational stress** on the work-life balance of teaching professionals. In the case of educators, occupational stress is a product of different factors, viz. **role conflicts, role ambiguity, unreasonable group and political pressure, powerlessness, poor peer relationships, and strenuous working conditions** [14, pp. 357–361]. The study leads one to conclude that occupational stress factors differ across fields of employment and depend on the cultural and political environment in a country or organisation. All this holds for India as well.

Helmle et al. tried to demonstrate a connection between **perceived work-life conflict** and the personal experience of work-life balance. The work concentrates on copreneurial firms — a type of family business within which a couple build personal and work relationships. The authors study the connection **between job involvement, spousal support, and the role of communicating about home at work** and vice versa. The findings show that job involvement reinforces work-life imbalance, whilst flexibility is positively related to WLB. Although spousal support has been considered a major factor in some investigations, Helmle et al. do not confirm a significant correlation between this phenomenon and WLB. **Communication**, however, is recognised as an important factor [15, pp. 110–132].

Grant et al. explore factors affecting the work-life balance of a remote e-worker. Many studies have emphasised the importance of **flexible working hours** and **remote working** in ensuring a healthy work-life balance. While technology provides a spatial link between the work and home environments, flexitime and flexiplace working blurs boundaries between them. The authors write: ‘Whilst e-working has been shown to have some positive effects, particularly for work-life balance, improvements in productivity and reduced stress levels, plus positive environmental impacts, there are some aspects which can be considered to

be negative' [16, pp. 527–546]. Maintaining a work-life balance seems to be a mutual responsibility of the employer and the employee. Employees must make informed choices and take rational actions, while the employer must respect working hours and the private space to maintain a reasonable work-life balance. The International Labour Organisation ('An employers' guide on working from home in response to the outbreak of COVID-19') identifies WLB as a chief concern amid the pandemic, when remote work is done simultaneously with taking care of children, helping them to do their home assignments, and performing other responsibilities.

Kossek et al. [17, pp. 347–367] have surveyed 245 teleworking professionals. The researchers focused on the perception of **boundary management** strategies and work control. They concluded that people who had drawn a line between work and family to control where and when they worked fared better. In a more recent study, Kossek et al. propose a person-centred theory of boundary management at work. They prove that individuals have different styles when managing boundaries between work and family. Some participants in the study reported a preference for integrating work and family, others tried to divide time between the two, whilst some chose a mixed strategy. The contribution by Kossek et al. and similar studies have considerable importance because they show how individuals can self-manage and how supervisors can identify individuals at risk [18, pp. 112–128]. At the same time, they demonstrate that there is most probably no universal approach to managing work and private life. Thus, whichever way is chosen to tackle the problem, it has to focus on the values and individual well-being.

Grant et al. argue that e-working enables integrating work and non-working lives. Home relationships can improve by increased contact, whilst remote working and flexible hours help interact across time zones. Teleworking means fewer days lost to absenteeism. It is also associated with lower stress levels because of less travel and fewer child-care issues. The authors emphasise that e-working may make one feel like one's 'own boss' and increase a sense of confidence and ability. Other studies have also confirmed the importance of feeling autonomous. On the negative side, e-working may limit social interaction with colleagues and result in unlimited working hours due to easy access to work [16, pp. 527–546]

An investigation conducted in the United States evaluates the relationship between WLB and job-related factors. The authors measure **supervisor support, organisational support, job satisfaction, job value, and the relation between socio-demographic variables** and WLB. The findings show that reasonable working hours, income, organisational support, and job value have a statistically significant relationship with WLB. When appreciation for work value increases,

respondents tend to see their work-life balance as optimum. The study stresses that values shared by the organisation and the individual raise the perceived value of work. Yet, the research disproves the assumption that supervisor support is crucial to maintaining an optimum WLB. Out of all factors, job value has the largest impact, which is nearly 1.5 times that of organisational support, followed by income and work time. The overall model explains 48% of the variance in WLB; this seems to be a considerably large proportion. The authors performed three regression equations to demonstrate the mediating effect of work-life balance and job satisfaction. The study results show that WLB partially mediated the relationship between two job-related variables — organisational support and job value. The same holds for job satisfaction [19, pp. 1447–1454].

Autonomy has received attention from scholars as a factor in WLB. Machuca et al. explore it in their 2016 work. They look into the relationship between **organisational pride**, **job satisfaction**, and **autonomy**, on the one hand, and work-life balance, on the other. A survey was carried out, and 374 responses were obtained to verify the correlation between the variables. The results confirm the hypothesised relationship between autonomy and work-life balance. They also show that supervisor WLB support is positively related to employee work-life balance [20, pp. 586–602]. Work-life balance, among other things, affects employees' attitudes, behaviours, and well-being. It also has an impact on organisational effectiveness [21, pp.124–197]. These findings have motivated companies to incorporate new forms of management to ensure social and supervisor support. Another factor strongly linked to work-life balance is organisational pride, which means enthusiasm, creativity, and a firmer commitment to customer service. Employees who are proud to work in their company are likely to be satisfied with their jobs and loyal to the employer [22, pp. 594–613, 23, pp. 351–360]. I believe that job value, which has been extensively researched as a factor in WLB, is very similar to organisational pride, and both are linked to values shared by an individual and the organisation. Thus, it seems essential to evaluate the person-organisation fit when looking for new employees so that an optimum WLB is achieved and job satisfaction and loyalty ensured.

Reviewing existing research (Fig. 1) and trying to understand factors influencing WLB on the part of individuals made it possible to suggest a model. Different colours indicate factors detected in the principal papers. Six colours were used to designate six articles. The articles identify diverse WLB factors; this suggests that work-life imbalance has been approached creatively and from several angles.

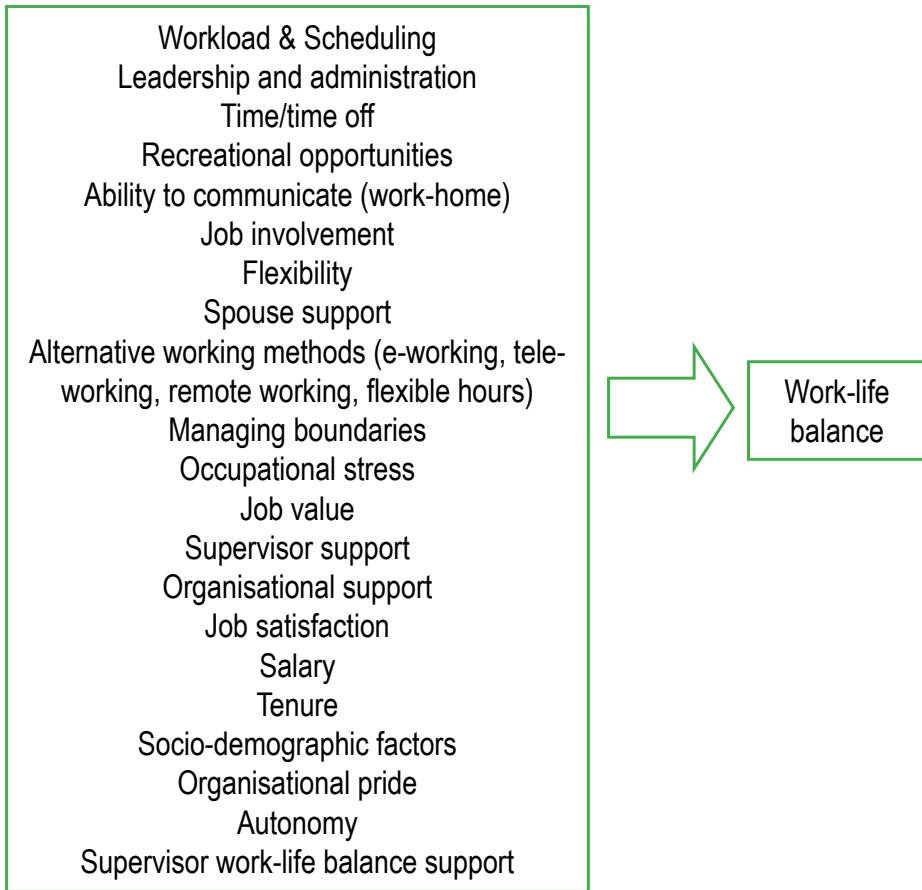


Fig. 1. Compilation of research on factors influencing work-life balance

Source: Prepared by the author based on [13–16; 19; 20].

The WLB factors were divided into two groups — individual and organisational (Fig. 2); similar ones were united into larger groups. For example, leadership style, flexibility, supervisor support, and autonomy comprise the group dependent on organisational culture. An organisation whose culture places the human being at its core should be capable of minimising many threats influencing WLB.

Distinguishing between factors influenced by the employee and by the employer seems essential in delineating the areas of responsibility. A substantial element in solving the work-life balance problem is open communication between the employee and the employer, which is impossible without a person-centred organisational culture. The latter is obviously the responsibility of the employer.

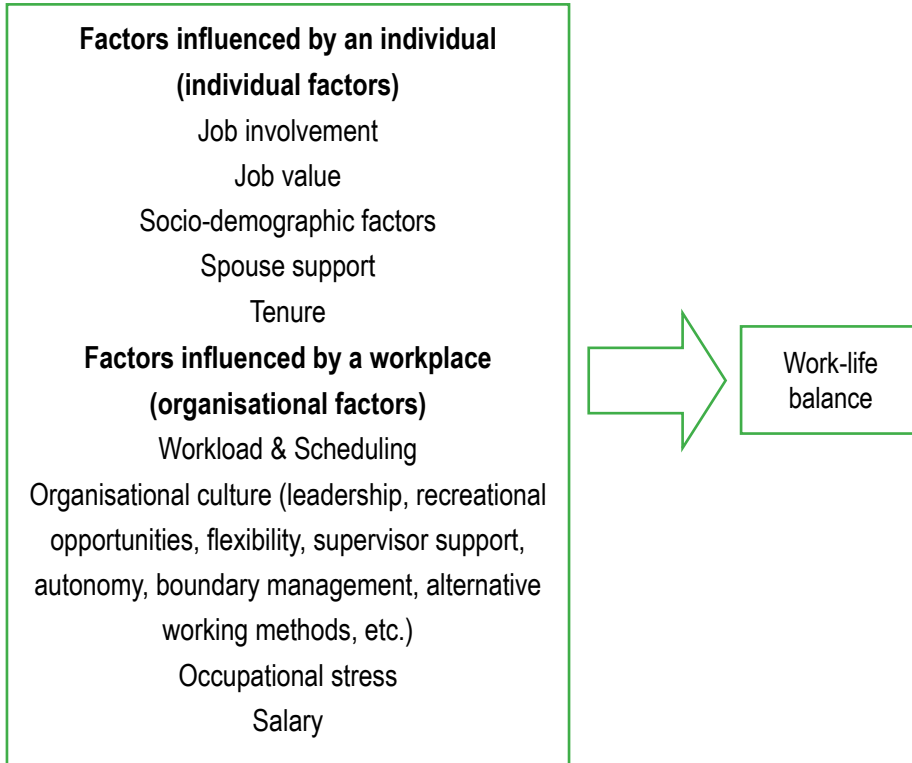


Fig. 2. Segmentation of factors influencing work-life balance

Source: Prepared by the author based on [13—16; 19; 20].

Conclusions

Although there is abundant literature on work-life balance and the topicality of the issue is still growing, a model fully accounting for factors affecting an individual's work-life balance is still lacking. This research has shown that factors influencing work-life balance are complex. Thus, there cannot be a single success strategy for organisations operating in different environments. Fig. 1 demonstrates that there are many factors in WLB and that the issue has to be looked at from several perspectives depending on the environment, the industry, the individual's stage of life, personal traits, and probably the culture. For example, a hospital will have needs and options to sustain balance different from those of a fintech company, a logistics company, or a school. Despite the need for further research and investigation, it was possible to divide the factors into two groups (Fig. 2) to show the main routes to individual work-life balance. These routes are found at both organisational and individual levels. I am convinced that employees must take responsibility for achieving and sustain-

ing well-being. Nonetheless, the social or economic situation may complicate this process, making individuals endure unpleasant consequences. Sometimes individuals are ignorant of their mental and physical health condition and do nothing to change the situation at either the individual or organisational level. Of course, organisations must protect their employees from burnout or other consequences of work-life imbalance. Moreover, the values and organisational culture of the employer must be focused on well-being, sustainability, and the human being to create an environment that can secure a long-term employer-employee relationship.

Future investigations may focus on factors identified as principal in earlier studies. These include values shared by the organisation and the individual as factors in job value and organisational pride. There is also room for analysing factors affecting the choice of a particular employer by employees, as well as for exploring the employer brand as an element in attracting and retaining the best employees. Further work is required to investigate the influence of demographic factors on WLB, such as gender and generational differences. This exploration may yield unexpected results if conducted in several cultural environments since age and gender are perceived differently depending on the culture.

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CURRENT TRENDS IN THE DEVELOPMENT OF A GREEN FINANCE SYSTEM: METHODOLOGY AND PRACTICE

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The concept of green growth and sustainable development is turning into a global ideology guiding the transformation of national economies. The focus is shifting from quantitative assessments of performance to rational choice conditions. Rationality is becoming the decisive factor behind sustainable green growth, and a change in the financial model that supports such growth may be needed. Therefore, the most urgent problems relating to sustainable growth are the transformation of the finance system, on the one hand, and the creation of a new financial paradigm based on the principles of responsible investment and corporate social responsibility, on the other. This study aims to consider the theoretical and practical aspects of creating a national green finance model ensuring sustainable growth in the Russian Federation. The development of a green finance mechanism and a green bond market in the Baltic Sea countries is analysed to determine national features and explore the possibility of translating the Baltic experience into practices usable in Russia. The research uses economic observations, economic description, structural and logical analysis, and systems analysis. Perhaps the most significant finding is the description of a methodological framework for sustainable development theory, as seen by major schools of economic thought. Studying the experience of the Baltic Sea countries in creating a new finance model of responsible investment helped detect national features and development priorities that can be used in Russia in devising the ideology, principles, and mechanism of green growth and sustainable growth financing.

Keywords:

sustainable development, green finance, responsible investment, socially responsible business, financial model for a sustainable economy, green growth

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Introduction

Sustainable growth and green development may fall off the agenda in a pandemic economy when business activity is shrinking everywhere, even in developed countries. Today's economic situation may help outline a new management concept at a national and global level. This concept will shift from quantitative parameters of economic recovery to qualitative characteristics, very much in line with the theory and practice of sustainable development. A shift like this will require the economic ecosystem to transform. It will also demand a new financial and investment model at the level of individual economies and countries [1].

The green growth and sustainable development discourse, which originated in the 20th century, has received attention worldwide. As early as 1987, the UN's World Commission for Environment and Development proposed a principle of sustainability — 'meet [ing] the needs of the present without compromising the ability of future generations to meet their own needs'.¹ Sustainable development means bringing global prosperity through sustainable consumption and production and achieving social and technological progress through sustainable innovations [2, p. 341 — 342].

The 2015 UN resolution, signed by heads of over 160 states, identified 17 primary sustainable development goals to be achieved by 2030². The resultant Transforming Our World agenda focuses on equitable quality education, gender equality, good health and well-being, reduced inequality, sustainable consumption and production, zero hunger, life below water, life on land, sustainable cities and communities, and innovative growth.³ The economic policy of signatory states must seek to meet these goals by altering the principles and tools of state regulation.

The green economy concept, which conforms with sustainable development principles, calls for an extensive revision of national policies on social, economic, and environmental issues, prosperity, and equality. New policies will require reducing environmental risks and ensuring a healthy development of ecosystems and thus disagree with the current principles of market economy organisation.

¹ Adopted at the Meeting of the Council at Ministerial Level on 25 June 2009, 2009, *Declaration on Green Growth*, available at: <http://www.oecd.org/env/44077822.pdf> (accessed 28.12.2020)

² Sustainable development goals, 2020, *Sustainable Development Agenda*, available at: un.org/sustainabledevelopment/ru/about/development-agenda/ (accessed 29.12.2020).

³ In 2020, the analytical centre under the Government of the Russian Federation published the first Voluntary National Review of the 2030 Agenda Implementation.

Therefore, the transition to a green economy amid a pandemic demands a thorough theoretical and practical examination.⁴ It is vital to study mechanisms for funding green initiatives since financing predetermines the achievement of goals and the success of actions.

The *Concept of a Russian Methodological Framework to Advance Green Financial Instruments and the Responsible Financing*⁵ stresses that the UN estimates the cost of measures to attain the sustainable development goals (SDG) at USD 30tn. Spending on this scale needs a change in the current financial investment model and a new global finance ecosystem — a system for responsible and green finance, which might be underpinned by the three ESG factors (environmental, social, and governance).

Both experts and the general public are debating green finance technology and its transformation. The most advanced economies create a new ecosystem for capital investment — one prioritising green investment and other equity instruments.⁶

The sustainable growth and green economy paradigm are becoming a fundamental management concept. It reaffirms the need for a new finance ecosystem to ensure the gradual development of the world economy towards green growth.

The Russian Federation has given serious attention to sustainable growth projects. In 2020, the first national review came out. It highlighted steps made towards each of the goals in 2019.⁷ By that time, most SDGs had already been included in the programme documents of the Russian Federation. Twelve national projects focused on demography, healthcare, education, residential development and urban environment, environmental protection, safe and quality motorways, labour productivity and employment, science, a digital economy, culture, small and medium entrepreneurship and support for business initiative, international cooperation, and exports. Overall, 107 of 169 SDG objectives had been covered.

⁴ *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication—A Synthesis for Policy Makers*, 2011, UNEP, available at: https://sustainabledevelopment.un.org/content/documents/126GER_synthesis_en.pdf (accessed 04.01.2021).

⁵ *Concept of Building a Methodological Framework in Russia to Advance Green Financial Instruments and the Responsible Financing Projects*, 2019, Expert Council on Long-term Investments under the Central Bank of Russia (ESG-finance Group), Moscow.

⁶ *Green Economy Developing Countries Success Stories*, 2010, United Nations Environment Programme, p. 6.

⁷ *Green finance: an agenda for Russia. A diagnostic review*, 2018, Expert Council on Long-term Investments under the Central Bank of Russia (ESG-finance Group), Moscow.

However, the national framework for a new finance ecosystem and responsible investment is not yet fully developed. Therefore, there is a need for further studies in the area, both theoretical and concentrating on Russian and international practices.

Green economy and green finance evolve very differently across the world. European countries outperform all other nations in achieving SDGs and serve as methodological centres for disseminating institutions, including green investment.

A study of the current state of green finance helped identify what countries were the most successful in this respect. Among the leaders are the Baltic region states — Denmark, Sweden, Germany, Finland, and Estonia. The experience of these countries merits particular attention when considering a possible Russian model of sustainable finance. This article examines the experience of the Baltic region states — front runners in the race for a green finance market and responsible investment. The investigation may aid in producing practical economic recommendations for Russia and its Kaliningrad exclave.

Materials, methods, and theoretical discussion

Theoretical groundwork for sustainable growth and a green economy was laid by the fathers of economic science and benefited humanity even when environmental problems were much less acute.

The founder of classical economic theory, Adam Smith, distinguished the moral, civic, and economic components in a human being. The moral and civil elements were believed to lead to responsible decision-making, rationality, and economic efficiency. These principles extended to one's attitude to factors of production, such as natural resources. Smith's views laid the foundation for the theory and practice of sustainable growth. He argued that 'every prodigal appears to be a public enemy, and every frugal man a public benefactor' [3, p. 654]. Other classical economists — Turgot, Petty, Ricardo, Quesnay, and *Boisguillebert* — maintained that land, the ultimate natural resource, was the principal factor behind the wealth of nations. Agricultural labour was considered the most productive because of the qualitative characteristics of the land. The classical notion of land rent reflected these characteristics and reflected the problem of measuring the quality and cost of land [4, p. 117].

Classical economists contributed enormously to sustainable development theory, which focuses on food quality, food security, zero hunger, greater agricultural productivity, and technological advances in agriculture.

The Malthusian theory of population, which appeared at the turn of the 19th century, can be considered another precursor of sustainable growth theory in terms of social equality. Malthus argued that the scarcity of natural resources and the effects of the law of diminishing returns might lead to long-term stagnation — the situation that was later called the Malthusian trap [5, p. 388–390]. If placed in the context of SDGs, this theory lends urgency to the reduction in inequality, sustainable cities and towns, industrialisation, increase in productivity, and innovations [6, p. 206–208]

Pigou's theory of externalities is the immediate forerunner of the sustainable development concept. It views externalities as resulting from interactions between two economic agents influencing the environment. This idea is concomitant with emission markets and government interventions remedying market failures through adjustment taxes, subsidies, and production quotas [7, p. 551].

Coase's alternative theory, particularly the idea of voluntary agreements, is another conceptual pillar of sustainable development and socially responsible businesses. These theoretical parallels help identify green growth priorities by balancing public costs and benefits [8, p. 21–23].

Among contemporary schools of economic thought, new institutional economics seems to have contributed the most to sustainable development theory. Buchanan, Tullock, and Brennan (their works precluded the creation of the International Society for New Institutional Economics in 1997) examined extractive and inclusive institutional aspects through the lens of economic growth rate factors. They concluded that sustainable growth was impossible without pluralist institutions [9, p. 34–36; 10, p. 154–155].

Environmental economics, which originated in the 1970s, is rightfully considered a backbone of the sustainable development concept. Exponents of this school of thought were the first to define environmental costs as repercussions of economic growth and distinguish between brown and green growth. William Nordhaus, the 2018 Nobel Prize winner in economic sci-

ence, is called the father of economics of climate change, and deservedly so. He was among the first to regard climate change as an economic problem. He also proposed a mechanism for state regulation in the emission market [9, p. 26–27].

Sustainable development and the practical implementation of green growth have not escaped the attention of Russian researchers. Yakovleva, Kabir, Nikulina, and Rakova examine the green finance mechanism and the formation of a finance ecosystem [12, p. 15–17]. Shkiperov, Kurilo, and Prokopyeva study green economy principles at a regional level, emphasising industry-specific environmental projects run in Russia's North-west [3].

Semenova, Eremina, and Skvortsova focus on the sources and mechanism of sustainable development and stress the need for a national system for green growth financing [14].

Nevertheless, previous studies have not provided a theoretical framework for green transformation in Russian conditions. Therefore, there is a need for a thorough examination of the experience of Russian companies. It is also essential to develop and systematise methodological approaches and principles of green finance and socially responsible investment [15, p. 11–12].

Thus, a theoretical and methodological framework for sustainable development has yet to be finalised. Work is being done in this area, but there is room for further theoretical and practical research.

Successes in attaining SDGs vary from country to country. The Sustainable Development Goals Index (SDG Index)⁸ was developed To measure how participating states perform in this respect. According to the index, the front runners are Denmark, Sweden, Finland, France, Austria, and Germany, which have done a lot to reduce inequality and provide equal access to cheap energy and quality education.⁹

⁸ The Sustainable Development Goals Index covers 162 countries and 100 indicators of the implementation of 17 SDGs. 100 points are awarded for the complete achievement of a goal, and 0 points if nothing has been done to attain it. The final score reflects the average performance of a country on all SDGs.

⁹ The EU Green Deal—a roadmap to sustainable economies, 2020, *The EU Green Deal*, available at: <https://www.switchtogreen.eu/the-eu-green-deal-promoting-a-green-notable-circular-economy/> (accessed 21.12.2020).

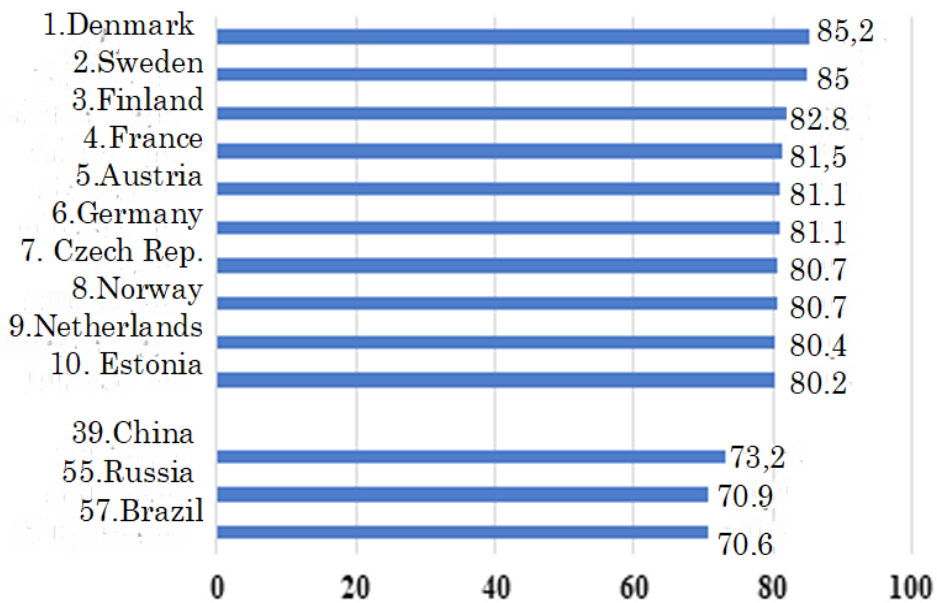


Fig. 1. Sustainable development ranking of countries (2019)

Source: SDG Index Sustainable Development Report 2020. The Sustainable Development Goals and COVID-19. Jun 30, 2020. URL: <https://www.sdindex.org/> (accessed 20.12.2020)¹⁰.

Despite the evident successes of some states, no country can boast the achievement of all 17 goals (Fig.1). Russia ranked 55th in 2019, having scored 100 points on goals 1 and 4.¹¹

Russia scored the highest on the ‘no poverty’ goal. There is, however, an important qualification: the effect of the pandemic could not be measured at the time. Moreover, the country performed very well on the education goal. International experts awarded Russia the fewest points for marine ecosystem preservation. Other problematic areas are the promotion of peaceful and inclusive societies and the provision of access to justice.

¹⁰ The Sustainable Development Goals and Covid-19 Jun 30, 2020, *Sustainable Development Report 2020*, available at: <https://www.sdindex.org/> (accessed 20.12.2020).

¹¹ National Review of the 2030 Agenda implementation, 2020, *Analytical Centre under the Government of the Russian Federation*. Voluntary, available at: <https://ac.gov.ru/projects/project/dobrovolnyj-nacionalnyj-obzor-dostizhenia-celej-ustojcivogo-razvitiya-10> (accessed 24.12.2020).

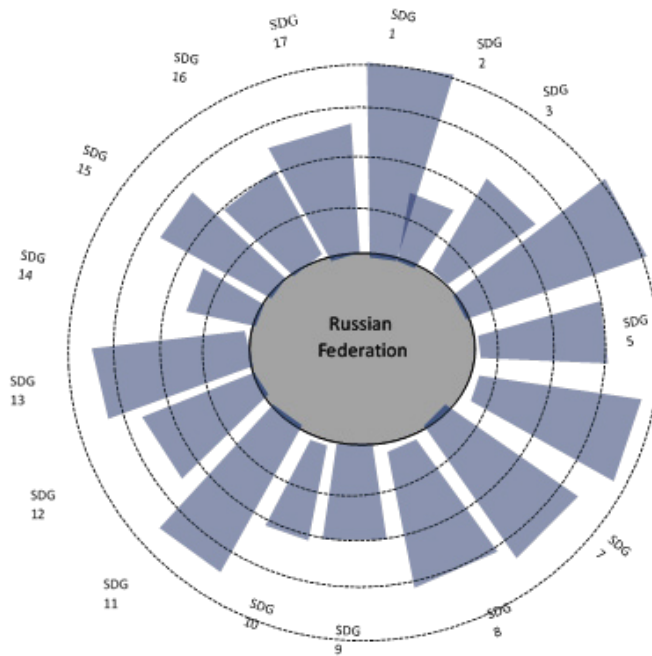


Fig. 2. Russia's ranking on SDG implementation, 2019

Source: Sustainable Development Report 2020. The Sustainable Development Goals and COVID-19. Jun 30, 2020 URL: <https://www.sdindex.org/> (accessed 20.12.2020).

Trends towards a new management ideology and social development paradigm are closely linked to sustainable development goals, the green growth concept, and, as a result, the principles of responsible investment, which create the financial framework for global change. Without a corresponding finance ecosystem, a green investment market, and a national model for environmental financing, a gradual transition and the achievement of SDGs will be impossible. A green transformation of debt and equity investment relationships in Russia requires a particular methodological and financial framework.

It is crucial to understand the terminology of the green bond market to grasp its essence. The term *green bonds* refers to a debt instrument, where the money borrowed from governments, banks, municipalities, or corporations can be spent only on climate conservation, renewable energy, ecosystem preservation,

energy conservation, low-carbon economies, green transport, and similar projects. *Green bonds* are an umbrella term encompassing environmental bonds and climate bonds — debt instruments used to finance sustainable projects with an environmental edge [16, p. 40–41].

The green bond terminology and infrastructure are developing simultaneously. For example, the Climate Bonds Initiative (CBI),¹² established in 2008, mobilises the USD 100 trillion bond market for climate action. The non-profit also reports on the evolution of the green bond market, aids in climate certification, and provides green bond rating services based on the listing, environmental impact, and yields [17, p. 26–27].

Another outlet for green investment and social responsibility is the Institutional Investors Group on Climate Change (IIGCC). The group seeks to mobilise investment for the transition to a low-carbon economy and ensure the resiliency of investments and markets in the face of climate change. The IIGCC was established in October 2006, when 21 institutional investors with total assets of over 1.4tn euros applied for membership.¹³ Among the members are about 20 private pension funds. In 2020, Denmark's pension industry invested over USD 8bn in green projects expediting the low-carbon transition in production. In our opinion, the visibility of private pension funds in the IIGCC is explained by the high social responsibility of these organisations and their commitment to sustainable growth. The members of the group report annually on their contribution to climate action. The EU uses data from these reports when coordinating the policies of member states. In Europe, IIGCC promotes green solutions at the highest level [18, p. 36–37].

Today, the group has 270 members from 16 countries, with 35tn euros worth of assets under management. Its aim is national policies, investment practices, and corporate behaviour focused on minimising long-term risks associated with climate change. The group takes part in creating a legal framework for green

¹² Green Bonds Global State of the Market 2019, 2019, *Climate Bonds Initiative*, available at: <https://www.climatebonds.net/resources/reports/green-bonds-global-state-market-2019> (accessed 02.03.2021).

¹³ Year in Review, 2020, *The Institutional Investors Group on Climate Change*, available at: <https://www.iigcc.org/about-us/our-members/> (accessed 10.03.2021).

transformations and emissions reductions. In November 2020, over 40 investors with total assets of 6tn euros used the IIGCC as a platform to call for EU leaders to expedite zero-emission goals [19].

The institutional framework for green investment provides for a broad scope of research and offers a wide range of financial tools. As the responsible investment market develops, countries embrace the concept of social bonds — an instrument used to finance projects with positive social outcomes. These initiatives are aimed at water quality, affordable housing, and social infrastructure development — all for a better quality of life and reduction in social inequality as a sustainable development goal. Blue bonds support coastal zones, marine biodiversity, sustainable fishing, and environmental control.¹⁴

In 2020, the pandemic drew attention to humanitarian obligations financing the struggle against pandemics and migration-related problems. Some issuers, such as the International Finance Facility for Immunisation, specialise in humanitarian bonds. We are witnessing today the golden age of innovative securities and new investment structures [20, p. 39—41].

The green investment market emerged with the first issues of bonds of the European Investment Bank and the World Bank, rated AAA, in 2007 [21].

The next landmark in green market development occurred in March 2013 when the International Finance Corporation (IFC) sold its first USD 1bn bond within the first hour after the issue. At the end of 2014, the Swedish property company Vasakronan issued the first corporate green bond. Apple, Engie, ICBC, Credit Agricole, and Tesla followed this example and became full-fledged issuers and participants in the market.

Experts emphasise rapid growth in the green investment market. For example, USD 167.3bn worth of green bonds were issued in 2018, whilst in 2020 the CBI estimated the market at over USD 829 bn. The investment priorities are energy, construction, transport, and water resources (Fig. 3).

¹⁴ European Regional Development Fund, 2020, *European Commission*, available at: http://ec.europa.eu/regional_policy/en/funding/erdf (accessed 06.01.2021).

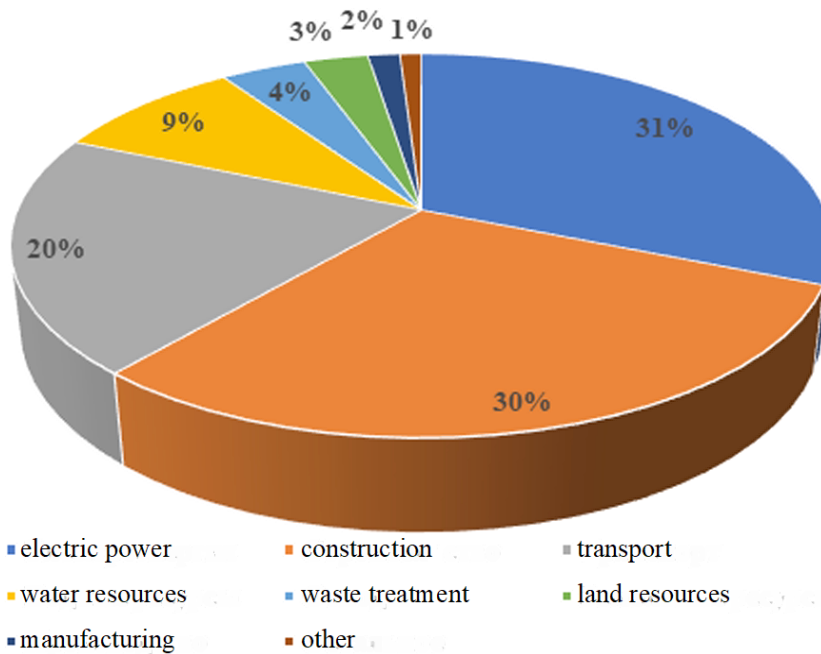


Fig. 3. Green bonds by industry, 2019

Source: Sustainable Debt: Global State of the Market 2020. URL: <https://www.climatebonds.net/resources/reports/sustainable-debt-global-state-market-2020> (accessed 21.12.2020).

The young social and green investment market is growing fast. The number of participating countries is increasing yearly. The leaders in the market are Germany, Finland, Denmark, and Sweden, all the Baltic Sea region states. They not only excel at SDG implementation but also attract public and private funds to environmental projects.

Investigating the problem at a regional level shows that commitment to sustainable development and green growth differs from country to country. Denmark, Finland, Sweden, Germany, and Estonia were in the top ten countries in SDG implementation in 2019 (Fig. 1). Lithuania, Latvia, Poland, and Russia are just on their way to create a sustainable development platform. They are building an institutional framework for sustainable growth and accumulating experience.¹⁵

¹⁵ Sustainable finance: Commission's Action Plan for a greener and cleaner economy. Brussels, 2018, *European Commission*, 8 March, Press Release Database, available at: https://europa.eu/rapid/press-release_IP-18-1404_en.htm?locale=en (accessed 27.12.2020).

An examination of the green bond market in the selected Baltic region states has revealed its national features. Sweden's green bond market is dominated by corporate green finance instruments, as local companies *put social responsibility* at the heart of their businesses. Active participants in the market are municipalities issuing green bonds. In 2013, Sweden's Gothenburg was the first city in the world to issue green bonds. In Europe, the country ranks second to France in green bond issue. In 2019, Sweden and Finland were in the top fifteen countries in terms of green bond issue, ranked 6th and 14th respectively by the CBI.

Finland's green bond market concentrates on property, development, and banking. Overall, organisations specialising in financing public sector projects are prevalent among financial institutions in the Baltic region states. These include *Kommuninvest i Sverige* (Sweden), *MuniFin* (Finland), and *KommuneKredit* (Denmark), which account for 23% of the Nordic green bond issue, or 4.5bn euros. Overall the Nordic green bond market is estimated at 19.2bn euros [22, p. 44–44].

Denmark, Sweden, Germany, Finland, and Estonia use the green bond market to invest in low-carbon construction and renewable energy. The Swedish financial group SEB, which manages assets in over 20 countries, including Lithuania, Latvia, Estonia, Germany, and Russia, has allocated the proceeds of green bonds to the Baltics since 2016, giving businesses from the three countries an opportunity to apply for loans and support green projects.¹⁶

In May 2018, Lithuania asserted itself as the pioneer in energy-efficient residential development, having raised funds in the green bond market. Renewable sources comprise over a fourth of all energy resources in the country, and this proportion is above the EU average. The government of the country successfully issued green bonds in April 2018. Moody's Investors Service assigned GB1 (excellent) assessment to the issue. Proceeds from the bonds were allocated to modernising housing blocks and increasing their energy efficiency.

In Latvia, green bonds are issued by Latvenergo, which has affirmed its commitment to achieving EU climate goals. It has become one of Europe's greenest energy utility companies. In 2017, Latvenergo issued 205m euro worth of bonds in two tranches. In the same year, the Latvian finance institution ALTUM issued 20 million euros in green bonds, repayable on Oct 17 2024. Remarkably, the demand for the bonds from investors, such as asset management funds, insurance

¹⁶ Sustainable finance: Commission's Action Plan for a greener and cleaner economy, Brussels, 2018, *European Commission*, 8 March, Press Release Database, available at: http://europa.eu/rapid/press-release_IP-18-1404_en.htm?locale=en (accessed 04.01.2021).

associations, and banks, was 6.5 times the planned issue.¹⁷ Lithuania accounted for 43.5 per cent of the total issue; Latvia, for 31 per cent; Estonia, for 19 per cent; Sweden and Germany, for 6.5 per cent [23, pp. 759–771].

Proceeds from the issue were allocated to the energy efficiency of central heating systems, renewable energy, reduction in energy intensity, energy-efficient buildings, and renewable energy (*wind power, solar power, and biomass energy*), etc. [24, pp. 16–17].

An influential actor in green finance is the European Bank for Reconstruction and Development (EBRD), which supports, among other things, sustainable economies in the Baltics. It assisted in the establishment of the first Baltic green building finance organisation. The EBRD made a 30m euro equity investment in the *Usaldusfond EfTEN* real estate fund, which provides capital for commercial property development in Latvia, Lithuania, and Estonia. The fund was the first in the three countries to work towards green goals and solutions to climate problems within their operations mandate. The EBRD invested 11.7m euros worth of zlotys in green mortgage bonds of the Polish bank PKO Bank Hipoteczny. This investment made it possible to construct low-emission buildings, grant green mortgage loans, and diversify the investor base.¹⁸

Another industry receiving green investment is clean transport. A 250m euro loan will allow the chemical company LG Chem to finance the construction of a production facility in Western Poland, which will manufacture lithium-ion batteries sufficient for powering up to 1m electro cars over a year. Using these batteries is expected to reduce CO₂ emissions by 155,000 t annually. In December 2016, Poland became the first issuer of sovereign green bonds (750m euros with a five year maturity period). The demand was three times the issue.¹⁹

Estonia is also an adherent to sustainable development. In 2021, the country's second-largest city, Tartu, will complete its transition to renewable energy derived from the sun, wind, and biomass. All street lighting in Tartu has 'gone green', and all the bulbs used for this purpose are energy saving. All electric bicycles from the municipal bike rental service are powered by renewable energy. Moreover, 85 per cent of the electric power used by city-owned buildings comes from renewables.

¹⁷ Modus Asset Management buys solar power plants in Poland, 2020, *The Baltic Course*, available at: http://www.baltic-course.com/rus/good_for_business/?doc=161288 (accessed 10.01.2021).

¹⁸ Financing Credible Transitions: 4 Page Summary Note, 2020, *Climate Bonds Initiative*, available at: https://www.climatebonds.net/certification/pko_bank_hipoteczny (accessed 15.12.2020).

¹⁹ Promoting responsible lending in the banking sector: The next frontier for sustainable finance, 2020, *OECD iLibrary*, available at: <https://www.oecd-ilibrary.org/sites/d5c54bd6-en/index.html?itemId=/content/component/d5c54bd6-en> (accessed 04.01.2021).

After the transition to green electricity, the municipal authorities intend to embrace green transport. Municipal buses are already running on recycled biofuel, whilst carbon-based fuel is still used by municipal fleet vehicles.

Germany made headlines in September 2020, when it entered the sovereign green bond market. The country issued 6.5bn euros worth of bonds with a ten-year maturity period, well above the 4bn euro target. By 2050 Germany will be climate neutral, having reduced emissions by 90% compared to 1990 [25, p. 16–17]. Kreditanstalt für Wiederaufbau (KfW), a German state-owned bank, issued USD 9.02bn in bonds in 2019, ranking second to the US mortgage company Fannie Mae with USD 22.4bn.²⁰

The principles of substantial development are firmly entrenched in these Baltic region countries, some of which are undisputed leaders in the green arena. Denmark, Sweden, Finland, and Germany are unrivalled in sustainable goal implementation and green investment market development.

Lithuania, Latvia, Estonia, and Poland go to great lengths to achieve SDGs. Nevertheless, their financial ecosystems are not sufficiently developed: their economic capacity is limited, as is the social responsibility of national businesses.

In Russia, the green bond market and responsible investment date back to Aug 12 2019, when a sustainable development sector was launched on the Moscow Exchange.²¹

The first Russian green bond issuer was RSB KHMAO, part of a group of companies engaged in municipal solid waste management.

Russia's green bond pioneer in gaining climate certification was Russian Railways. In May 2019, the company issued 500m euros in Eurobonds, priced to yield 2.2 per cent. In March 2020, the company completed its second green Eurobond offering, worth 250m Swiss francs. Russian Railways were successful in green bond issuance because 85 per cent of its operations are electricity-powered, and this fact places the company's services within the green taxonomy.

Russian Railway's offering of green bonds, which sought to finance the purchase of energy-efficient locomotives, was a triumph. It drew 1.8bn euros in bids, and the coupon rate was the lowest in the history of Russian Eurobonds. The green status of Russian Railways was officially acknowledged in the process. This recognition is of cardinal importance for a Russian state-owned company running the risk of sanctions.

²⁰ The European repo market at 2020 year-end An ICMA European Repo & Collateral Council (ERCC) briefing note, 2020, *The International Capital Market Association*, available at: <https://www.icmagroup.org/sustainable-finance/resource-centre/> (accessed 10.01.2021).

²¹ Russia green finance: unlocking opportunities for green investments policy note, 2020, *The World Bank*, available at: <http://documents1.worldbank.org/curated/en/103531540924946297/pdf/131516-PN-P168296-P164837-PUBLIC-Green-finance-Note.pdf> (accessed 10.01.2021).

In November 2019, the commercial bank Tsentr-Invest also issued green bonds, which remain the only ones admitted to the sustainable development segment on the Moscow Exchange. The securities of Garant-invest and Solar-Systems are also listed in the segment.

The Russian green investment market comprises over 50 companies specialising in energy, petrochemicals, construction, metallurgy, utilities, etc. They have issued 7bn roubles worth of bonds listed on the Moscow Exchange.

In Russia, the market and the state are joining green efforts to support the urban economy and the utility industry. State-owned Sberbank and Vnesheconombank, the most active participants in the green finance market, promote investment projects focusing on utilities — water treatment, sewerage, waste sorting, and recycling [26, p. 45—46]. Another promising area is construction, particularly the erection of energy-efficient buildings. Other projects aim at increasing the energy efficiency of city lighting. According to expert estimates, an average project in this area brings about a 50—75, or even 85, per cent increase in energy efficiency. These figures mean a 50—75 per cent reduction in energy consumption and CO₂ emissions.

Of importance are projects aimed to increase the heat efficiency of standard housing blocks through façade and roof insulation (which reduces heat losses by a third) and individual heating schemes. They pay for themselves in five to seven years.

Another major player in the Russian green finance market is Sberbank, which has embraced the green agenda. It is supporting environmental and community-centred projects. With the aid of the bank, the Irkutsk company EkoStep has been recycling tyres to produce flooring for gyms and stadiums since 2016. In 2020, it recycled 3,000 t tyres; the target for 2021 is 6,000 t. The company gets annual loans from the Baikal branch of Sberbank, which is considering now a 20m rouble investment loan to EkoStep.

In 2019, Sberbank announced its plan to issue green bonds to finance the best available technology (BAT) in the forestry industry. The issuance of green bonds is an effective tool to attract low-cost, long-term funds. In collaboration with the state, Sberbank plans to develop green industries in Russia. The bank estimates the national green finance market at 3tn roubles. According to Sber-

bank analysts, industrial ecology will generate at least 1.8–2tn roubles. Loans and bonds that can be described as green account for several hundreds of billions of roubles in the bank's portfolio.

Russia's green bond market has a segment of unlabelled green bonds. Their issuers are green since they finance build-operate-transfer projects in utilities, transport, and energy. However, they have not been admitted to the sustainable segment [26, p. 46–47].

Another essential aspect in the development of the Russian green finance market is infrastructure. In 2020, the Russian Agricultural Bank launched an exchange-traded fund. The investment vehicle is tied to the Sustainable Development Vector Index of the Moscow Exchange. It was the first responsible investment to be assigned an ESG rating. In the middle of 2020, VTB debuted two funds aimed at Russian companies with a high ESG score.

Sberbank Private Banking²² has launched three ESG-centric investment strategies. It estimates the potential of the Russian green bond sector at 3tn roubles until 2023.

The Russian green investment market is rapidly developing. Lacking a conceptual development model, the market requires thorough research and methodological analysis based on the examination of current practices and the systematisation of theoretical approaches.

It seems that the emergence of a new, green paradigm for economic management will incorporate all relevant practices regardless of their stage of development. There is also a need for a single conceptual framework consolidating all current trends and methods [27, p. 143–144].

The mechanism of responsible investment and green finance involves activities across several jurisdictions. Thus, there is an urgent need for a single methodological approach to the level of security. We distinguish three of them: the global-status international level, the regional-status international level, and the national level. The latter relies on existing financial systems and creates a unique system of green finance coordination.

At the global level, the system of methodological support for responsible investment and green finance comprises the groundwork laid by the organisations listed in Table 1.

²² The unit of Sberbank that deals with customers with assets over 100m roubles.

Table 1

**Major international organisations for responsible investment
and green finance instruments**

Principles for Responsible Investment, PRI https://www.unpri.org/pri	Principles for Responsible Investment
	The ESG in Credit Risk and Ratings Initiative
	Shifting perceptions: ESG, credit risk and ratings in three parts
Climate Bonds Initiative, CBI https://www.climatebonds.net/	Climate Bonds Standard
	Green Bonds Register
International Capital Market Association, ICMA https://www.icmagroup.org/	Green Bonds Principles (GBP)
	Suggested Impact Reporting Metrics for Waste Management and Resource Efficiency Projects, Clean Transportation Projects, Green Building Projects
	The Handbook – Harmonised Framework
	Green bond registers and verifiers
Organisation for Economic Co-operation and Development (OECD) https://www.oecd.org	The polluter-pays principle
	Centre on Green Finance and Investment)
	OECD environmental documents include 147 reports and recommendation papers.
Task Force on Climate-related Financial Disclosures, TCFD https://www.fsb-tcfd.org G20 Financial Stability Board	Recommendations of the Task Force on Climate-related Financial Disclosures
Network of Central Banks and Supervisors for Greening the Financial System, NGFS. https://www.banque-france.fr	A Call for Action
The Global Innovation Lab for Climate Finance, GILCF https://www.climatefinancelab.org/	Thirty-five innovative solutions for green growth worldwide. Sustainable Energy Bonds (SEBs) were developed specifically for a project in India.

Source: Expert Council on Long-term Investments under the Central Bank of Russia (ESG-finance Group). Concept of Building a Methodological Framework in Russia to Advance Green Financial Instruments and the Responsible Financing Projects. Moscow, 2019. P. 87.

An established methodological framework for responsible investment principles is impossible without harmonising national guidelines and recommendations on green bonds and other market components. Analysing the best practices of the Baltic region states has shown that the national model of the financial system is the key to methodology. The four major models describing the distribution of financial resources in an economy are Scandinavian, German, Mediterranean, and Asian. Sometimes the Anglo-Saxon and mixed models are distinguished as well. The model determines the organisation of the responsible investment market and the green finance mechanism. In our study, we will consider the Anglo-Saxon, Scandinavian, German, and mixed models.

Several conclusions can be drawn from a systematisation of the financial system organisation models and industry priorities of green investment. The Scandinavian model is associated with green investment in social programmes and quality of life programmes. The German model has infrastructure projects at its core. Large business projects are crucial to the Anglo-Saxon model, whilst the mixed one supports responsible investment across many industries (Table 2).

Therefore, the prevalent type of financial relationship affects the industry priorities of responsible investment.

Methodologically speaking, it is also essential to identify industries eligible for responsible investment; this can be done using a taxonomy for investment. Although the EU taxonomy can be used as a template for a national one, national features should take precedence in the process.

A taxonomy helps investors and companies plan their green activities. The CBI, ICMA, IDFC, and EU taxonomies lay down criteria for a green investment project.

In November 2020, the Government of the Russian Federation appointed VEB responsible for the national green finance methodology. The bank was also charged with devising a mechanism for financial support for green-financed projects. In 2021, the investment portfolio of VEB included 50bn roubles allocated to projects aimed at energy efficiency, water supply and sewerage, and the modernisation of production facilities to reduce emissions.

Table 2

The financial systems and industry priorities of responsible investment in the Baltic region

Financial system model	Model description	Country	Principal issuers	Responsible investment priorities
Scandinavian model (Swedish socialism)	A social focus of funds distribution and a substantial share of the public sector in the economy	Denmark, Sweden, Norway, Finland	Corporations, municipalities (issuer cities), specialised financial institutions, mortgage companies, banking institutions	Low-carbon construction, urban infrastructure
Germany (Rhine model)	Government control combined with social welfare. The banking system has the leading role in financing the economy.	Germany	Federal Ministry of Finance, corporations	Transport; international cooperation in research, development, and innovations; energy; manufacturing; agriculture; forestry
Anglo-Saxon model	The state's financial policy encourages citizens to do business; corporate and private property prevails.	Lithuania, Latvia, Poland, Estonia	Businesses, corporations	Utilities, energy
Mixed model	The state stimulates business activity and initiatives	Russia	Financial institutions, corporations, businesses	Market infrastructure, utilities, energy

Source: prepared by the authors.

The taxonomy proposed by the bank covers economic activities such as waste management and recycling, power generation, green building, green mechanical engineering and transport, gas-powered transport, forestry, natural landscape and biodiversity preservation, ICT for energy-efficient transport systems, and efficient, sustainable, and low-emission thermal energy [28, p. 25–26].

VEB envisioned its green finance methodology to provide projects aimed at greener products with low-cost financing options. This way, Russian companies would more easily adapt to the transition to green technology and become more visible in the international financial market to receive low-cost funds.

Yet another problem is the sanctions, which make green investment riskier. Restriction may result in a ban on importing leading-edge technology and unattractiveness to domestic investors. VEB experts believe that a national taxonomy helps minimise these risks by differentiating investment. Moreover, sanctions do not target most technologies needed for the green transition. Restrictions focus mainly on hydrocarbon exploration technology accounting for less than 5 per cent of green debt instruments. Western capital markets do not give a green discount as long as hydrocarbon projects are concerned. Otherwise, the discount is about 20–30 basis points [29; 30]. Green bonds are mainly associated with energy, transport, and construction — the sectors on which restrictions have not been imposed.

The yield of Russian green bonds will be higher than that of their European counterparts. This difference will attract Western investors who pay little heed to sanctions when looking for greater yields. In September 2020, VEB emphasised at a meeting of IDFC members that political restrictions should not stay in the way of environmental projects. The bank also reminded that the international community of development banks had recognised the priority of environmental challenges over national political ambitions.

Despite the short history of green finance, there is sufficient practical and methodological potential for a national green finance system. The Russian practice of transforming green finance principles draws on international methodological recommendations and aims to create a national financial ecosystem.

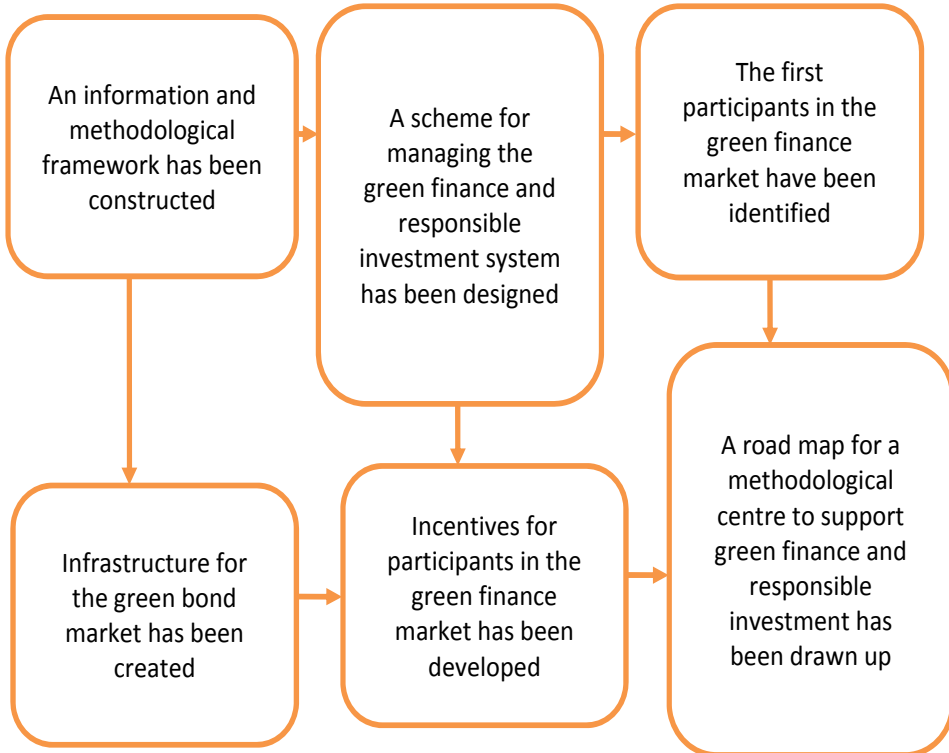


Fig. 4. Steps taken to develop a national system of green finance and responsible investment

Source: Proposed by the authors.

A methodological framework has been created for informed decision-making taking into account both best practices and national conditions. A study of green and sustainable investment in 2016–2018, carried out by the National Financial Research Institute, provides a comprehensive picture of how the green finance market is developing worldwide. A task group of the Central Bank of Russia has published *The Diagnostic Overview Green Finance: the Agenda for Russia*.

Research has been conducted into green finance in the BRICS countries. It analyses market drivers and the role of the state in the process.

In January 2019, the WWF and the National Association of Concessionaires and Long-Term Infrastructure Investors (CoLTI) prepared the glossary *A green economy; definitions and concepts*. The document makes it possible to harmonise and unify the theoretical aspects CoLTI releases the quarterly report *Sustainable development; current state and trends*.

The structure of managing a national green finance system may look as follows.

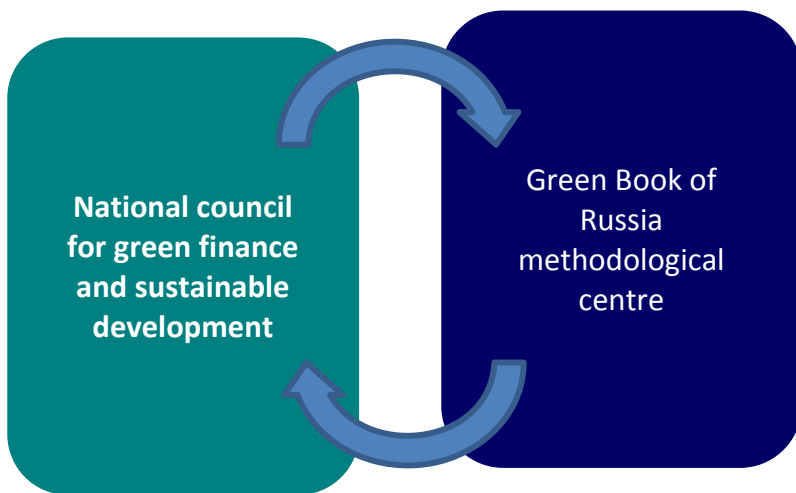


Fig. 5. A scheme for managing a national green finance system

The state also has a role in developing the green bond market. The Ministry of Industry and Trade devised a subsidy programme, which compensates the coupon rates of green securities supporting the industrial transition to BATs²⁵. Keen interest from the state means guaranteed low-risk green instruments that are likely to attract potential investors.

The existing green finance infrastructure is adequate for the necessary preparation, emission, and redemption processes and procedures. The Moscow Exchange and the Russian Union of Industrialists and Entrepreneurs (RUIE) signed an agreement on computing sustainable development indices: the Openness and Responsibility by the Moscow Exchange and the RUIE and the Sustainable Development Vector Index by the same institutions. The RAEX rating agency pre-

²⁵ Subsidies for BAT introduction projects, 2020, *Ministry of Industry and Trade*, available at: <https://minpromtorg.gov.ru/projects/ndt/04/> (accessed 04.01.2021).

pared the first ESG ranking of Russian regions — *Evaluation of ESG risks of Russian regions: first results*²⁴. The RAEX ranking of Russian businesses by environmental spending shows that Nornikel, Ilim, and the Arkhangelsk Pulp and Paper Mill earmark about 3.8 per cent of their revenue for environmental protection, which is twice the European average.²⁵

Analysis of current trends in international and Russian green investment practices shows that this segment is rapidly growing. Both the private and the public sectors are interested in green instruments. The former seek to establish themselves in the public eye as socially responsible businesses, and the former aims to solve structure problems while staying committed to environmental priorities.

Green finance is an urgent issue in the Kaliningrad region because of the territory's close ties with the Baltic Sea states and the need to implement SDGs, particularly Goal 14 (Life below water) and Goal 15 (Life on land). There are bright prospects for green finance in the region. Firstly, developing and supporting regional businesses is a primary focus of federal policy. Furthermore, large and small Kaliningrad businesses can benefit from achieving the six systems transformations outlined by the World Business Council for Sustainable Development. Finally, responsible investment and green finance help solve macroeconomic, infrastructure-related, humanitarian, and socio-cultural problems.

Conclusion

This research has shown that the global community pursues an investment model transformation and seeks new principles of responsible investment. All of this will translate into a new business ideology of shared social responsibility and economic efficiency. Each country has to lay down national criteria that will safeguard the interests of all responsible investment stakeholders.

A distinctive feature of the Russian green finance and responsible investment market is the state's remarkable efforts to encourage businesses to transition to responsible investment. The experience of the Baltic region states helps extrapolate this trend to the municipal level and conclude that municipal participation will contribute to solving social and economic problems at the local and regional levels.

An urgent issue is information dissemination and transparency. It is essential to heighten awareness of the quality of securities, listing, and certification. There is a need for an information centre working in real-time to detail the current state and trends in the responsible investment market.

²⁴ ESG ranking of Russian regions 2020, 2020, RAEX, available at: https://raex-a.ru/rankings/regions/ESG_raiting (accessed 04.01.2021).

²⁵ *Expert Council on Long-term Investments under the Central Bank of Russia (ESG-finance Group)*, Green finance: an agenda for Russia. A diagnostic review, Moscow, 2018, p. 64—65.

Overall, Russia has successfully joined the global ecosystem. The country is embracing ESG standards across various aspects of social life. The primary goal at this stage is building a national model for responsible investment and green finance. Achieving it will create conditions for the sustainable development of Russian society and green growth in the national economy.

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DEPOPULATION OF COASTAL RURAL LITHUANIA: DO REGIONAL PARKS STABILISE THE SITUATION?

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Regional parks in Lithuania preserve the most valuable physical and cultural components of the landscape, NATURA 2000 habitats, etc. Usually, they are located in natural or semi-natural landscapes of rural areas. These territories, however, have a higher depopulation rate than urbanised districts. Still, conservation priority areas were expected to attract young families as permanent residents and make their population more stable. This study aims to investigate changes in the rural population in three regional parks of the Klaipėda county to determine the number of abandoned villages (with 0 residents) and vanishing ones (with a population < 5), as compared to territories with no conservation regime. The article examines migration as one of the determinants of depopulation. Analysis of national and local statistics, institutional documents, and structured interviews revealed that the conservation regime applied in regional parks did not necessarily encourage local people to stay or newcomers to arrive. Proximity to the sea and towns with developed social infrastructure remains a priority when looking for a residence in the countryside.

Keywords:

depopulation, disappeared villages, rural population, regional parks, conservation priority

Introduction

Depopulation is caused by socio-economic, political, environmental, cultural, and other factors, which affect the population replacement rate and may deprive once inhabited areas of their residents. This phenomenon has occurred in many regions of the world. The negative impacts of depopulation on rural areas can be subsumed under three categories — those relating to culture, caused by nature, and created by humans [1].

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Abandoned areas become overgrown, and nature slowly reclaims them [2]. At the same time, plants or animals whose habitat is dependent on human activities disappear, and deserted material heritage falls into decay. Unpopulated land deteriorates and gradually becomes unusable for agriculture [3]. On a larger scale, the emptying of villages holds back the economic activity and makes the area uncompetitive. Not only changes in agricultural production — intensification/marginalisation, specialisation, and concentration — affect rural landscapes. There are other causes as well. Urbanisation means outmigration from rural regions, whilst rural residence, outdoor recreation, tourism, and nature conservation influence the dynamics of a landscape. The latter four aspects are closely connected to changes in agriculture and forestry [4–12]. The protected areas of parks can be seen as ‘pull’ factors in local livelihood in alternative economies [13; 14]. On the one hand, more services and new infrastructure appear in rural areas as recreation, tourism, and environmental protection gain ground. On the other, the local population decreases and becomes sparser; the countryside is emptying. In Lithuania and other Eastern European countries, the latter processes accelerated after the collapse of the Soviet Union in 1991 [15].

Villages of all sizes became fewer after the restoration of Lithuanian independence, although the changes in the internal structure of rural settlements were minimal. The least affected were medium-sized settlements with 201–500 inhabitants. Most larger rural settlements that performed a variety of service functions have survived. Smaller settlements were disappearing [16; 17].

According to data obtained from Lithuanian wards (NUTS-4), there are 133 unpopulated villages in the Northern Lithuanian Biržai district. In Western Lithuania, 14 villages in the Kartena ward of the Kretinga district have disappeared over the past 30 years.¹ Twelve villages ceased to exist in the Šilutė district between 1989 and 2001.² In the Žemaičių Naumištis ward, three settlements, whose population ranged between one and six people in 2011, may disappear in the coming years [18]. In Western Lithuania, the rural population started to decrease much later, in 2000. And, in the other Lithuanian regions, the reduction began soon after the independence [17]. The literature identifies migration due to economic and social reasons as a central factor causing depopulation, which is a self-inducing process. Young, mobile, employable people usually migrate first,

¹ Gyventojų skaičiaus pasiskirstymas pagal teritoriją, amžių ir lytį 2011, Lietuvos Respublikos 2011 metų visuotinio gyventojų ir būstų surašymo rezultatai, 2013, *Lietuvos Statistikos Departamentas*, Vilnius, available at: http://Inform_gyv_sk_pasisk.pdf/ (accessed 22.12.2017) (in Lithuanian).

² Šilutės rajono savivaldybės teritorijos bendrasis planas, 2010, UAB „Statybos strategija“, available at: http://www.pamarys.lt/publ/Terit_planavimas/Bendrieji/BPL_Silute/2010_T1_1586_BP_L_Silute_aisk1.pdf (accessed 05.07.2016) (in Lithuanian).

followed by young families with children. This migration trend precludes population replacement. Disproportions in rural development and settlement structures lead to job shortages and social problems in rural areas. Outmigration has been the hardest on smaller villages in Europe. Some of them have been depopulated, turning into dead or ghost villages [19].

The literature shows that conservation policies may cause wildlife to reclaim human-occupied areas, and this reclamation may adversely influence small and vulnerable human populations. [20; 21]. The socio-economic opportunities provided by protected areas might not make up for the corresponding restrictions [21].

There are 30 regional parks in Lithuania, which comprise 54 per cent of the country's protected areas. All of them are found within cultivated landscapes. Lithuanian regional parks perform many tasks, but their primary function is to preserve the most valuable physical and cultural components of landscapes such as cultural heritage and NATURA 2000 habitats [22]. Activities that may damage the landscape of regional parks, natural and immovable cultural values, as well as natural recreational resources are prohibited or restricted, and buildings causing visual pollution cannot be built there.³

The number of protected areas is growing in Lithuania, much to the discontent of the local population. There are numerous reasons for conflicts between residents and the administration of regional parks: stakeholders are not included in the working groups; residents of protected areas cannot participate in nature protection; there is no unanimity over the restrictions [23]. Another problem is insufficient public awareness. People do not even know about nearby protected areas or what rules apply there. There is a need for better communication with locals and more effective awareness campaigns [24]. Residents of regional parks in Klaipėda County have faced all these problems to a greater or lesser extent.

It has been pointed out that each abandoned village or area needs a tailored intervention strategy [25; 26]. According to Güler and Kâhya (2019), a possible way out is the return of former inhabitants and resettlement with new residents. Part of the population may come from time to time to their second homes in those villages [1].

Although Lithuanian scientists have investigated the geographical aspects of rural extinction [27, 28], there is a gap in the research on how this process occurs in protected areas, particularly regional parks. It was hypothesised that a decrease

³ Republic of Lithuania Law on Protected Areas, 9 November 1993, No I-301. As last amended on 11 June 2015–No XII-1784, Vilnius, [Law], *Seimas Prezidentas*, available at: <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/cf9f9132b60d11e6a3e9de0fc8d85cd8?jfwid=rivwzvvpvg> (accessed 08.08.2020) (in Lithuanian).

in the village size and population within regional parks with a conservation regime would be less pronounced compared to other areas. Parks were expected to inspire people, particularly the young, to embrace new services and get satisfaction from working in harmony with nature. This study aims to determine the number of disappeared villages (with zero population) and disappearing ones (with population < 5) by examining three regional parks in Klaipėda County, their settlements, their population, and temporal and spatial changes in these areas. The situation in these territories is compared to that in localities without a conservation regime to reveal the causes of depopulation and produce recommendations for improving regional policies and management.

The study focuses on the villages and rural population of three regional parks, four district municipalities, and their 12 wards in Klaipėda County, as observed in 2001, 2011, and 2019.

Cases and places

The regional parks in question have different geographical features, history, protected objects, population, settlement structure, and businesses. Their common element is hydrography. The Pajūris regional park is located on the Baltic coast; the Nemunas Delta park borders the Curonian Lagoon; the Salantai Regional Park is crisscrossed with rivers and streams. From the administrative point of view, all regional parks belong to Klaipėda County.

The Nemunas Delta regional park is located where the Nemunas River branches into several streams. Bordering the Kaliningrad region of Russia, the park is latticed with rivers, polders, and canals. Over 300 bird species live there. In spring, and sometimes in winter and autumn, most of the park is flooded. Floodplains provide hay and grazing, and the abundance of cheap fodder facilitates livestock farming.

The Pajūris regional park comprises a strip of Lithuania's coast and about 30 km² of the Baltic Sea water area. Showcasing the biological diversity of the Baltic Sea, the park boasts unique coastal landscapes, natural and cultural heritage. With its sandy beaches, eroded banks, and pine forests, it is a draw for tourists.

The Salantai regional park is situated in northwestern Lithuania, spanning three district municipalities. Agricultural lands make up 67 per cent of its area. A quarter of the park is forested. A unique feature of the park is boulders dating back to the Last Glacier Period. The territory has been untouched by human hands so far. The park seeks to preserve the landscape, the natural ecosystem, and the cultural heritage of the river valleys and their surroundings (Fig. 1).

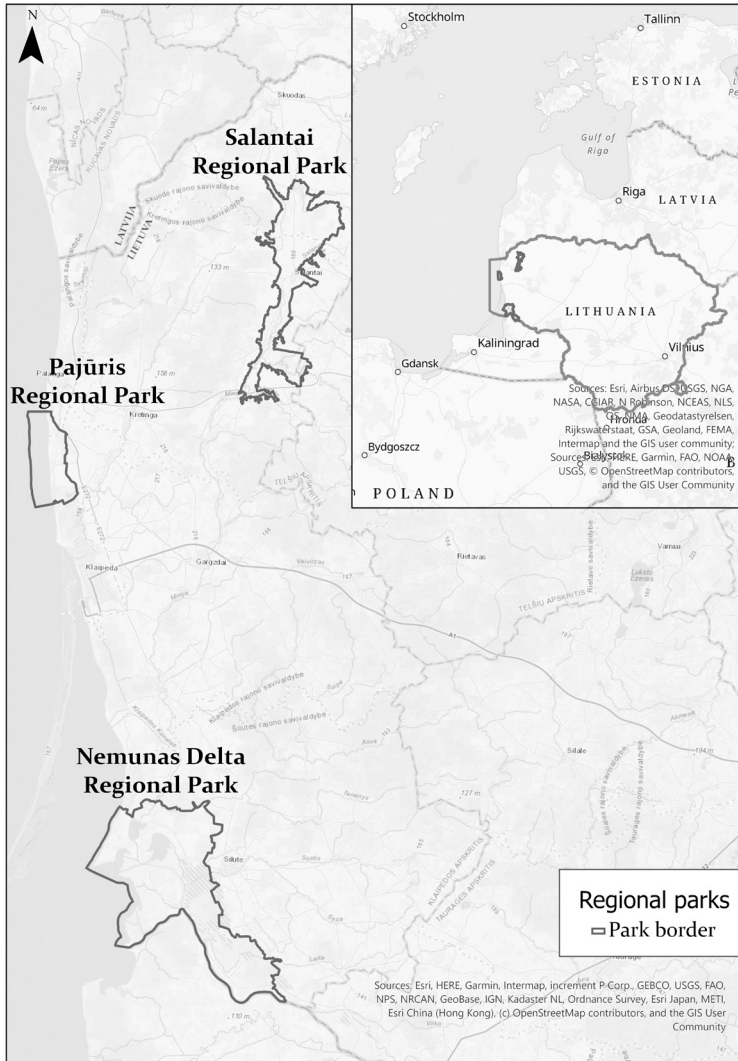


Fig. 1. The location of study sites in Western Lithuania

Source: based on the 2019 ward statistics.

Lithuanian rural settlements can be grouped according to their size and population into very small (1–4; 5–9; 10–24; 25–49 people), small (50–99), medium (100–199; 200–499), large (500–1000), and very large (1001+) [28]. Medium-size villages dominate the coastal part of the country [29].

The regional parks differ in area, settlement patterns, and population. The largest by area is the Nemunas Delta regional park and the smallest the Pajūris regional park. The Salantai Regional Park, classified as medium by area, is the most populous and has the highest population density. The largest settlements are found in the Pajūris regional park, followed by Salantai and Nemunas Delta.

There are three townships in the Salantai regional park and one in the Nemunas Delta regional park, whilst most settlements in these areas are villages of different sizes (Table 1).

Table 1

Regional park population characteristics in 2019

Regional parks	Area, km ²	Population	Population density per km ²	Total number of settlements	Average population per settlement	Residential area, % of total area
Pajūris	58.65	1789	30.5	7	255.6	0.9
Salantai	132.65	5526	41.7	29	190.6	4.2
Nemunas Delta	288.7	2293	7.9	26	88.2	1.0

Source: prepared by the authors based on the 2019 ward statistics.

According to the historical/architectural features, functions and location, the settlements of regional parks are classified into three groups, as demonstrated in Fig. 2.

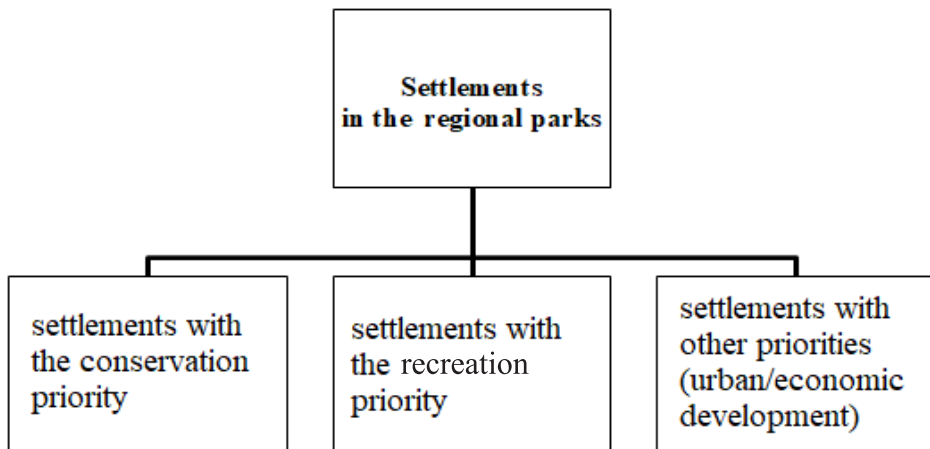


Fig. 2. Lithuanian regional park settlements and their priorities

Source: prepared by the authors, based on⁴.

⁴ Pajūrio regioninis parkas, 2020, *Tvarkymo planas*, available at: https://www.pajuris.info/index.php?option=com_content&view=article&id=58&Itemid=65&lang=en (accessed 08.08.2020) (in Lithuanian).

The first group includes conservation priority settlements. These towns, townships, villages or their parts are protected as cultural heritage. They are governed based on the architectural principles of conservation, restoration, regeneration, imitation, renovation, and transformation. Depending on which ones are applied, different results can be obtained, ranging from the preservation of authentic objects to the creation of copies, imitations, and hybrids and the launch of innovations. Cultural landscape management has developed spatial requirements for all these objects, and the spatial relations between them have been described.

The second group comprises recreation priority settlements. Most of them are popular locations for summer houses. Local landscape management focuses on ensuring recreational quality.

The third group brings together villages and towns located in the buffer zones of the parks. They have few cultural heritage or nature conservation sites. Yet, these settlements can contribute to the protection of other, more valuable territories. The high priorities are ecological protection, urban and economic development.⁵

Methods

Structural interviews were carried out, and literature, maps, statistical data, and legal documents analyzed. GIS and classification methods were employed to investigate the emptying of villages in the selected regional parks, rural municipalities, and wards. Two semi-structured interviews with 12 ward administrators and landscape specialists from three parks (on the phone and the Internet) were conducted in 2018 and 2020. The twelve wards were Mosėdis, Skuodas, Imbarė, Kartena, Kūlupėnai, Kretingalė, Kintai, Rusnė, Juknaičiai, Šilutė, Saugos, and Salantai. A qualitative analysis of three case studies was performed to explore the causes of depopulation in the localities and the measures proposed by different stakeholders and local authorities to improve the situation.

The findings were mapped using ArcGIS PRO software. The 2001–2019 population change in the wards is shown on a choropleth map: the wards have different colouring depending on the intensity of the process. Settlements were classified by population change (no change, negative change, positive change, no population). Each class was assigned a symbol to mark villages and towns on the map. The distribution of settlements was analysed through the lens of local priorities and population change. Disappeared and disappearing villages were the focus of the analysis.

⁵ Pajūrio regioninio parko tvarkymo planas: sprendiniai, 2014, *Valstybinė saugomų teritorijų tarnyba prie Aplinkos ministerijos*, Vilnius (in Lithuanian).

Research results

The number of sparsely populated areas is rapidly increasing in Lithuania. This rise is due to outmigration and low birth rates. The Lithuanian literature identifies three types of sparsely populated areas: (I) having fewer than five inhabitants per sq km; (II) having five–ten residents per sq km; (III) having 10–12.5 people per sq km. Some studies also distinguish territories with fewer than 15 residents per sq km. All areas with a population density of below 12.5 people/km² are considered scarcely populated [28].

The average population density of wards located in the regional parks is 63.5 people/km². There are two cities in the area, and if the urban population is not factored in, the average population density is as low as 21.3 people/km². Thus, the population density in most local villages is above 12.5 people/km². In 2019, there was only one eldership (Notėnai) with a population density below this threshold (9.54 people/km²).

According to the classification of Lithuanian wards [30], those located in regional parks have different levels of urbanisation. Most of them are non-urban areas lying at a substantial distance from cities and characterised by a declining population and negative natural change. More people leave the areas than arrive there. The Salantai and Skuodas wards (Salantai regional park) are classified as less urbanised areas. Both are a fair distance from Klaipėda and seaside resorts and thus are not attractive to residents. The Šilutė ward is a mixed urban area heavily influenced by the Šilutė district centre. The Kretingalė ward, part of the Pajūris regional park, is a suburban area affected by two cities — the port city of Klaipėda and the resort of Palanga.

The parks protect not only natural sites but also other objects. Amongst them are the ethnographic villages of Miniija (Mingė) and Rusnė (former Skirvytėlė) in the Nemunas Delta regional park and ethnographic homesteads, fragments of a manor, and many other places of interest in the Salantai regional park.

The condition of heritage objects depends on the function of a park. In conservation areas, the physical condition of buildings and structures is excellent. They remain authentic and retain their cultural value. At the same time, the physical condition and cultural significance of other objects have deteriorated [31].

The causes of depopulation and the emptying of settlements are many. Firstly, some political events expedited the process: wars, Soviet exile, administrative divisions, emigration, the partisan movement, Soviet collectivisation, etc. Secondly, there were economic causes: industrialisation, land reclamation or melioration, emigration to the EU, internal migration to larger cities, etc. Thirdly, natural phenomena — disasters such as earthquakes, floods, and landslides — had their role to play. Thus, geographic mobility is a consequence of macro- and micro-level factors, one of which is rural-to-urban migration. In Lithuania, like in many other developing nations, this type of migration has evolved into international migra-

tion [32]. When Lithuania announced independence in 1990, 19,541 of the country's population lived in villages, single homesteads, and towns. Yet, according to the 2011 census, only 18,461 Lithuanians lived in such settlements, i. e. a six per cent reduction took place [33].

Depopulation in Lithuania has marked regional differences. In Western Lithuania, where the analysed territories are located, emigration has a more dramatic impact on population decline than natural change [27].

In 2001–2011, the number of rural settlements in Lithuania decreased by 1,638 or 4.13 per cent. In the districts where the regional parks are situated, 46 villages, or 9.4 per cent, disappeared in 2001–2020 (Table 2). This decline intensified in 2001–2011 and reached a plateau.

Table 2

**Total number of villages and number of disappeared villages
in rural municipalities of Klaipėda County in 2001, 2011 and 2020^{6,7}**

Municipality	Total number of villages			Number of disappeared villages (with zero population)	
	2001	2011	2020	2001	2011
Skuodas district	171	169	169	5	10
Kretinga district	194	189	189	23	26
Klaipėda district	302	290	284	11	12
Šilutė district	310	288	289	12	15
Total	977	936	931	51	63

The remote Šilutė district in Klaipėda County was affected the most by this negative demographic trend [34]. The number of rural settlements decreased by more than 6 per cent there. Larger rural settlements in Western Lithuania can still sustain their residents, and there are fewer empty villages (without inhabitants) than elsewhere in the country. The population of Klaipėda County districts changed differently. In the suburban Klaipėda district, the number of inhabitants increased, whilst it declined in the rest of the territory [35].

Twelve villages became depopulated in these districts in 2001–2011. This process is still ongoing.

⁶ Lietuvos gyventojų ir būstų surašymas 2001 m., Surašymo rezultatai, informacinis pranešimas, 2002, *Lietuvos Statistikos Departamentas*, Vilnius, 5 p. (in Lithuanian).

⁷ *Valstybės įmonė Registrų centras* [State Enterprise Centre of Registers], 2020, available at: https://www.registrucentras.lt/ibi_apps/WFServlet?IBIF_webapp=/ibi_apps&IBIC_server=EDASERVE&IBIWF_msgviewer=OFF&IBIF_ex=ar-a1-savivaldybes.fex&CLICKED_ON=&ADM_PAV=Klaip%EBdos%20apskr.&APSKR=3.00&LENT_NR=160.00&PERIODAS_N=0000020009&PERIODAS_I=0&skirt=0&adm_vien=1&dat_laik=1&LAIK=1 (accessed 15.07.2020) (in Lithuanian).

The number of very small villages is growing in the regional parks (Fig. 3). There are seven villages with fewer than five inhabitants in the study area — three in the Nemunas Delta regional park, three in the Salantai regional park, and one in the Pajūris regional park. Twenty-year data show that the number of such villages is likely to increase in the future. Another three villages disappeared in the Salantai regional park.

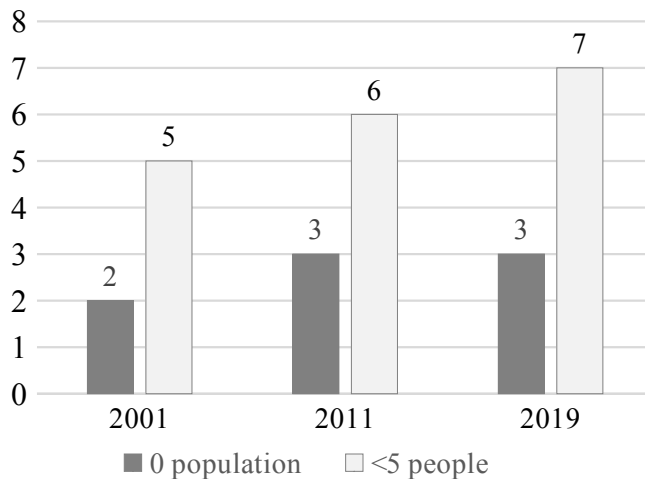


Fig. 3. The number of disappeared villages (zero population) and those with fewer than five people in the three studied regional parks in 2001, 2011 and 2019

Source: prepared by the authors based on the 2019 ward statistics.

Small settlements dominate regional parks. Only in townships does the population exceed 1,000 inhabitants. Although many regional parks gained more people than they lost last year, population decline was the prevailing trend in 2001–2020.

Two factors explain the population change in the regional parks:

- 1) general demographic trends typical of Lithuania and its Western region;
- 2) activities and restrictions specific to regional parks.

It is difficult to say which had a more profound impact on the population change in the disappeared villages. These villages are located at the administrative boundaries of municipalities, far from district centres, and thus they are not attractive to residents. In 2019, two of the three villages were part of conservation areas, where the only permitted economic activity is rural tourism. Thus, over time, the development of rural tourism may lead to the repopulation of some disappeared villages.

Changes in the population distribution and migratory attitudes throughout the country and in Western Lithuania are determined by geography. In this case, the decisive geographical factor is proximity to the city of Klaipėda or the seaside. The largest city in Western Lithuania, Klaipėda has a busy port; it is a centre for industry, services, research, and culture, which is appealing to Lithuanians and people from abroad. Like other cities in Lithuania, Klaipėda is going through suburbanisation. Many young families buy suburban houses. Moving away from the coast and Klaipėda causes the population density to decrease. In suburbs, buildings are dispersed, and the population is older than in cities. In Klaipėda County, the demographic situation is better than the national average. In 2019, the demographic old-age coefficient (the number of people aged 65 and older per 100 children under 15) reached 130 in Lithuania, whilst it was 119 in Klaipėda County. Natural change is negative all over Lithuania (-3.8 per 1,000 population), but Klaipėda County performs slightly better than that (-2.2).

The population of the Nemunas Delta regional park decreased by 24.7 per cent from 2001 to 2019. That of the Salantai regional park dropped 19.9 per cent over the period. In only nine settlements, the population increased over the nineteen years — in four villages in the Pajūris regional park, three in the Salantai park, and two in the Nemunas Delta park (Fig. 4).

Unlike the Salantai and Nemunas Delta regional parks, the Pajūris park saw a 3.25-fold population increase in 2001—2019. This park is situated in a coastal area near the port city of Klaipėda. Geographical attractiveness and better job perspectives encourage young families to buy houses in the territory and settle there. Most newcomers are young people looking for a clean, peaceful environment for themselves and their families. In recent years, the number of young people arriving in the suburbs of Klaipėda has been growing. Villages, however, must have good roads and social infrastructure (schools, kindergartens, etc.) to attract young families.

In the Pajūris regional park, villages grew exceptionally fast, whilst their counterparts in the other parks saw an increase by only a few residents (Fig. 4). Overall, the growth of large (over 500 inhabitants) settlements was the most rapid in the territories surrounding the city of Klaipėda; small (up to 9 inhabitants) settlements also grew. Meanwhile, villages with 10—99 inhabitants were losing population from 2001 to 2011 [36].

Fig. 5 shows how the population changed in villages with different priorities over almost 20 years.

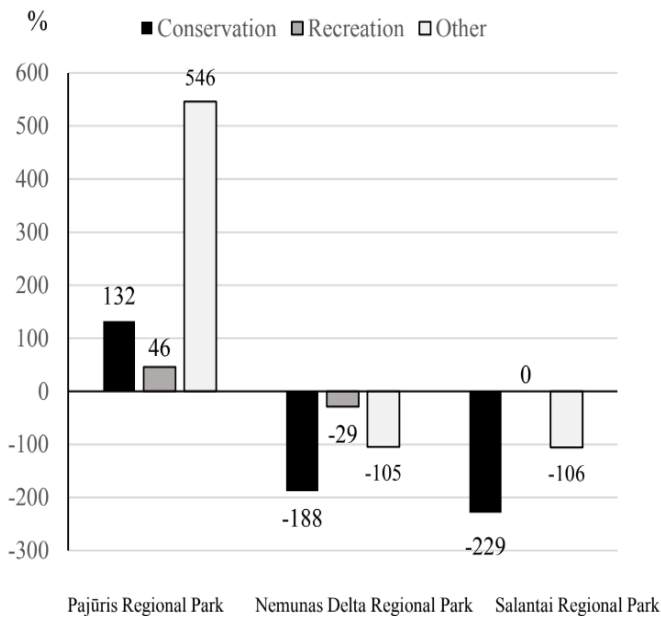


Fig. 5. Population change in 2019 in the villages with different priorities in the examined regional parks,% of the 2001 level

Source: based on 2019 ward statistics, 2001 census data, and the grouping of settlements according to their functional priority.

Data show that the average change in the Pajūris regional park was different compared with the two other areas. Its villages with conservation, recreation, and other priorities were gaining population, whilst in conservation priority settlements in the Salantai and Nemunas Delta regional parks, the opposite trend continued. There are recreation priority settlements in the Pajūris and Nemunas Delta parks. These settlements fared well in the latter, witnessing a very modest decrease in the population. Nevertheless, the villages of the studied areas, particularly those of the Salantai regional park, need a boost to the recreation industry. In settlements of the Nemunas Delta and Salantai regional parks with other priorities, the population decline was very similar over the study period.

Although agriculture is the primary field of employment in the Nemunas Delta park (from 30 to 70 per cent of the working-age population in different wards works in this sector), the Salantai regional park boasts the vastest agricultural lands. Agriculture is poorly developed in the Pajūris park — an area covered chiefly with forests and coastal meadows.

Analysis of interviews made it possible to identify some factors as causes or consequences of the situation observed in the regional parks. Fig. 6 demonstrates these factors.

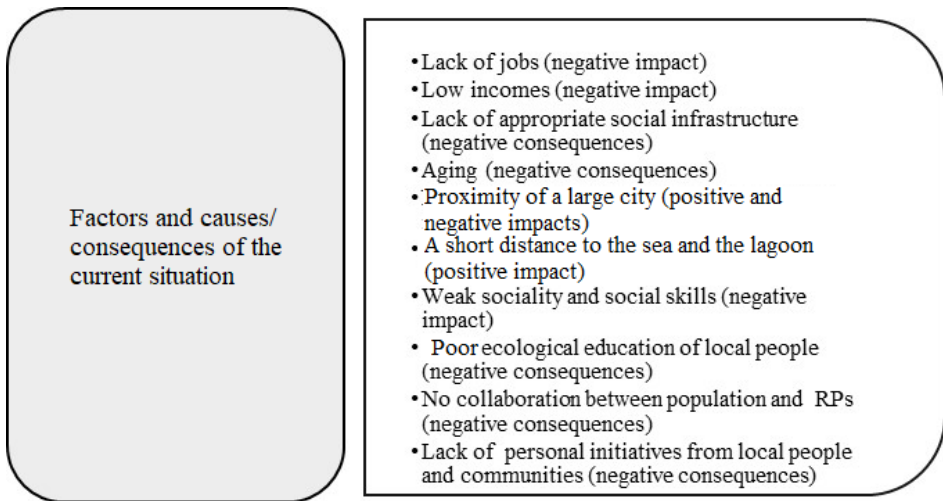


Fig. 6. Factors and causes/consequences of the current population trends in rural settlements in the regional parks

Source: based on the interviews conducted in 2018 and 2020.

The healthiest situation is in the settlements of the Pajūris regional park, where a slight population decline occurred in two villages with the recreation priority and one with the conservation priority. The most substantial increase took place in the other settlements with the same priorities. This situation may be a result of joint actions and effective collaborations between the regional park and the local community in Karklē — one of the largest settlements with conservation and recreation priorities. The about 300-strong village of Nemirseta, populated primarily by young families, has to be more actively involved in the affairs of the regional park to understand its mission and functions. There is a need for environmental education in the other settlements of the Pajūris regional park as well. The park prides itself on sport and recreation routes, including the Litorina nature trail.

The situation in the two other regional parks is more complicated. In the Salantai park, there is hope for more effective communication if the park sets up more initiatives involving residents, schools, and communities.

Although the Nemunas Delta regional park encourages local communities to participate in environmental protection, this collaboration has not been successful. Many residents still do not understand the tasks of the regional park, even in the settlements with the recreation priority.

These parks may benefit from performing an educational function. Cognitive guides have been developed for students, teachers, and visitors of the Nemunas Delta and Salantai regional parks. In particular, there are three outdoor theme-

based lessons available. Visitor centres display expositions for ecological education, and all the parks have educational trails. Nevertheless, improving ecological education requires closer cooperation between regional park administrations and educational institutions.

Twelve ward administrators stressed a need for measures to be taken at the national and municipality/ward levels to improve the current demographic situation in the Klaipėda County regional parks. Research experience leads one to a similar conclusion (Fig. 7).

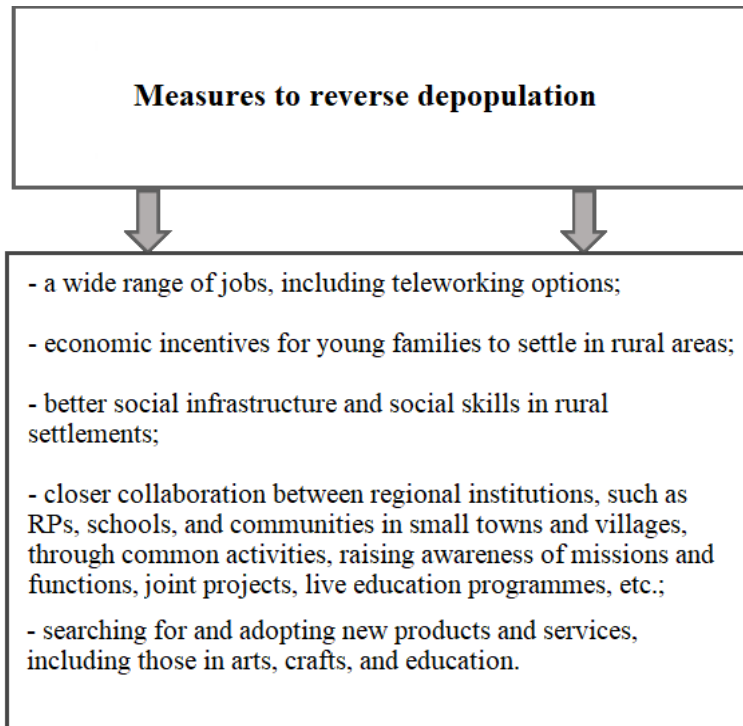


Fig. 7. List of measures to reverse depopulation in the rural wards of the three regional parks

Source: based on the interviews conducted in 2018 and 2020 and research experience.

Sustainable rural landscapes provide complex sustainable services to visitors to gain economic and social benefits for residents. Muller (2002) demonstrates the diversity of agricultural management practices required to ensure the good conservation status of different types of habitats [37]. Organic farming is another success story [38]. There are five organic farms in the regional parks: one organic farm in the Salantai park and four organic farms in the Nemunas Delta park. The Pajūris park⁸ has no such farms; a promising local priority is sustainable forestry.

⁸ Lietuvos erdvinės informacijos portalas, VĮ „GIS-Centras, available at: <http://www.geoportal.lt/lvi/>.

Ecotourism is an excellent opportunity for visitors to learn about sustainable practices. Tourists share their experiences and thus contribute to environmental protection and biodiversity conservation [39, 40, 41, 42, 43]. The educational function of protected areas is vital [44]. Protecting the environment should not be the only purpose of regional parks. It is also essential to achieve other goals outlined in the Law on Protected Areas of Lithuania. These are creating conditions for recreation (foremost, cognitive and ecological tourism), developing environmental education, promoting organic farming or sustainable forestry, and other measures aimed at the comprehensive preservation of landscapes and their values. Environmental protection has a more substantial positive impact on local labour markets when business regulations are relaxed [45].

Improving the demographic situation is a complex and resource-intensive process. It should not be the sole responsibility of the national government. Local communities should also have a role in revitalising endangered villages. Burinskienė and Lazauskaitė [46] highlight the importance of informal planning by institutional agents such as village groups, sports clubs, community organization, and others. Such planning includes the improvement of infrastructure and the activation of cultural life. Rural settlements should be evenly distributed across a country or a region, whilst adequate infrastructure will reduce differences between rural and urban areas [47, 48]. Strategic planning demands financial support for local people (tax cuts, benefits or similar measures) [36]. Thus, involving residents in governance will strengthen their attachment to the place and desire to protect nature and increase participation [49].

Discussion and proposals for future research

Comparing two censuses (of 1989 and 2011) suggests an important conclusion: the population of some villages and homesteads is growing. And there are about 130 such settlements in Lithuania [33]. Two settlements, which once had zero population, were repopulated again in the area under study. These are Vorusnė and the Tatamiškiai in the Nemunas Delta regional park.

The chief cause of depopulation is inefficient cooperation between regional parks and local communities or lack thereof. Unfortunately, there are few positive examples of such collaborations, most of them in the Pajūris regional park. Closer cooperation between parks and local communities and joint education and development projects will encourage people, particularly young families, to relocate to parks. Regional park authorities have a central role in reconciling the interests of stakeholders [2]. Further research should be undertaken to investigate the expectations and opinions of locals, particularly the young.

Conclusions

1. Small settlements dominate the regional parks. Most new residents are young people. However, they opt for settlements with developed social infrastructure (kindergartens and schools). Not all townships or villages with a population of more than 100 can boast such institutions.

2. The Pajūris regional park stands out in terms of demography. It is situated in the coastal area near the port city of Klaipėda. Its location and availability of jobs encourage young families to buy homes and settle there, although residential construction is restricted in the park due to the conservation regime. The population of the Pajūris regional park increased 3.25 times in 2001 – 2019.

3. In the Salantai regional park, disappearing villages cluster near the boundaries of the district. They lie at a distance from the district centre and the seaside and attract few residents. Three villages had disappeared in this park by 2019 compared to 2001. The Salantai park lost more people living in the conservation area than the other regional parks did. Restrictions upon construction and industrial activities may be the cause of the population decline.

4. In the Nemunas Delta regional park, on the one hand, agricultural activities are restricted because of the prevalence of flood meadows. As a result, farmers can keep only limited numbers of livestock. It is not attractive to residents and young people, who are leaving the villages. On the other hand, recreational services developing in the area may contribute to the population increase in the future.

5. Few jobs, low incomes, lack of social infrastructure, and legal restrictions imposed on regional parks are the main factors behind the population decline in many villages. Another problem is the ineffective communication between local communities and the administration of regional parks. Therefore, improving the situation requires a boost to ecological farming, sustainable forestry, and other sustainable activities. It is necessary to involve the staff of regional parks in the activities of wards, organise as many community events as possible, and develop joint projects. The latter may focus on environmental education, the organisation of ecological tours, etc. Economic measures are also needed to motivate the population to stay in the countryside and revitalise depopulated settlements.

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DEVELOPING GEOTOURISM WITH A FOCUS ON GEOHERITAGE IN A TRANSBOUNDARY REGION: THE CASE OF THE CURONIAN SPIT, A UNESCO SITE

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Recreation in protected areas (PAs) has received special attention amid international travel restrictions. The conflict between the conservation and economic use of these territories is increasing. This work aims to find ways to optimise and modernise environmental outreach and recreation in national parks as a type of PAs. Geotourism is viewed here as a sustainable form of tourism bridging the gap between conservation and recreation. Several objectives have been attained to fulfil this aim. The first one was the analysis of the best practices of geotourism development in PAs; the second one was measuring the resource potential for diversifying ecotourism events in PAs; the third objective was designing an algorithm for creating a geological heritage-focused eco-trail, an innovative recreation product aimed at environmental education and community outreach. The authors view the methodology for geo-tour design as an example of heritage preservation and propose a new tourist trail — the Geological and Geomorphological Chronicle of the Baltic Sea. This tour acquaints sightseers with the nature of the Curonian Spit National Park, a unique geological and geomorphological feature whose landscapes are a product of centuries-long human-nature interactions. Twenty years ago, in 2000, the conservation area was listed by UNESCO as a place of considerable natural significance. The field studies were carried out as part of the international project Ecotour4Natur: Ecotourism as a Tool for the Preservation of Natural and Cultural Heritage within the Lithuania-Russia Cross-border Cooperation Programme 2014–2020. The developed algorithm for eco-trail design may benefit other national parks as well.

Keywords:

geotourism, geo-heritage, ecotourism, sustainable development, tourist trail design methodology, Curonian Spit, protected areas, geological and geomorphological resources, Kaliningrad region, transboundary studies

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Introduction

Amid the Covid-19 pandemic, the demand for domestic tourism has soared dramatically leading to a massive influx of tourists to specially protected natural areas (PAs), particularly those located near large urban agglomerations or resort areas. This poses the risk of conflict between the recreational activities of tourism enterprises and nature conservation as the major policy of the Ministry of Natural Resources and Environment. At the same time, in search of innovations meeting both the reserves' conservation needs and the increased demand from tourism organizations (and independent tourists) destinations with centuries- or even millennia-old tourist sites are unjustly overlooked.

Since the 1980-s there has been an ongoing scientific discussion on whether the term geotourism refers to geology or geography. This article shows that geotourism is at least a three-component concept. On the one hand, it applies to the resources created by nature itself; on the other hand, the creation of routes is directly related to geography (including geomorphology), the study of wildlife and inanimate nature, conservation through development, studies, and recreational use. National parks are the most universal kind of PAs as they allow combining the functions of education, research, recreation, and tourism. At the same time, geotourism can and should be viewed as a niche of nature-oriented tourism aimed at the sustainable development of tourism in PAs.

One of the essential tasks of the PAs is environmental education, i. e. passing on the accumulated information to their visitors within the framework of educational tourism activities. Nowadays, the geographic spaces of PAs are complex multi-component biogeocenoses with geological structures being their integral parts. Understandings of the PAs' operational principles vary. In recent years, the international literature has been widely using the term "geotourism" incorporating geographic and geological aspects. However, it seems also important to identify the recreational component as an objective of management and operational subsystem within the framework of PAs' operation. Taking into account a historically developed complex system of flora and fauna tied to certain geological and geomorphological structures and landscapes, as well as the historical and cultural potential and heritage of the territory, it is possible to formulate an idea of the inextricable unity of the content space of PAs. According to the regulations, the key functions of national parks as protected areas are nature conservation, nature study, and limited recreational activities, in the order indicated.

The Curonian Spit National Park came into the focus of this research for a valid reason. The data shows that over a long time the number of visits to the Curonian Spit has been steadily growing. This growth is accompanied by violation of environmental regulations and overuse of the recreational capacity of existing tourist routes. All this reduces the recreational and tourist value of the park and

practically excludes the possibility of environmental education shifting the focus of attention to just visiting the site. Excessive use of recreational capacity affects not only tourists' impressions but also the preservation of landscapes and natural objects, as well as their functioning.

Thus, a conflict arises between the major functions and operational framework of the national park as high attendance, supposedly leading to an increase in the recreational effectiveness, threatens the preservation of valuable biogeocenoses and further reduces the recreational effect. Another problem is the distortion of the recreational effect itself, i. e. focus on "visiting" instead of "ecological education and impressions". One of the ways to resolve the contradiction is to change the model of tourist activities in the PA as well as the related elements of information services and infrastructure.

The article aims to identify the ways to improve recreational and educational activities through the development of new types of tourism on their territory. Global practice shows that geotourism is considered to be one of the sustainable forms of tourism. However, it is possible only in territories with a certain potential (international literature widely uses the concepts of georesources and geoheritage). These natural resources (objects) must be properly studied, described and adapted for the general public; a special route needs to be created too. It is important that such a route did not affect the protected areas, therefore, it requires certification by PAs researchers, and, in some cases, approval by the Ministry of Natural Resources and Environment (in the Russian Federation).

Since the above activities are largely in line with the environmental educational policies of national parks, it is expedient to consider opportunities for the development of geotourism on the territory of the Curonian Spit, a UNESCO site. Another objective is to develop an algorithm for creating such a tourist trail, drawing on the example of the Curonian Spit National Park.

Geotourism as a trend in the use of a territory's natural heritage (geoheritage)

The concept of geotourism has progressed from a way of involving natural areas in tourism activities to the creation of a network of geoparks as territories with unique geographic features.

Geotourism developed as a special area of tourism in the 1980s-90s. At first, it was mainly associated with the transformation of reclaimed mining areas into tourism objects. T. Hose [1; 2] described the English origins of the trend. Alongside other European scientists, he substantiated the connection between the preservation of natural heritage and the development of geotourism. Although over the past fifteen years European scientists have suggested various interpretations of geotourism, almost always its definition has included the study of the physical foundations, means of interpretation and the promotion of geo-objects and geoheritage [3]. For example, M. Gray, speaking about natural heritage, uses

the term “geodiversity” encompassing the diversity in living and inanimate nature. Identifying various types of geodiversity values (cultural, economic, functional, scientific, and educational), Gray also ascribes an aesthetic value to geotourism and recreational activities [4]. Gordon takes a similar position noting that the valuation of assets, values and benefits of geoheritage within the service framework of a cultural ecosystem can provide for a more holistic approach to geotourism; he also acknowledges the links between people, geo-heritage, and landscape. In addition to the results of geoconservation and economic returns to communities, relationship benefits for participants include improved health and well-being through aesthetic and spiritual enrichment, opportunities for recreation, physical activity, inspiration, reflection, research, and validation of cultural identity [5, p. 14]. There are studies substantiating the development of this type of tourism as a sustainable trend [6; 7].

Starting from 2001, the year of the creation of UNESCO Global Geoparks¹, researchers mainly study geotourism as one of the forms of their promotion. For instance, S. Justice studies the Geopark of Chablis in France [8]; R. Becerra-Ramírez with co-authors describe the geotouristic resources of the Geopark of the Campo de Calatrava Volcanic Region in Spain [9]. Polish researchers not only describe geoparks already existing in their country but also substantiate the creation of new ones, for example, Geopark “Stone Forest in Roztocze” [10]. Romanian scientists propose to develop urban geotourism based on the natural (river) and historical and cultural (fortress) heritage of the city of Oradea [11]. A relevant approach to the study of the development of geotourism in PAs is presented in the assessment of natural resource potential based on the zoning of the territory of Western Kazakhstan for recreation and tourism [12].

F. R. Ardislamov formulates the very concept of a geopark using the example of the Toratau UNESCO Geopark. “A geopark is a managed territory containing protected objects of natural, historical, and cultural heritage, unique geological objects and landscapes and adapted for recreational, social and other functions” [13]. According to the definition, a geopark aims not only to study and protect but also to provide for recreational processes.

In Russian scholarly literature, the topic has not been thoroughly researched. Studies on natural heritage and geotourism are done mainly for the mountainous areas. For instance, N. P. Soboleva examines the geo-resources of tourism and substantiates their use to ensure the sustainable development of the Altai Republic [14]. A. G. Redkin and O. V. Otto propose the creation of a geopark as a new direction of tourism in the same mountain system [15]. A Russian geotourism theorist prof. D. Ruban mostly draws on the example of the North Caucasus [16; 17]. His work “Geoconservation organizations and management support for their effective activities in the context of the paradigm of the use of specially protected

¹ *Unesco Global Geoparks*, 2020, available at: <https://unesdoc.unesco.org/ark:/48223/pf0000247511> (accessed 02.10.2021).

natural areas” is of particular interest for our study. It identifies the priorities of geoconservation activities and formulates the necessary management decisions for their implementation [18].

On the territory of the Kaliningrad region of the Russian Federation, scientific research in this field mainly focuses on the geocological aspects of nature management and coastal protection issues. This is largely due to the established scientific school of geocologists and geographers of the I. Kant Baltic Federal University [19–21].

In Lithuania, the Tourism Law was enacted in 1998; it was last reviewed in 2015². Until recently, the concept of “geotourism” has not been legally defined. It has enjoyed different interpretations covering the processes of tourism development in natural parks, coastal zones, in landscapes with various geomorphological and geological formations. The definition of geotourism is found in the feasibility study for the removal of shipping barriers in the Curonian Lagoon [22], which states that the concept of geotourism encompasses visually and scientifically interesting forms of landscapes, observation of morphological, climatic, and hydrographic processes, as well as attractive cultural heritage sites influenced by the environment, including geological processes.

In Lithuania, the definitions and concepts of geotourism are closely related to eco- and environmental tourism; however, geotourism as a specific concept has not been properly developed either in applied tourism research or in tourism development strategies.

Recognizing that geography is an integrated science, and following the Geographical Society, researchers view geotourism as tourism that supports or enhances the distinctive geographical character of a place, including its environment, heritage, aesthetics, culture, and the well-being of its inhabitants³.

The objectives of geotourism, depending on the form of its organization, include improving the ecological culture, deepening and systematizing the knowledge of geology and geomorphology within the school curriculum, providing for schoolchildren’s research on local history, as well as for wellness and organized recreational activities [23, p. 2].

For the proposed geotour, the following key landscapes of the spit with their historical and geomorphological features were selected from the available scientific literature. The basic information on them is as follows.

Important milestones in geological and geomorphological history. After the Valdai glaciation, an undulating moraine plain crossed by a hilly ridge formed on this territory. On the site of the Baltic Sea, the following water bodies were located in their successive order: the cold Baltic Ice Lake, the salty Yoldia Sea, the warm Ancylus Lake, and the Litorina Sea (once the straits opened connecting the Lake to the world ocean). The Curonian Spit was formed by the transgression

² Lietuvos Respublikos Turizmo įstatymas, 2015 (In Lithuanian).

³ Geotourism, 2020, *National Geographic*, available at: <https://www.nationalgeographic.com/maps/topic/geotourism> (accessed 10.02.2021).

of the Litorina Sea six thousand years ago⁴. About five thousand years ago, after flooding, the plateau in the area of Rybachy acquired its modern shape and location. Its constituent islands changed their outlines and increased their size, sandbanks formed between them covering the moraines as they subsided. A sandy plain had formed on the islands with its wandering dunes driven by the wind. Their growth and movement together with the uneven load on the base of the spit resulted in a unique geological phenomenon: the lagoon sediments with ancient molluscs were squeezed out from under the dune sands. The dying off and accumulation of vegetation created the forest soil, in which archaeologists find traces of ancient people.

Methods and methodology

To study the best practices for the development of geotourism in protected natural areas, a bibliographic method was applied for tracing the evolution of the geotourism concept from its origin to its use in Russian scholarship. The goal-setting method was applied to identify the potential for the diversification of ecotourism activities in the PAs. To optimize the process of innovative recreational activities aimed at environmental education, a modelling method was used which made it possible to develop an algorithm of the steps (stages) involved in the ecotrail design. The new route was tested during the implementation of the Ecotour4Natur project⁵, which involved the development of the geology-geomorphological tour “Geological and geomorphological chronology of the Baltic”. To this end, several mini-expeditions (field research method) were organized in 2020–2021 to research 10 natural objects, 10 cultural and historical objects (on the 35–40 kilometres of the national park) on the Russian territory of the Curonian Spit and 20 objects on its Lithuanian part in the vicinity of Nida. The study also relies on archival and historical materials. The assessment of the territory and the laying of the trail (routing) was carried out using publicly available Google maps and GIS technologies.

Results

The main organizational form of environmental education and exploration of natural and cultural attractions of PAs is the ecotrail. An ecotrail is an established route for tourists to move along and explore unique natural objects and attractions. The infrastructure of the trail reduces the load on the ecosystem

⁴ Materials of a comprehensive environmental study of marine and coastal areas of the Curonian Spit National Park for granting these areas the legal status of a marine protected zone. *Implementation of the Baltic Sea Action Plan in Russia (BASE) project, 2020*, available at: <https://helcom.fi/media/publications/Extension-of-the-marine-protected-zone-of-the-Curonian-Spit-Final-Report-in-Russian.pdf> (accessed 10.04.2021).

⁵ Ecotourism as a tool for preserving natural and cultural heritage, 2020, *Ecotour4Natur*, available at: <http://special.kantiana.ru/ecotour-lt-ru> (accessed 10.03.2021).

while its information system (boards and audio guides) gives a better opportunity to explore the objects of display. There are different kinds of trails, including landscape, botanical, zoological, hydrological, as well as integrated ones.

The results of the international project “Ecotourism as a tool for the preservation of natural and cultural heritage” show that numerous excursions to the Curonian Spit National Park do not properly cover the issues related to its geomorphology, although they are extremely important for ensuring its environmental safety. In addition, independent tourists dominate the tourist flows on the territory of the park. According to the park’s public affairs office⁶, during the three summer months of 2020, 844 buses carrying 20 thousand tourists coming in organized groups visited the park. Meanwhile, more than 500 thousand people in total visit it annually, and most of them are independent tourists. Despite the systematic efforts of the park administration to design and establish new ecotrails, every year its staff detects hundreds of violations of the PA conservation regime.

The study on the geomorphology of the Curonian Spit involved the development of the algorithm for designing an ecotrail “Geological and Geomorphological Chronicle of the Baltic” providing comprehensive protection of this unique natural monument vulnerable to mechanical damage (Fig. 1).

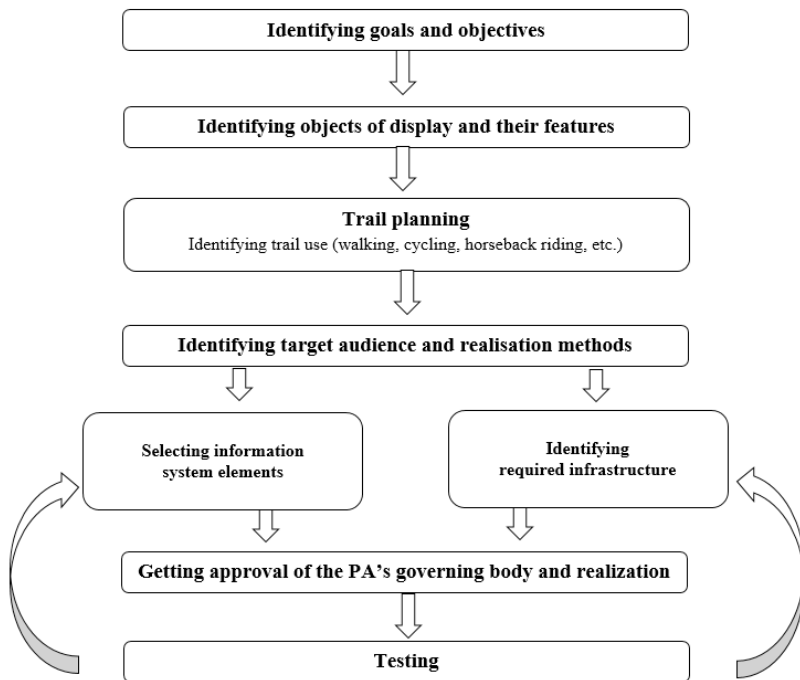


Fig. 1. Algorithm for creating a geotour trail in protected areas

Source: compiled by the authors.

⁶ An entrance fee of visit to the Curonian Spit National Park will increase to 300 rubles, 2020, *Interfax*, available at: <https://tourism.interfax.ru/ru/news/articles/75028/> (accessed 04.10.2021).

First, the goals and objectives of a specific ecotrail are determined. The reference points are the features of the ecosystem and attractions, as well as social demand. The goals and objectives of the trail were determined taking into account the main natural value of the Curonian Spit, a unique geomorphological formation created by the retreating glacier, winds, and currents. Bringing these features of the Spit to the focus will make it possible, firstly, to portray the Spit as a unique and vulnerable landscape in need of protection and careful handling and, secondly, it will allow the visitors to fully explore the scientific data on the geomorphology of the Spit, and in some cases to conduct simple research.

Types of tourism in the territory under consideration. Table 1 presents the common (or promising) types of tourism identified within the settlements and their adjacent territories, based on the available resources.

Table 1

Types of tourism within the tourist zones of the Curonian Spit

Areal	Nature tourism	Ecological tourism	Cultural tourism	Coastal tourism	Water tourism	Recreational fishing	Historical heritage	Geotourism
LITHUANIA								
Alksnyne	-	+	-	-	-	-	+	-
Juodkrante	+	+	+	+	+	+	+	+
Pervalka	-	-	-	+	+	+	-	+
Preila	-	-	-	+	+	+	-	+
Nida	+	+	+	+	+	+	+	+
RUSSIA								
Morskoe	+	-	-	+	+	+	-	+
Rybachy	+	+	+	+	+	+	+	+
Lesnoe	-	-	-	+	+	+	+	-
Visitor center, 14th km of the Spit	+	+	+	+	+	-	+	-

Source: Compiled by the authors, 2020.

As Table 1 shows, geotourism is one of the most promising types within the PAs. Its development is possible in six out of eight settlements.

To design the transboundary route “Geological and Geomorphological Chronicle of the Baltic”, the most interesting geological and geomorphological objects were selected.

Geotourism objects in the Lithuanian part of the Curonian Spit. The Lithuanian part of the Curonian Spit National Park (lith. Kuršių nerijos nacionalinis parkas) is a good example for research and observation of geotourism formations and ongoing processes. The most important sites are the Parnidis Dune in Nida (located near the border with the Kaliningrad region of the Russian Federation), the “Dead Dunes” territorial complex in the Nagliai Nature Reserve near Juodkrante, the “Hill of Witches” in Juodkrante, and sandy hills in Smiltyne (in the northern part of the Curonian Spit)⁷.

Dune migration is a long-term geomorphological process manifesting mainly along the Curonian Lagoon coast. The singularly shaped dune peaks, naturally formed slopes and sandy valleys, as well as endemic and ephemeral flora, attract the attention of ecotourists and other visitors seeking to explore the landscape and the most unique geomorphological formations in Northern Europe⁸ [24]. Since 2017, following the updated methodology for the UN regional classification, Lithuania has been attributed to the group of Northern European countries. It is worth mentioning that owing to the natural geomorphological processes caused by the sand movement, many settlements were repeatedly relocated. Nida’s current location is its fourth.

Another landscape of interest for geotourism is the bottom profile and the waters of the Curonian Lagoon. Its Lithuanian part is dominated by shoals and water landscapes of varying depths. This is not favourable for navigation, because the formation of shoals never stops owing to the geomorphological process of wind transport of sands to the Curonian Lagoon [25]. There are sapropel accumulations along the shores of the lagoon close to the “Dead Dunes” Nagliai Nature Reserve.

The Lithuanian part of the Curonian Spit is widest at the horn of Bulvikis where it reaches 3.8km in width; the narrowest point is in the village of Lesnoe, where the Spit is only 380m wide.

Geotourism objects in the Russian part of the Curonian Spit. Within the framework of the “Cross-heritage” international project, a geomorphological ecotrail was designed in the vicinity of Rybachy according to the suggested algorithm (Fig. 1). The approbation of the ecotrail resulted in selecting several objects.

An important object on the Russian part of the developed ecotrail is Lake Chaika — the largest lake in the Curonian Spit with an area of 0.22km². Once the lake housed a large colony of gulls of over 800 pairs. The lake stretches for 1,420 m from west to east. The average depth is 0.4 m, the maximum depth is 1.5 m. The flora of Lake Chaika is represented by 105 species of vascular plants. The species composition of the ichthyofauna is relatively poor. Crucian carp, tench, pike, loach, and stickleback prevail.

⁷ Sudarytoja, M. (ed.) 2013, Natural geography of Lithuania [Lietuvos gamtinė geografija], *Eidukevičienė*, KU, p. 331 (In Lithuanian).

⁸ Lietuvos saugomos teritorijos, [Protected areas of Lithuania], 2006, *Informacinis leidinys-žinytas*, Lututė, p. 325 (In Lithuanian).

The next object of the ecotrail is the palve (from Prussian), wasteland. Palve is an eolian-marine accumulative plain. It was probably formed from a regressive marine terrace with a series of coastal ramparts subsequently built on by fore dunes [26].

An important element of any natural ecosystem is the soil. The main parent materials on the Spit are eolian quartz sands of various granulometric composition. The thickness of sandy deposits varies significantly — from half a meter to dozens of meters. Another parent material is boulder calcareous loam forming brown earth⁹. A remarkable feature of the Spit is the presence of both well- and weakly developed soils. Well-developed soils are found at the beginning of the ecotrail. These are cultivated brown earth podzolic soils near Rybachy. They account for no more than 5% of the Spit. These soils formed on moraine calcareous loam historically covered by oak forests. Cultivated since the 13th century as arable lands, hayfields and pastures, they have developed a generous arable layer owing to human activities. A significant area of the Spit of about 15% consists of incompletely developed soils represented by semi-fixed sands. These soils are located on foredunes and dune ridges. Their vegetation cover is grasses of psammophytes, xerophytes, and willows, with moss and lichen spots. These are thin soils (ca 20 cm). Almost 20% of the area of the Curonian Spit National Park is not covered with soil.

The most unique and significant feature of the Curonian Spit landscape is a man-made foredune built in the 19th century.

A foredune is a natural and anthropogenic zone of modern eolian accumulation. On the Curonian Spit, there are two forms of foredunes. The first is a narrow strip of sandy hills with uniformly steep slopes facing land and sea. The second is flat sandy terraces leaning against the seaward slope of an older dune ridge. The foredune is 10–20 m wide, its height is 4–6 m. The foredune stands out not only geomorphologically, but also owing to the species composition of its vegetation. It is mostly covered by grasses and psammophytes, while woody and shrub plants are characteristic of the more ancient eolian formations. Owing to the current scarcity of sediments in some areas, the foredunes degrade, which manifests in deflation corridors. At the same time, large 50–100 m long tongues of the beach sands are drawn inland. They are called “deflation basins”, or “blowouts” [27]. Burnashov and Karmanov, having examined 333 basins, classified them into six groups. Sometimes the basins bend due to the dense shrub or herbaceous vegetation on the foredune, as the covered areas are less susceptible to blowing out than uncovered ones. As the basin develops, the wind following the path of least resistance bends around obstacles, forming curved shapes (hooks, crescents, etc.) [27]. A rare kind of elongated shallow deflation basin was discovered on the foredune and proposed for inclusion into the trail (Fig. 2).

⁹ Materials of a comprehensive environmental study of marine and coastal areas of the Curonian Spit National Park for granting these areas the legal status of a marine protected zone. Implementation of the Baltic Sea Action Plan in Russia (BASE) project, 2020, *HELCOM*, available at: <https://helcom.fi/media/publications/Extension-of-the-marine-protected-zone-of-the-Curonian-Spit-Final-Report-in-Russian.pdf> (accessed 10.04.2021).



Fig. 2. Shallow deflation basin (photo by A. Yu. Anokhin)

Trail planning. At the next stage, the trail is planned taking into account the location of the target objects, as well as environmental requirements. If it is possible to use different modes of transportation, the trails for each of them are specified.

The first phase of the project involved the planning of the Russian part of the trail. Figure 3 shows the proposal.

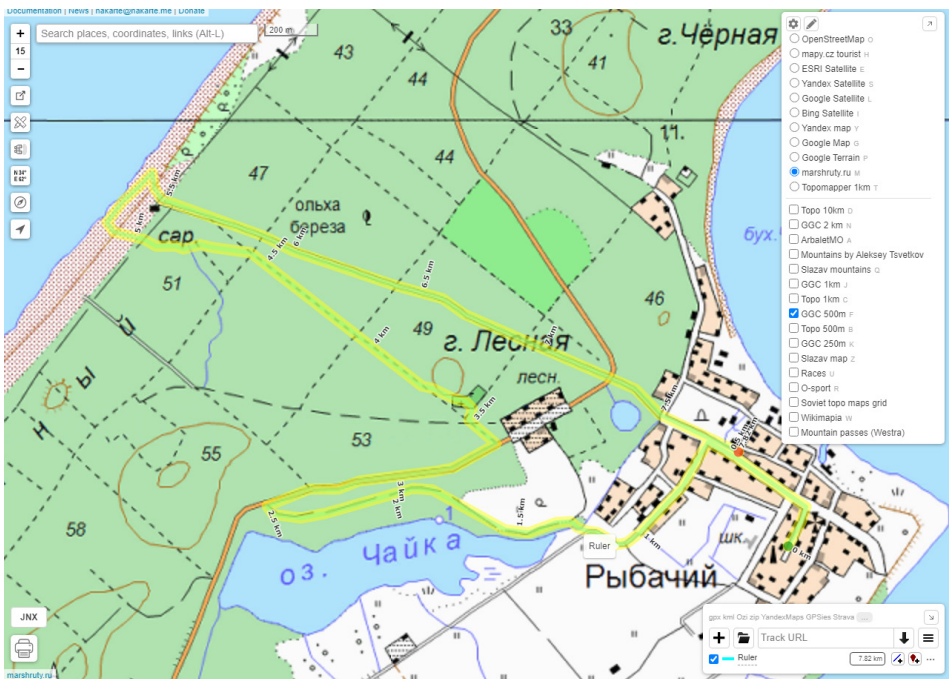


Fig. 3. Ecotrail route

Source: compiled by the authors.

The trail starts in Rybachy from the museum being created within the framework of the project. The trail follows the existing dirt road along the northern tip of Lake Chaika, then it goes along the highway, along forest roads through the palve to the foredune. Further, along the sea beach, the trail runs to a dirt road and back to the Rybachy village.

The scientific novelty of the trail and its qualitative difference from the existing routes in the Spit suggest a more accurate selection of the target group. There is a concept of “the sensitive period of development” in psychology and pedagogy: as a rule, for basic mental functions (perception, thinking, reflection, speech), it is between the 1st and 5th years of life. At the same age, simple behavioural manifestations are formed through the mechanism of interiorization of external social attitudes and rules. Complex behavioural manifestations including attitude towards nature are formed in early and middle school age. Therefore, the main target audience for forms of environmental education and upbringing in the PAs are primary and secondary school children, as well as older tourists, whose structure of value orientations has already formed and whose cognition is ready for the interaction with the ecosystem. En-route information is to be presented in the form of QR codes located at the existing stands, as well as in the form of an off-line audio guide downloaded from the National Park’s website and other resources.

Since some parts of the trail go along the vulnerable elements of the landscape (the foredune), the infrastructure of the trail (its wooden flooring) is being simultaneously developed. The next step should be the approval of the trail infrastructure by the relevant authorities of the PAs (Scientific and Technical Council of the Curonian Spit National Park), its implementation and subsequent testing on the target groups. The trail quality control tools can be a questionnaire, testing or focus group interview methods. After approbation, if necessary, the trail is modified.

The next stage of work on the project involves the study of the Lithuanian part of the trail and combining both parts into a single tourist trail.

Discussion

The main objective of the study was to assess the ratio of environmental and recreational components of geotourism as a promising area of tourist activity in the protected areas. Attaining this objective with the parameters of a specific protected area in view is an important scientific and practical result of the study presented in the form of a correlation of positive and negative effects of the development of geotourism in PAs (tab. 2).

Table 2

Effects of geotourism development in the protected area

Positive effects	Negative effects
Preservation of the territory's natural, historical and cultural heritage; formation of infrastructure for its exploration	Impact of the infrastructure of tourist trails and their service (transport) on the natural environment
Preservation and development of the cultural and tourist potential of the territory	Tourist-generated environmental pollution
Environmental education; disseminating the knowledge about PA through tourism	Exceeding the permissible recreational load on the ecosystem potentially resulting in its degradation or disappearance
Improving economic indicators of the territory (jobs, financial flows, local taxes)	Negative changes in the ecosystem of the PA owing to the introduction of invasive species of plants, fungi, and bacteria associated with tourism development
Increased level of environmental education among the local population through raising their awareness of environmental potential being a value	Increased risks of fires, vandalism, destruction of unique elements of the ecosystem and other negative anthropogenic impacts
Increased cultural and educational level of the local population owing to its integration into tourist and excursion services	Changing the way of life of local communities, if it is authentic or of cultural value

Source: compiled by the authors.

The issue of infrastructure development in protected areas remains controversial to this day. As Table 2 shows, service and infrastructure development creates some negative impacts on the ecosystem. On the other hand, the development of infrastructure and services encourages a high level of visitors' interaction with the protected area's ecosystem, i. e. recreation with limited anthropogenic impact and progressive forms of environmental education. The lack of infrastructure and services determines a barbaric and consumerist attitude towards natural and other resources. Therefore, the development of the infrastructure for educational and ecological tourism in the PAs is the most promising avenue of their use on condition of meeting the objective criteria for conservation and the use of a specific ecosystem. In our opinion, it is not a system of prohibitions and restrictions, but rather the transmission of environmental values through methodological and infrastructure-mediated forms of environmental education that will make it possible to fully preserve and develop the ecosystem of the protected area. The introduction of new tourist trails, including those based on geoheritage, is a significant component of the conservation and sustainable development of territories with a special nature conservation status.

Conclusions

Following M. V. Zotova and A. B. Sebentsov who raised this issue in 2017 in the collection of papers “In the focus of heritage” developing the ideas of Yu. A. Vedenin, we should take note of the conflict between nature conservation and recreational activities arising in the operation of protected areas: “tourism and heritage conservation are often considered complementary activities since it is the heritage that is one of the main resources for tourism development” [28, p. 479]. Meanwhile, modern PAs are not just territories with protected biogeocenoses. They should function as an integrated technological system, where the protection and study of natural heritage, on the one hand, and environmental education and recreation, on the other, intertwine, synergistically reinforcing each other. If there is no interaction between them, the processes become mutually exclusive.

We presume that the described conflict can be resolved through designing innovative, technological, and environmentally friendly means and forms of recreation. The exploration of the best practices for the development of geotourism in protected areas made it possible to identify major methods of disseminating environmental knowledge. The example of the Curonian Spit National Park was used to study and analyze the natural potential of the territory as a base for the development of geotourism. The “growth points” created on this platform ensured spatial decentralization and thematic differentiation of forms and methods of recreation. The principles and algorithm for designing qualitatively new techniques for recreation and environmental education were developed. We conducted a detailed study and analysis of the natural potential to create an algorithm for designing an ecotrail. It includes axiological, cognitive and educational aspects of environmental education integrated into an attractive recreational form. The resource potential and activities of other studied PAs allow us to consider the possibility of extrapolating the proposed technique to most national parks. This is what makes it possible to resolve the revealed contradiction at a qualitatively new level through innovative modernization of the recreational and educational activities of national parks.

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THE IMPACT OF COVID-19 ON IMMIGRATION: THE TRANSFORMATION OF NORWEGIAN MIGRATION POLICY ON ASYLUM SEEKERS

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Until just a year ago, hardly anyone believed that the increasingly unrestrained growth in mobility could be so abruptly interrupted by a radical immobilisation of large population groups. Neither mobility studies nor other research fields had foreseen this kind of scenario in their mobility and migration models. And why should have they? In the past decades, the belief in unconstrained mobility, as well as the practice of mobility and its scientific modelling, relied on the idea of unbounded growth at the sub-national, national and supra-national level. The article focuses on immigration to Norway, showing how institutional constraints were used to deal with the spread of COVID-19 and how they affected immigration to the country.

Due to complexity reasons, we focus exclusively on the situation of asylum seekers, giving additional attention to unaccompanied minors. These groups' migration status is assumed to make them especially susceptible to the newly established immigration measures. Drawing upon a combined focus of data on migration regulations and asylum application statistics, we examine what impact mobility-related COVID-19 measures implemented in Norway since January 2020 had on asylum procedures, asylum mobility and asylum applications in Norway.

Keywords:

COVID-19, immigration, asylum seekers, Norway, policies

Point of departure

Until recently, the belief that mobility and migration would grow indefinitely still dominated public, political and scientific debates. More than twenty years ago John Urry wrote, “It sometimes seems as if all the world is on move” [1, p. 3].

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Steadily growing numbers of commuters, business and vacation travellers have determined the forecasts, debates and scientific analyses of recent decades. And it was believed that mobility not only would, but also should continue to grow. More students should be able to study at foreign universities, workers should be able to move with fewer restrictions through international economic areas according to labour market demands and it should be possible for individuals to take vacations, parties or family reunions wherever they want, even if these places are increasingly scattered around the globe. Three main reasons are given for the growth in mobility:

“International mobility has become easier since the 1980s because of political reform, cheaper transport and a communication revolution that has opened up access to information, ideas and networks hitherto the prerogative of the few” [2, p. 7].

Parallel to increases over the last decades in these forms of mobility or migration, which are mostly seen as positive and functional, mobility and migration due to poverty, war, political persecution or climate change have also been rising [3; 4]¹. One recent peak in this latter form of migration was the so-called “migration crisis” of 2015/2016, in which more than one million migrants knocked on Europe’s doors within a short period of time to gain entry, protection and a perspective in life. However, COVID-19 and the fears and perceived threats associated with the virus and its aftereffects led to mobility restrictions for a wide majority of the population with a scope and intensity that were unprecedented in post-war Europe [5–7].

“Many people stopped going out to work (unless deemed essential) while others were sent back to rural villages or distant countries; children were kept home from school and struggled to learn online; many businesses closed their doors while others had to reorganize their work processes; airplanes stopped flying, airports emptied, and cruise ships were turned away from ports as borders closed; factories stopped churning out inessential products, and the global shipment of goods slowed to a trickle.” [6, p. 1].

COVID-19 posed a new unforeseen and unfamiliar challenge that caused formidable insecurities among people and governments “that confront decision-makers and undermine assumptions of security, including the security goals that were defined by the UN.” [8, p. 406].

In this context, which was classified as a state of emergency, governments quickly implemented mobility and migration regulations so that by mid-April restrictions were in place at the sub- and supranational levels which were more comprehensively and globally encompassing than any time before this in his-

¹ INFORM # 1 — EU and OECD member states responses to managing residence permits and migrant unemployment during the COVID-19 pandemic, 2020, *European Migration Network*, European Commission, available at: https://ec.europa.eu/home-affairs/sites/home-affairs/files/oo_eu_inform1_residence_permits_and_unemployment_en_updated_final.pdf (accessed 25.04.2020).

tory [9–12]. Furthermore, this took place largely without parliamentary or extra-parliamentary participation of the population — in the EU states specifically, but also globally².

Transit provisions and entry and exit regulations became modified, restricted or in many cases suspended³ short or long term [13, p. 1237; 11]. This for example led to a significant decrease in arrivals to Europe in the Mediterranean region. While in January 2020 8,223 and February 6,732 arrivals were counted the numbers dropped to 3,686 in March and to just 1,658 arrivals in April [11, xxiv]. One year before, in April 2019, 5,675 migrants arrived in Europe via the Mediterranean migration channels [11 p. xxiv]. In addition, within the framework of COVID-19 measures, service provision measures for migrants — depending on the respective national, regional or local conditions — were more or less drastically changed, adapted to the new situation or suspended [13, p. 1238]. Many countries, such as Norway, made drastic legislative changes, giving governments the mandate to make decisions, also without broader parliamentary consultation, which would temporarily suspend or change the existing legal framework for national borders for the duration of the COVID-19 crisis COVID-19⁴.

If the reports, documents, minutes and decisions that formed the basis of COVID-related political decisions become available at all in the future, then only after a longer period of time, as in the case of Norway, where such information might be held back for 60 years in accordance with provisions in the Administration, Personal Information and Security Act [14].

Although substantial measures were implemented against this perceived threat and challenges it is argued that “countries could have been better prepared and taken early measures to contain the spread of COVID-19” [15, p. 379]. Especially, when the threat of a pandemic rose on the horizon, supra-, national and sub-national policies reacted — under the lack of a coherent international policy — almost idiosyncratic to the perceived COVID-19 challenges. Many countries shifted from the policies managing the COVID-19 threat in a purely health perspective to a mobility and/or migration perspective. “While the COVID-19 pandemic is not a migration issues it is being viewed and managed as one” [16]. Additionally, some country-specific debates and policies tried to instrumentalise and utilise the COVID-19 pandemic for introducing or pushing anti-migration arguments and measures [16].

This paper discusses the changes in the Norwegian institutional framework for immigration in reaction to COVID-19 and the consequences these changes

² COVID-19 emergency measures in asylum and reception systems, 2020, *EASO*, Brussels, p. 5, available at: <https://www.easo.europa.eu/sites/default/files/covid19-emergency-measures-asylum-reception-systems.pdf> (accessed 25.04.2020).

³ For example were search and rescue operations in the central Mediterranean suspended “due to logistical difficulties caused by COVID-19” [13, p. 1238].

⁴ Ny koronalov, 2020, *Regjeringen.no*, available at: <https://www.regjeringen.no/no/aktuelt/ny-koronalov/id2694038/> (accessed 25.04.2020).

might have had for immigration to Norway. As a concrete example, we have chosen to focus on the policy field of asylum, since its framework conditions are especially sensitive to influences related to COVID-19. This article is structured as follows. In a first step, we briefly outline the perception and reaction to COVID-19 on the EU level, since this was a factor framing political decisions in Norway. Next, we will examine how policy in Norway reacted to the perceived challenges of COVID-19 and how this changed the conditions affecting immigration, cross-border and internal migration and mobility. In a third step, we will examine how immigration to Norway — with a special focus on asylum-related migration — has developed since COVID-19 spread to Europe. The article concludes with a further discussion of the contents of the paper.

First Reactions of the EU to the COVID-19 Threat

Before we discuss the concrete developments and measures in Norway, it is important to take a closer look at the developments at the European level since February 2020, which have influenced mobility and migration-specific restrictions, not just at the European, but also at the national, regional and local levels.

First, we will summarise how this situation began. The virus was first discovered in Europe in February 2020 in Italy, which immediately declared a state of emergency. From the end of February onwards, the EU introduced various public health, economic, agri-food and travel measures to contain the consequences of Covid-19 within the European states⁵. On 17 March the European Commission established an international advisory panel of “leading epidemiologists and virologists” from different EU Member States.

The perceived threat of COVID-19 had lasting consequences for asylum-related migration and the associated asylum and repatriation procedures⁶.

It quickly became clear that asylum procedures and processes, as well as the resettlement and repatriation of migrants in general and refugees had to be adapted to the new situation with regard to COVID-19⁷. For asylum registration and housing, this meant altering the interviewing procedures as well as the reception

⁵ Summary of the European Commission’s response to coronavirus (COVID-19) crisis to date, 2020, *European Commission*, available at: https://ec.europa.eu/ireland/news/summary-of-the-european-commission-s-response-to-corona-virus-covid-19-crisis-to-date_en (accessed 25.04.2020).

⁶ COVID-19: Guidance on the implementation of relevant EU provisions in the area of asylum and return procedures and on resettlement, 2020, *European Commission*, p. 1, available at: <https://ec.europa.eu/info/sites/info/files/guidance-implementation-eu-provisions-asylum-return-procedures-resettlement.pdf> (accessed 25.04.2020).

⁷ *Ibid.* P. 2

conditions (including detention and asylum procedures)⁸. This posed a significant strain on the EU regarding the variable contexts of implementation among the EU member states and associated EEA countries. “The Commission fully acknowledges the difficulties that in the current context Member States face when implementing relevant EU rules in this regard”⁹.

In principle the EU, although acknowledging the complexities of COVID-19 challenges, aimed to maintain the usual processes and procedures. “Therefore, even if there are delays, third-country nationals who apply for international protection must have their application registered by the authorities and be able to lodge them.”¹⁰ However, with the rise of COVID-19, measures were also implemented to allow for some flexibility in asylum procedures. “As regards reception conditions, Member States may make use of the possibility under Directive 2013/33/EU (hereafter ‘the Reception Conditions Directive’) to exceptionally set, in duly justified cases and for a reasonable period that should be as short as possible, different modalities for material reception conditions from those normally required”¹¹.

For example, it was proposed, in accordance with Article 31 (3) of the Asylum Procedures Directive, that the periods for the examination of asylum applications be made more flexible. In this context, several recommendations were made to sustain adequate asylum procedures and processes despite the new constraints. It was proposed to the Member States that they practice “social” or “physical distancing” by replacing their face-to-face interaction with media or digital communication via phone, mobile or web-based electronic services¹². As for asylum procedures, this meant that personal interviews were to be suspended for a certain period or conducted per video conference.

The Commission further recommended, “that Member States as far as possible make use of such specific temporary arrangements, provided that necessary arrangements concerning the facilities are set up and that interpretation, as well as access to legal assistance and representation, is ensured by the competent authorities”¹³.

From these statements alone, it can be seen that from the first appearance of the virus in Europe, especially in January and February, the EU’s way of dealing

⁸ COVID-19: Guidance on the implementation of relevant EU provisions in the area of asylum and return procedures and on resettlement, 2020, *European Commission*, p. 2, available at: <https://ec.europa.eu/info/sites/info/files/guidance-implementation-eu-provisions-asylum-return-procedures-resettlement.pdf> (accessed 25.04.2020).

⁹ *Ibid.* P. 1.

¹⁰ EASO Guidance on asylum procedure: operational standards and indicators, 2020, *EASO*, Brussels, p. 3, available at: <https://www.easo.europa.eu/sites/default/files/covid19-emergency-measures-asylum-reception-systems.pdf> (accessed 25.04.2020).

¹¹ *Ibid.* P. 3.

¹² *Ibid.* P. 4.

¹³ *Ibid.* P. 5.

with COVID-19 had a substantial influence on the temporal as well as substantive rules regarding mobility processes, especially with regard to asylum. Asylum process procedures in the partner countries began to be delayed — for example, owing to the change from face-to-face interaction to digital communication and digital processing of cases. Defined deadlines — e. g. “six months for concluding the examination of an application”¹⁴ or procedures under Regulation (EU) N^o 604/2013 — as well as associated procedures, had to be divided into parts and in some aspects decelerated, which meant longer processing and waiting times as well as a delayed onward journey for asylum seekers to other destination countries within the Euro-Zone — e. g. in the context of Dublin Transfers¹⁵.

The same lasting effects that COVID-19 had on asylum applicants’ mobility could be observed with regard to their “immobility”, i. e. the conditions where they were staying in reception or temporary camps or in their borderlands. Almost overnight common procedures such as health screening, health care, quarantine and isolation¹⁶ had to be adapted to the requirements associated with the perceived COVID-19 problem. “Many Member States have introduced stricter medical screening for applicants and mandatory COVID-19 testing for new arrivals”¹⁷. In addition to typical health care issues like emergency care and treatment of illnesses and mental disorders, now member states had to implement new measures dealing with COVID-19 health issues under higher risk situations, for instance, because they had to be conducted face-to-face¹⁸.

This was complicated by the different rates, at which national or regional governments implemented such measures. Not only did the countries follow different assessments and decisions regarding the timing of the implementation of relevant measures.¹⁹ The measures themselves were different in character and their impli-

¹⁴ “Article 31 (3) point (b) of the Asylum Procedures Directive allows Member States to extend the six-month period for concluding the examination of applications by a period not exceeding a further nine months when a large number of third country nationals or stateless persons simultaneously apply for international protection, making it very difficult to complete the examination within this time-limit.” (EASO Guidance on asylum procedure: operational standards and indicators, 2020, EASO, Brussels, p. 7, available at: https://easo.europa.eu/sites/default/files/Guidance_on_asylum_procedure_operational_standards_and_indicators_EN.pdf (accessed 25.04.2020)).

¹⁵ EASO Guidance on asylum procedure: operational standards and indicators, 2020, EASO, Brussels, p. 7, available at: https://easo.europa.eu/sites/default/files/Guidance_on_asylum_procedure_operational_standards_and_indicators_EN.pdf (accessed 25.04.2020).

¹⁶ *Ibid.* P. 10.

¹⁷ *Ibid.* P. 10.

¹⁸ *Ibid.* P. 10.

¹⁹ *Ibid.* P. 7.

cations for mobile and non-mobile people²⁰. Hence, actions or mobility practices that were appropriate in one national or specific regional context, may not have been appropriate in another one.

Norway's Responses to the COVID-19 Threat in the Context of Migration

Norway started to introduce emergency measures in mid-March 2020²¹. However, already on 31 January, in response to the development of COVID-19 in Asia, the Ministry of Health and Care Services commissioned the Norwegian Directorate of Health to “coordinate the health and care sectors’ efforts in collaboration with the National Institute of Public Health and other affected actors”²². On 31 January COVID-19 was also categorised as a highly infectious and generally dangerous disease and it became a requirement to report all cases. In the following weeks and months, the Norwegian government introduced further measures to control COVID-19 and its effects. These are considered the most far-reaching measures taken in Norway since the end of the Second World War [10, p. 776].

On 14 March, a travel ban was instated for health professionals who work directly with patients. Two days later a recommendation was issued that also the general public should not travel abroad. Also on 14 March, to implement measures limiting the further spread of the coronavirus, the arrival of resettlement refugees (quota refugees) was suspended²³. At that time, there were 5,120 refugees²⁴, who were to be moved to around 200 municipalities in Norway. Ref-

²⁰ COVID-19: Guidance on the implementation of relevant EU provisions in the area of asylum and return procedures and on resettlement, 2020, *European Commission*, available at: <https://ec.europa.eu/info/sites/info/files/guidance-implementation-eu-provisions-asylum-return-procedures-resettlement.pdf> (accessed 25.04.2020); COVID-19 emergency measures in asylum and reception systems, 2020, *EASO*, Brussels, p. 5, available at: <https://www.easo.europa.eu/sites/default/files/covid19-emergency-measures-asylum-reception-systems.pdf> (accessed 25.04.2020).

²¹ COVID-19 emergency measures in asylum and reception systems, 2020, *EASO*, Brussels, p. 7, available at: <https://www.easo.europa.eu/sites/default/files/covid19-emergency-measures-asylum-reception-systems.pdf> (accessed 25.04.2020); In the following, only those measures relevant for mobility or migration will be discussed. Other measures will not be discussed here, such as the introduction of hygiene regulations, the closure of public facilities such as kindergartens, schools, universities and recreational facilities (sports centres, clubs, etc.) and the closure of hairdressers, hotels, shopping malls or stores, etc. or the ban on overnight stays for people with second homes (mostly vacation homes) in other localities [10, p. 775].

²² Tidslinje: myndighetenes håndtering av koronasituasjonen, 2020, *Regjeringen.no*, available at: <https://www.regjeringen.no/no/tema/Koronasituasjonen/tidslinje-koronaviruset/id2692402/> (accessed 25.04.2020).

²³ *Ibid.*

²⁴ More than half of the people to be moved were resettlement refugees (*Regjeringen.no*, 2020).

ugees who had been granted a residence permit in Norway and a settlement in a municipality, but who were not yet in Norway, were refused entry until further notice²⁵. At the same time, temporary entry and exit controls were introduced at the Schengen internal border²⁶.

On 15 March, the “Forskrift om bortvisning mv. av utlendinger uten oppholdstillatelse i riket av hensyn til folkehelsen” (regulation no. 293) came into force²⁷. Paragraph 1 of this law, “The Expulsion of Foreigners without a Residence permit, etc.”, stipulates with reference to the Immigration Act that in order to ensure public health under COVID-19 conditions, foreigners without a residence permit (including all foreign nationals who were arriving after 16 March, 8 a. m.)²⁸ should immediately be expelled from Norway or leave of their own accord²⁹. From that time onwards, foreigners without a residence permit for Norway were refused entry at the borders, in accordance with the Infection Law. Still excluded from this regulation at that time were foreigners who were already in airport transit but had not left the country, those seeking asylum or those with caregiving or other important welfare-related duties in Norway³⁰. In addition, procedures for making case decisions and presenting grounds for those decisions were simplified. In urgent cases, it became possible to inform asylum applicants of the decisions concerning their application orally via phone or digitally as long as other procedural channels were not available³¹.

On 16 March, medium term internal border controls were introduced to prevent the spread of COVID-19. In the most extreme cases, there were mobility controls and restrictions or even bans within or between municipalities or localities.

On 8 April, a medium-term regulation concerning the accommodation of asylum seekers in reception centres was issued, which included requirements regarding social distancing, quarantines and isolation, as well as rules limiting personal contacts and travel mobility³². In addition, all practices within the asylum application and related procedures which were previously performed face-to-face — e. g. fact-finding — were to be conducted using phone or digi-

²⁵ Tidslinje: myndighetenes håndtering av koronasituasjonen, 2020, *Regjeringen.no*, available at: <https://www.regjeringen.no/no/tema/Koronasituasjonen/tidslinje-koronaviruset/id2692402/> (accessed 25.04.2020).

²⁶ *Ibid.*

²⁷ Forskrift om bortvisning mv. av utlendinger uten oppholdstillatelse i riket av hensyn til folkehelsen, 2020, *ustisog Beredskapsdepartement*, Oslo, available at: <https://lovdata.no/dokument/LTI/forskrift/2020-03-15-293> (accessed 25.04.2020).

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ *Ibid.* P. 5.

³² The first paragraph does not apply to those EEA citizens and their family members who are residing or working in Norway pursuant to section 110 of the Norwegian Immigration Act.

tal communication. As of April, for example, asylum applications were no longer be submitted during a personal interview, but rather by mail to the police. Changes were also made regarding the entry deadlines for residence permits. As many asylum seekers were unable to continue their journey to Norway due to COVID-19-related travel restrictions in Europe, this was recognised as a justified reason for an extension of the deadline to enter Norway³⁵. All this had “a consequent impact on the processing, renewal and validity of temporary authorisation of stay, residence permits and long and short stay visas of third-country nationals in (the EU and) Norway”³⁴.

Finally, the ‘Corona Act’ (conceived as a provisional measure) came into force at the end of March. Since this made it possible to adapt 62 other basic laws or areas of law in the context of COVID-19³⁵, it can also be regarded as a kind of enabling act. The resulting “restrictions gave priority to health over the economy and to standardised national regulations over local flexibility, and they were a combination of mandatory regulations and more soft advisories.” [10; p. 776].

In July another law came into force, the “Midlertidig lov om innreiserestriksjoner for utlendinger av hensyn til folkehelsen”³⁶, which was aimed at regulating immigration to Norway for the following months. This included the following regulations:

«A foreign national is only entitled to enter if

a) the foreign national resides in Norway with a residence permit or right of residence under the Immigration Act;

b) the foreign national seeks protection (asylum) in the realm or otherwise invokes a right to international protection due to risk of persecution etc.; see section 73 of the Immigration Act;

c) the presence of the foreign national in the realm is essential to maintain the proper operation of critical public functions or attend to fundamental needs of the population;

d) the foreign national has been granted a residence permit without deferred entry; see section 3;

³⁵ Beboere i asylmottak etter statsborgerskap og status i søknad, 2020, *UDI*, available at: <https://www.udi.no/en/statistics-and-analysis/statistics/beboere-i-asylmottak-etter-statsborgerskap-og-status-i-soknad-2020/> (accessed 25.04.2020).

³⁴ Inform N° 1 — EU and OECD member states responses to managing residence permits and migrant unemployment during the COVID-19 pandemic, 2020, *European Migration Network*, European Commission, p. 3, available at: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/oo_eu_inform1_residence_permits_and_unemployment_en_updated_final.pdf (accessed 25.04.2020).

³⁵ Midlertidig Lov om Forskriftshjemmel for å Avhjelpe Konsekvenser av Utbrudd av Covid-19 mv. (Koronaloven), 2020, *Justis- og Beredskapsdepartement*, available at: <https://lovdata.no/dokument/LTI/lov/2020-03-27-17> (accessed 25.04.2020).

³⁶ This is an Interim Act relating to entry restrictions for foreign nationals concerning public health (Interim Act Relating to Entry Restrictions for Foreign Nationals out of Concern for Public Health, 2020, *Ministry of Justice and Public Security*, Oslo, available at: <https://lovdata.no/dokument/NLE/lov/2020-06-19-83>) (accessed 25.04.2020).

e) the foreign national has been granted an entry visa under section 12 of the Immigration Act;

f) the foreign national has been granted a visa under section 10 of the Immigration Act by the Norwegian decision-making authority subsequent to 15 March 2020».

Furthermore, there is an optional provision that names specific reasons for which a foreign national may nonetheless enter the country, such as care obligations for a family member or other important welfare-related duties³⁷. Violations of this decree are to be punished with non-entry or expulsion.

Regarding the area of mobility and migration, it can be concluded that Norway's strategic approach with respect to immigration can be described as inclusive, even during the implementation of COVID-19 measures [10]. Although Norway intensified its border controls, established entry restrictions and even closed borders with Sweden and Germany (for example, ferry traffic between Norway and Germany), asylum seekers (and immigrants in general) continued to have access to safety, health-care services and integration-relevant information (for example, on the subject of application procedures, communication and contact possibilities, etc.) despite the implementation of pandemic measures.

As Christensen & Læg Reid [10] conclude: "The government measures were implemented through a joint strategy of advice, guidelines, and mandatory directives, the last followed up with potential penalties for non-compliance. Although the measures were pretty strong, the most draconian measures, such as a full shutdown of businesses, a curfew, full border closure and isolation of infected citizens in designated buildings, were not imposed" [10, p. 777].

The Case of Asylum Applications in the Context of COVID-19 and the Implementation of COVID-19-Related Measures

For finding out if the implemented measures somehow had an effect on immigration in Norway in the following we will examine the impact the COVID policy had on asylum mobility, asylum applications in general and asylum applications from unaccompanied minors. In particular, we look at the development of the number of asylum applications to Norway for the last three years (2018, 2019 and 2020).³⁸ These numbers are collected and made publicly available by the Norwegian Directorate of Immigration (UDI), the main institution responsible for processing asylum applications, including those specifically from foreigners (mainly Third Country Nationals) who wish to visit or live in Norway. The UDI is also responsible for refugee reception centres, refugee housing and deporta-

³⁷ Interim Act Relating to Entry Restrictions for Foreign Nationals out of Concern for Public Health, 2020, *Ministry of Justice and Public Security*, Oslo, available at: <https://lovdata.no/dokument/NLE/lov/2020-06-19-83> (accessed 25.04.2020).

³⁸ Irregular migrants were not included in this analysis.

tion³⁹. The available data include information on the number of asylum seekers in Norway living in housing centres (currently 35 centres, while there were 40 in 2019) and the number of asylum applications from adults and youths living in these asylum centres (fig. 1)⁴⁰.

The data and respective figures show a general trend, that is, a general decrease in numbers over the entire period between 2018 and 2020 as well as falling figures in the respective years. In January 2018, for example, 4,885 asylum-seekers were living in these centres, whereas by September 2020 this figure had decreased to approximately half of that number, namely 2,626 asylum seekers. Fig. 1 further indicates that the average number of asylum seekers in reception centres have almost halved from 2018 to 2020.

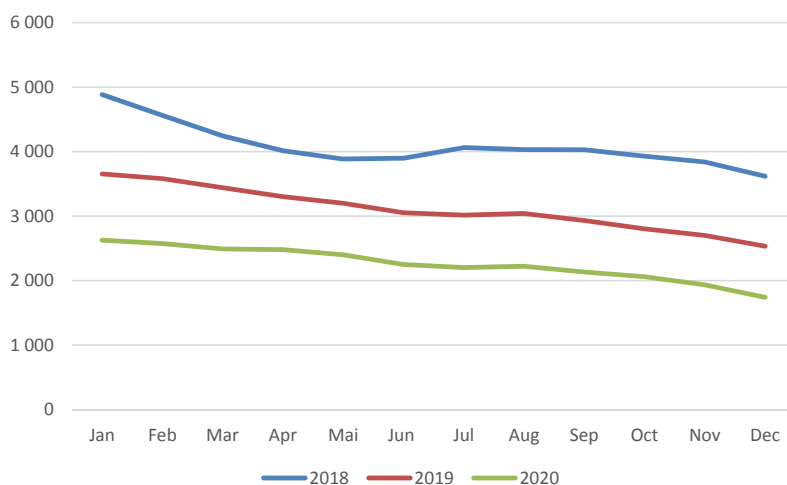


Fig. 1. Number of Asylum Seekers in Reception Centres 2018, 2019, 2020

Source: Data provided by UDI.

Next, we analyse the development of the number of asylum seekers registered at the national arrival centre Råde i Østfold (the only one of its kind in Norway), which was established in 2015. It can be assumed that if COVID-19 and the measures to deal with it had had an effect on immigration — here specifically, asylum-related migration — this should be reflected in a significantly lower number of asylum seekers, starting in February 2020 and over the following months.

³⁹ Beboere i asylmottak etter statsborgerskap og status i søknad (2020), 2020, *The Norwegian Directorate of Immigration*, available at: <https://www.udi.no/en/statistics-and-analysis/statistics/beboere-i-asylmottak-etter-statsborgerskap-og-status-i-soknad-2020/> (accessed 25.04.2020). For an explanation of the different types of asylum seeker reception and housing institutions, see Ulike Typer Asylmottak, 2020, *The Norwegian Directorate of Immigration*, available at: <https://www.udi.no/asylmottak/ulike-typer-asylmottak/> (accessed 25.04.2020).

⁴⁰ This population is very heterogeneous with reference to their country of origin and specific migration motivations. By October, asylum seekers from 37 countries plus so-called stateless persons were living in the arrival centers (Beboere i asylmottak etter statsborgerskap og status i søknad (2020), 2020, *The Norwegian Directorate of Immigration*, available at: <https://www.udi.no/en/statistics-and-analysis/statistics/beboere-i-asylmottak-etter-statsborgerskap-og-status-i-soknad-2020/> (accessed 25.04.2020)).

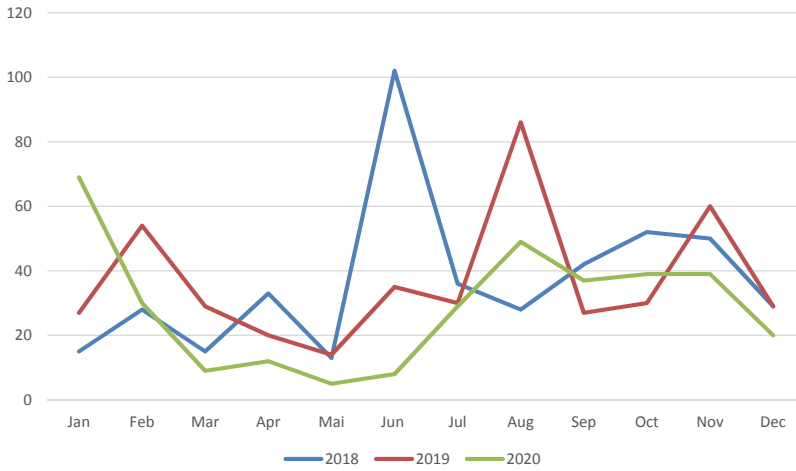


Fig. 2. Number of Asylum Seekers in Reception Centre Råde in Østfold 2018, 2019, 2020

Source: Data provided by UDI.

As Fig. 2 shows, the number of asylum seekers at the arrival centre Råde i Østfold follows a U-curve during this time period. The decrease between February and May is significant and does not recover until July and August, with the gradual withdrawal of the drastic COVID-19 measures introduced in the spring — here specifically related to travel and entry restrictions. Moreover, the curve for 2020 shows a more constant trend with less extreme swings, which could also testify to a possible effect of the COVID-19 measures.

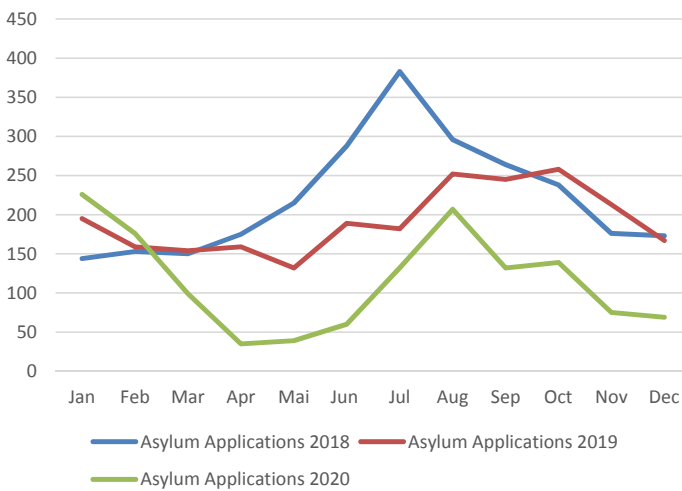


Fig. 3. Asylum Applications Lodged in Norway 2018, 2019, 2020 (N)

Source: Data provided by UDI.

Next, we take a look at the asylum applications registered in Norway over the years 2018—2020. A first glance shows that the number of asylum applications falls noticeably from February to April, remains at a very low level until June, then rises and falls again over September and October. As described above, it seems likely that this is related to the temporarily suspended arrival of resettlement refugees (quota refugees) on 14 March⁴¹. This concerns refugees who had already been granted a residence permit for Norway and housing in a specific Norwegian municipality, but who had not yet resided in Norway. These refugees were not able to travel to Norway from their places of residence at the time. A further complicating factor for all other migrants who intended to seek asylum in Norway was that due to general travel restrictions, travel to Norway was only possible under difficult and costly conditions (e. g. flights or transportation connections to Norway were extremely complicated and expensive and were often cancelled). Finally, many migrants also hesitated to continue their journey to Norway because of the incalculable risks of facing infection, a quarantine or border control issues [8, p. 405].

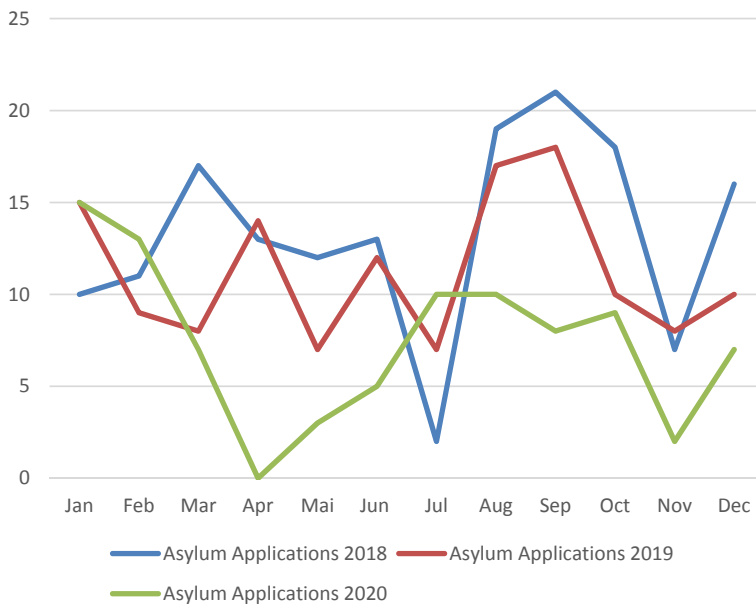


Fig. 4. Asylum Applications of Unaccompanied Minors Lodged in Norway 2018, 2019, 2020

Source: Data provided by UDI.

Finally, let us take a look at the number of unaccompanied minors who have sought asylum in Norway in recent years. First of all, it can be seen that in 2018 and 2019 the number of asylum seekers in this specific migrant group was higher

⁴¹ Tidslinje: myndighetenes håndtering av koronasituasjonen, 2020, *Regjeringen.no*, available at: <https://www.regjeringen.no/no/tema/Koronasituasjonen/tidslinje-koronaviruset/id2692402/> (accessed 25.04.2020).

than in 2020. The trend in 2018 and 2019 was that the numbers fell slightly until the middle of the year and rose sharply for a short time from August to September. The year 2020 shows a different trend. The number of young unaccompanied minors seeking asylum falls from 15 in January to 0 in April and then rises again through May, June and July. Then in August, September and October, the numbers remain close to the July/August level, settling down at a lower level compared to the previous years. November is marked by a significant drop in numbers followed by a slight rise in applications in December. Again, the data suggests that COVID-19 affected the immigration rates of unaccompanied minors to Norway.

Conclusions

The aim of this paper was to discuss how the spread of COVID-19 led to changes in the institutional constraints on immigration and mobility at the European level in general and in Norway in particular, and what consequences this had for immigration to Norway — especially in the case of asylum migration.

We have shown that measures were taken relatively early in Europe — however with significant variations between the member states regarding extent, content and timeline of measure implementation — and later in Norway to prevent the further spread of COVID-19. At the core of these measures were general restrictions on mobility/migration and special measures to reduce close contact in the context of migration. It is important to note that these measures were not primarily aimed at regulating migration or mobility — that is, they were not primarily migration policy measures — but were first and foremost motivated by health and security policy concerns [16].

The respective number curves discussed above must be interpreted in this context. While the developments in 2018 and 2019 (and those of the years before) are mainly a consequence of migration and security policy measures, the rise and fall in migration in 2020 were primarily a consequence of health and security policy measures (related to travel, onward travel or entry bans, reduced opportunities for face-to-face interaction, physical or social distancing, quarantine rules, etc.) to combat the COVID-19 threat. In the example we have chosen — asylum applications or claims in Norway in 2020 — the available data show a significant drop in the number of applications. This drop can be considered a proxy for a significantly reduced number of refugees arriving from February to June as a result of the existing COVID-19 measures. These measures, as they were implemented throughout Europe, established drastic barriers to mobility almost overnight, leading to a ‘freezing’ of mobility.

From a political science perspective [17; 18] one can assume a radical change in the procedural dimension of politics. The way in which the content-related dimension of political action (‘policy’) comes about in the process of political decision-making has become de-democratized under COVID-19, i. e. the tension between consensus and conflict has almost been eliminated — at least in a short

term perspective. “We are witnessing the disintegration of daily political routines and the glowing red, existential anxiety driving political activity in the face of an ‘external enemy’, which is creating chaos and fear for life and health” [19].

As a consequence of the drastic COVID-19-related changes in the established institutional migration or mobility arrangements and in the corresponding procedures, migrants were forced almost overnight to adapt their practices to the existing COVID-19 challenge. “The situation is particularly difficult for movers and non-movers as the Corona Virus, the lack of preparation for a pandemic, and the unknowns that surround COVID-19 become an existential threat to security” [8, p. 405]. The resulting uncertainties are complex for migrants on multiple levels. First, they concern the perception and factual situation of the institutional conditions for migration. The adjustments and changes implemented and in progress to meet the challenge of COVID-19 must first be understood, deciphered in the context of the new situation and put into practice according to the adjusted institutional procedures. For migrants, it results in a growing uncertainty regarding the amount of information they need to make appropriate decisions regarding their own migration situation. Uncertainties also arose as to what the existing alternatives for action could be in the context of asylum-related migration and corresponding asylum procedures. Finally, this led to uncertainties regarding the consequences of action in connection with the new boundary conditions. Which actions are most likely to help me reach my goal, which obstacles and risks must I reckon with, which institutional rules and procedures apply in the respective countries in the context of the COVID-19 threat, etc.? “At points of origin and destination, movers and non-movers are confronted by these new insecurities and the reality that they may undermine plans going forward” [8, p. 407]. Should one migrate in times of COVID-19 or should one wait? “This can be as difficult a decision as is staying put and practising self-quarantine” [8, p. 407].

“This extraordinary situation contains a mixture of frantic political measures and a social life of the lowest possible intensity” [19]. Migrants should no longer be mobile. Rather, they should follow the political interventions and implemented measures, immobilize themselves, so to speak, and distance themselves physically and socially from one another in immobility. In the context of COVID-19 mobility and migration became more and more perceived as a risk to public health at a supranational, national and sub-national level, an accomplice to the “external enemy”, a threat to life and health [19].

And yet, the intentions of political regulation in the context of COVID-19 must not be confused with their effect, since the object for regulation — in our case mobility and migration — has its own autonomy with respect to control and regulation activities [20; 21]. Accordingly, despite the restrictive COVID-19 migration policy described, a dynamic contingent migration practice can be assumed. Exactly this aspect of emergence, process and autonomy could be used as a starting point for further research to shed light on institutional contexts and

forms of practice of actors (corporate agents as well as migrants) in the context of a defined pandemic. This would help to better understand the role of contingency in the context of restrictive political conditions regarding mobility and migration.

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RUSSOPHONE IMMIGRATION TO FINLAND: NEW FORMS, TRENDS, AND CONSEQUENCES

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Until the 1960s, Finland was more often the country of origin than the country of destination. Once a depressed area, it soon turned into a welfare state, becoming with international migrants. Since Finland's labour market and society are beset with demographic problems, the country gladly accepts labour migrants, particularly those from neighbouring states. Most EU immigrants coming to Finland are Estonians. Immigration from without the EU — from Russia and other former Soviet countries — has, however, an even greater potential. Non-EU immigration falls into several categories — from seasonal labour migration to the relocation of top specialists and entrepreneurs. Currently, family reunions, marriages, and student and labour migration account for most migration from Russia to Finland. This article attempts to study immigration to Finland from neighbouring countries, primarily from Russia. The result of the study is an analysis of principal channels of international migration to Finland. These are family reunion, student migration, top specialist relocation, and the expansion of Russian business. Finland is in dire need of healthcare specialists, researchers, business development and IT specialists, and other professionals. For example, Russia-bordering Finnish regions lack upper and middle-level healthcare specialists. The focus of the study is on the professional and socio-demographic structure of labour migration to Finland and the country's migration policy on the adaptation and integration of Russian-speaking immigrants. The article gives a general picture of Finland's migration policy on labour migration from Russia and other countries. In collecting and processing materials, data from official websites of Finland's Migration Service and Employment Service, the database of Statistics Finland, the Organisation for Economic Cooperation and Development, and the Finnish National Agency for Education were used.

Keywords:

labour immigration, marriage immigration, student immigration, Finland, Russia, EU, integration of immigrants, migration crisis, immigration policy, Russian-speaking immigrants

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Introduction

Since the beginning of the 1990s, Russia's participation in world migration flows has been large-scale and diverse [1, p. 499–509]. Experts estimate the number of Russians who lived outside the CIS in the early 1990s at 20m.¹ Finland has become one of the most popular countries for Russians to emigrate to. Educational and particularly labour emigration constitutes the main channels of relocation from Russia to Finland. Other popular reasons for emigration are marriage and family reunions. Many Russians visit the Nordic country to do shopping, find a job, purchase real estate, and apply to universities.

Russophone immigration has received considerable attention from Finnish researchers. Anatoly Stikhin and Tatjana Rynkänen investigate the emigration of Russian-speaking teachers, their role and participation in school education in Finnish border towns and villages, and the difference between the educational systems of Finland and Russia [2]. Tatiana Tiaynen-Qadir writes about the priority of traditional family patterns in the life of Russian and Polish women in Finland and the connection between generations in their families [3]. Pirjo Pöllänen and Olga Davydova-Minguet focus on the everyday life of Russian immigrants in Finnish border regions, their life priorities, and the history of marriage immigration of Russian-speaking women [4]. Rolle Alho and Mika Helander explore the living and working conditions of seasonal migrants from neighbouring countries and the dependence of Finnish farms on seasonal workers [5]. Asteria Brylka, Tuuli Anna Mehonon, and Inga Jasinskaja-Lahti assess the extent of Russian-speaking immigration and explore the growing ethnocultural diversity of the country, along with the attempts to find a balance between the preservation of identity and the integration of immigrants [6]. Inga Jasinskaja-Lahti and Karmela Liebkind address the urgent issue of discrimination against and psychological adaptation of adolescents with a Russian migration background and their commitment to traditional values and national identity [7]. Elina Eskelä examines the globalisation of higher education and the growing number of qualified international personnel in Finland [8]. Driss Habi looks at what encourages Russian doctors to emigrate to Finland [9]. Helga Eggebø and Jan-Paul Brekke consider the relationship between family migration and integration [10].

This article explores the issues raised by Finnish and Russian researchers. The intensive migration exchange between the countries, primarily in border regions, is a product of a long shared border, historical and socio-cultural ties,

¹ See Lokosova, V. V., Rybakovsky, L. L. 2014, *Migration Processes in Russia*, Moscow, Econ-inform, p. 383 (in Russ.).

and family contacts. Demographic problems common to most European countries and Russia compels Finland to count on immigrants. This study reveals how Russophone immigration affects the socio-economic development of the country. To this end, it analyses the so-called ‘Russian-speaking economy’ and the emerging market for highly qualified Russophone specialists — two new phenomena in need of further investigation. This study aims to analyse the emigration to Finland of Russian citizens and Russian speakers from the former USSR and examine Finland’s labour migration policy. The work combines statistical, comparative, and formalised analysis. In particular, we collect and process information, study and compare facts, and identify causal relationships between them. The contribution presents our findings from field research conducted in Eastern Finland in Joensuu in December 2019.

Factors of immigration to Finland

Finland ranked first in the Good Country Index for several years — from 2017 to 2020.² The World Happiness Report names Finland the happiest country in the world with a score of 7.842.³ The country also moved up the Migrant Integration Policy Index (MIPEX). Today it is at the top of the ranking of 52 countries. MIPEX assesses national migrant integration policies in eight areas: labour market mobility, family reunions, education, political participation, long-term residence, access to nationality, anti-discrimination, and health.⁴

In Finland, like in most European countries, the birth rate is declining, the population is ageing, and qualified personnel is lacking. The natural replacement of the labour force is very unlikely, and attracting overseas workers seems the only way out [11, p. 472]. Finland welcomes young, educated, ambitious people, who can once become full citizens. Naturally, ‘Russia and the EU are competing for labour resources from CIS countries’ [12, p. 18].

Traditionally, Finns worked in agriculture. Finland did not immediately become a country of destination after industrialisation in the second half of the 20th century. Its unattractiveness was a consequence of its peripheral position [13, p. 133—141]. The economic problems of the 1960s and 1970s led to mas-

² *The Good Country index*, 2020, available at: <https://www.goodcountry.org/index/results> (accessed 19.10.2020).

³ The ranking of countries in the world in terms of happiness according to the United Nations, 2020, *Humanitarian portal*, available at: <https://gtmarket.ru/ratings/world-happiness-report/info> (accessed 09.10.2020).

⁴ *Migrant Integration Policy Index*, 2020, available at: <https://www.mipex.eu/finland> (accessed 10.19.2020).

sive labour emigration from Finland to Sweden, where the economy was growing and workers were in demand. Finland and its closest neighbour Sweden have a similar cultural and historical paradigm. This proximity played a part in the attractiveness of the country to Finnish migrants.

In the 21st century, Finland has become a post-industrial economy and a country of destination. Russia is Finland's principal partner in many areas. The countries are linked by a common history and share a long border. The states run a plethora of economic and cultural projects. Various immigration forms have developed between Russia and Finland, which is a major recruiter of migrant labour from the former USSR. The main channels for Russian citizens to emigrate to Finland are family reunions, including marriages, student migration, and various types of labour migration (that of highly qualified personnel, business relocation, seasonal migration, etc.). Family reunions are the most common reason to move to Finland. Table 1 shows the number of applications submitted by citizens of different countries from 2015 to 2018 and in the first six months of 2019. The data are from the Ministry of the Interior and the Finnish Migration Service. It is apparent from the table that more than a third (37%) of Russian immigrants have moved to Finland to reunite with their families.

Table 1

Applications for family residence permits in 2015-2019, people

Country	2015	2016	2017	2018	2019 (first six months)
Russia	1 383	1 592	1 172	1 208	595
India	677	579	700	936	536
Iraq	558	1 100	1,689	846	364
Somalia	483	576	661	558	274
China	410	431	433	459	230
Thailand	552	516	422	441	223
Ukraine	268	278	310	382	192
<i>Other countries</i>	5,138	5,071	6,232	6,206	3,109
<i>Total:</i>	9 469	10 578	11 619	11 036	5,523

Source: International Migration 2018–2019 — Report for Finland, p. 32, *Valto: Etusivu*, available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161871/SM_2019_32.pdf?sequence=1&isAllowed=y (accessed 28.09.2020).

Table 2 shows the number of positive decisions on applications for family residence permits.

Table 2

Number of positive decisions on Finnish family residence permits, people

Country	2015	2016	2017	2018	2019 (first six months)
Russia	1 281	1 472	1 012	1 052	527
Iraq	317	557	1,107	902	340
India	688	565	698	873	425
Somalia	411	410	448	469	192
Thailand	540	472	350	369	222
<i>Other countries</i>	4 802	4 695	5 474	5 434	2 922
<i>Total:</i>	8 039	8 171	9 089	9 009	4 628

Source: International Migration 2018–2019 — Report for Finland, p. 33, *Valto: Etusivu*, available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161871/SM_2019_32.pdf?sequence=1&isAllowed=y (accessed 28.09.2020).

Russians make up the main flow of migrants moving to Finland for family reasons. This trend is likely to continue in the years to come.

The structure of the immigrant flow to Finland

Non-EU countries account for most immigrants coming to Finland, whilst the bulk of immigrants coming to Finland from the EU are Estonians.⁵ There is a steady increase in the contribution of immigration to the Finnish population (Figure 1). Immigration from Russia and other states of the former USSR, such as Ukraine, can significantly change the demographic situation in the country.

Employment areas suffering the most from a shortage of specialists are transport and logistics, residential construction, welding, plumbing, metalworking, gardening and forestry, and cleaning. The demand for specialists in the service sector and IT has been steadily growing in recent years.

In 2019, 7,853 residence permits were issued to Russian citizens; 4,093, to Ukrainians; 300, to Belarusians.⁶ Citizens of post-Soviet republics such as Tajikistan (6), Kyrgyzstan (36), and Kazakhstan (196) also received Finnish residence permits, whilst only 8,533 EU citizens obtained ones during the period.

⁵ *Maahanmuuttovirasto Migratiosverket Finnish Immigration Service*, 2020, available at: <https://tilastot.migri.fi/index.html#applications/23332?l=en> (accessed 11.05.2020).

⁶ *Maahanmuuttovirasto Migratiosverket Finnish Immigration Service*, 2020, available at: <https://tilastot.migri.fi/index.html#decisions/21205?l=en&start=588&end=599> (accessed 11.07.2020).

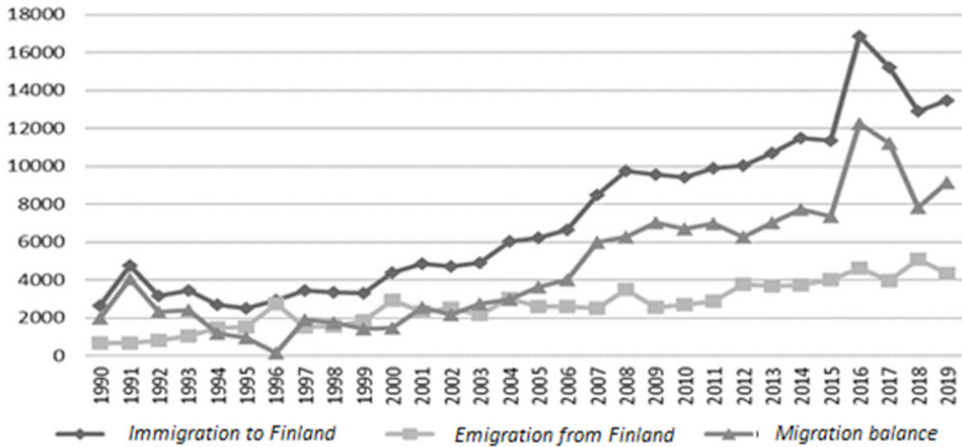


Fig. 1. Migration between Finland and non-EU countries, 1990—2019, people

Source: Statistics Finland Maahanmuuttovirasto Migratiosverket Finnish Immigration Service, 2020, available at: http://www.stat.fi/til/muutl/2018/muutl_2018_2019-06-17_kuv_001_en.html (accessed 11.05.2020).

The movement of migrant labour between border regions is growing. Many residents of the Leningrad region, St Petersburg, Karelia, and the Murmansk region wish to emigrate to Finland. ‘Border territories and cities are amongst the first to respond to the ongoing changes and challenges associated with massive movements of people and growing cultural diversity’ [14, p. 495]. Most of these changes affect national economic and political environments.

According to the International Labor Organisation, about 25,000 Estonian citizens, 8,400 Russians, 3,300 Swedes, and 1,700 Ukrainians worked in Finland in 2018.⁷ From November 2018 to October 2019 alone, 12,200 people arrived from Russia to Finland.⁸ Moreover, Russian citizens filed 8,800 applications for a residence permit in Finland, of which 7,800 were approved. Citizens of Ukraine also emigrate to Finland. Out of 4,500 applications for a residence permit submitted in 2019, 4,000 were successful.⁹

Many migrants come to Finland for less than 90 days. Workers arrive in Finland on a regular tourist visa, as no special permit is required for stays short-

⁷ International Labour Organisation, 2020, *II Ilostat*, available at: <https://ilostat.ilo.org/data/> (accessed 15.05.2020).

⁸ *Maahanmuuttovirasto Migratiosverket Finnish Immigration Service*, 2020, available at: <https://tilastot.migri.fi/index.html#applications?l=en§ion=nationalities> (accessed 20.10.2020).

⁹ *Maahanmuuttovirasto Migratiosverket Finnish Immigration Service*, 2020, available at: <https://tilastot.migri.fi/index.html#decisions/21205?l=en§ion=nationalities> (accessed 20.10.2020).

er than three months. Thus, it is problematic to keep statistics of visits that are not registered as migrant arrivals. There is strong demand for seasonal workers, mainly in gardening, forestry, and berry picking. Many seasonal workers come from Ukraine and Thailand. In 2019, most were citizens of Ukraine (817 people), Vietnam (91 people), Russia (65 people), and Belarus (35 people).¹⁰

Educational migration to Finland is encouraged by the country's free high-quality education. Finnish universities are amongst the best in the world, and Russophone immigrants value the opportunity to study at such institutions. They see education as the perfect way to embrace Finnish social norms [15, p. 404]. In 2017, a new law introduced tuition fees for English-language master's programmes. This change concerned only non-EU citizens. Students from outside the Union have to pay from 8,000 to 16,000 euros a year for a master's programme. Russian citizens and Russophones comprise the largest group of international students in Finland. Table 3 shows changes in the number of international students at Finnish educational institutions. The data are from the Finnish National Agency for Education (EDUFI).

Table 3

**Changes in the number of international students
at Finnish educational institutions (people)**

Top 10	2016	2017	2018
Russia	772	457	502
Vietnam	1005	419	478
China	491	304	426
Bangladesh	228	150	287
Nepal	301	282	233
Germany	149	195	219
India	204	168	213
Estonia	152	169	163
Pakistan	203	148	162
Nigeria	186	129	148
Proportion of international students, %	61	51	53

Source: Finnish National Agency For Education, 2020, available at: <https://www.oph.fi/sites/default/files/documents/tilastoja-korkeakoulujen-ulkomaalaisista-tutkin-to-opiskelijoista-ja-uusista-opiskelijoista-2018.pdf> (accessed 25.02.2020).

¹⁰ *Maahanmuuttovirasto Migratiosverket Finnish Immigration Service*, 2020, available at: <https://tilastot.migri.fi/index.html#decisions/21205/59/2/488002?l=en&start=588> (accessed 20.10.2020).

An interview given by a Russian Karelian confirms many of the above trends.

I grew up in a small village near Petrozavodsk. My mother was a teacher at a local school. After graduating from the university in Petrozavodsk, I received a grant for a master's degree at the University of Joensuu. After completing the programme, I was offered a research position at the university. Today I teach Karelian at the University of Eastern Finland and work as a researcher. My decent command of Finnish helped me adjust to life in the country. I have friends, many of whom are from Russia. Do I want to go back? Probably, under certain conditions, yes. I really like my job. I'd like to cooperate with Russian universities.

Amid COVID-19 restrictions, Finnish universities expected 2,300 exchange students to come to the country in winter term 2020. This number is about 36 per cent that of students who arrived a year ago.¹¹

Trends in emigration from Russia to Finland

In the first years after the collapse of the USSR, emigration from Russia was in essence repatriation of ethnic Finns (the Ingrian people). The Ingrian Finns settled on the territory of present-day St Petersburg in the 17th century and took part in building the city. Finland's repatriation law granted privileges to indigenous Finns.¹² The repatriation programme ended on 1 July 2016. In June 2016, at its very end, the Finnish Immigration Office received a record number of repatriates' applications, 244, whilst only 61 were submitted in May 2016. Most ethnic repatriates come from Russia to Finland from the northwestern regions of the former, namely the Republic of Karelia, St Petersburg, and the Leningrad region. This skew is explained by the border position of the areas, linguistic proximity, similar mindset, and family and friendship ties. There are about 10,000 native speakers of the Karelian language in Finland; another 20,000 understand but do not speak it.

For comparison, about 25,000 residents of Karelia are native speakers of Karelian.¹³ The language is on the curriculum of some schools and universities in Finland.

The annual growth in immigrants from Russia to Finland ranges from 1,500 to 2,700 people (Table 4).

¹¹ Finnish National Agency For Education, 2020, *Opetushallitus*, available at: <https://www.oph.fi/en/news/2020/higher-education-institutions-estimate-number-student-exchanges-autumn-semester-be-much> (accessed 01.11.2020).

¹² Those who lived in the area of St Petersburg before the foundation of Russia's northern capital, 2020, *Bumaga*, available at: <https://paperpaper.ru/photos/ingria-facts/> (accessed 01.11.2020).

¹³ Karelian in Finland Eldia Case-Specific Report, 2020, *University of Vienna Phaidra*, available at: <https://services.phaidra.univie.ac.at/api/object/o:471733/diss/Content/get> (accessed: 13.11.2020).

Table 4

Migration from Russia to Finland in 2009–2018, people

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
2445	2353	2852	3096	2901	2467	2155	2640	1811	1781

Source: Statistics Finland's free-of-charge statistical databases, 2020, Tilastotietokannat, available at: http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__vrm__muutl/statfin_muutl_pxt_11a9.px/ (accessed 15.10.2020).

Closer contacts between the two countries have encouraged Finnish eastern border municipalities, such as Joensuu, Lappeenranta, and Imatra, to introduce Russian language and literature lessons in schools. Particularly, ' [i] n 2013, the Finnish parliament supported establishing a foundation for the Russian language and culture. The organisation will award scholarships for studying the Russian language in Finland and allocate funds for advanced training of Russian teachers. The government has allocated 10m euros' [16].

Table 5 shows changes in the size of the Russian-speaking population in Finland. Over 79,000 residents of Finland consider Russian their native language, which is 21 per cent of foreign language speakers in the country. About 145 public organisations in Finland use Russian in their day-to-day operations or are targeted at the local Russian-speaking community. Yet another proof of the interest the Finnish state has in the Russian language and Russophone immigrants is that the 2013 State Prize of the Ministry of Culture and Education of Finland went to the Finnish Russian scholar Arto Mustajoki for a book about the Russian language [17].

Table 5

The number of foreign speakers in Finland, people

Language	2015	2016	2017	2018
Finnish	4,865,628	4,857,795	4,848,761	4,835,778
Swedish	290,161	289,540	289,052	288,400
Sami	1,957	1,969	1,992	1,995
Other languages, total	329,562	353,993	373, 325	391, 746
Russian	72,436	75, 444	77, 177	79, 225
Estonian	48,087	49, 241	49, 590	49, 691
Arab	16,713	21, 783	26, 467	29, 462
Somali	17,871	19, 059	20, 007	20, 944
English	17,787	18, 758	19, 626	20, 713
Kurdish	11,271	12, 226	13, 327	14, 054
Persian, Farsi	8,745	10,882	12, 090	13, 017

The end of table 5

Chinese	10,722	11, 334	11, 825	12, 407
Albanian	9,233	9,791	10, 391	10,990
Vietnamese	8,273	9,248	9,872	10,440
<i>Total:</i>	5,487,308	5,530,297	5,513,130	5,517.919

Source: Statistics Finland, 2020, available at: https://www.stat.fi/tup/suoluk/suoluk_vaesto_en.html#foreignersinfinland (accessed 20.10.2020).

The Russian M., interviewed on 24 November 2019 at the University of Eastern Finland (Joensuu), commented on many of the above aspects.

I moved because I wanted my children to have a good education and bright prospects. I have two kids. One of them is in a private school (it's free like public ones), the other is in kindergarten (the fee depends on the parents' income and ranges from 0 to 350 euros). Kindergarten is free for us. Our family is on the programme for immigrant integration. The first stage of integration is language courses, state-funded; my wife is taking one. She has a higher education and is registered with the employment service. How does an unemployed person receive an allowance (about 500 euros)? The courses are run by organisations that have won a tender. Five-hour classes are held five days a week during one and a half semesters. A small cash allowance (about 200 euros) is paid to stimulate course attendance.

Immigration through marriage comprises a considerable proportion of the migration flow from Russia to Finland. Finnish men and women often marry Russians and citizens of other post-Soviet countries (Table 6). There are many mixed marriages in border towns and settlements.¹⁴ Russians enter into both traditional and same-sex marriages in Finland. But the latter are so few (nine cases in ten years) that they will not be considered here because of their little effect on the overall picture of immigration through marriage.

Table 6

Changes in marriage migration from Russia to Finland in 2010–2018, people

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018
Women (brides with Russian citizenship)	372	414	385	365	315	302	303	321	186
Men (grooms with Russian citizenship)	77	78	85	66	107	104	84	91	95

Source: Statistics Finland's free-of-charge statistical databases, 2020, Tilastotietokanta, available at: http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__vrm__ssaaty/statfin_ssaaty_pxt_121h.px/table/tableViewLayout1/ (accessed 20.12.2020).

¹⁴ Statistics Finland's free-of-charge statistical databases, 2020, *Tilastotietokanta*, available at: http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__vrm__ssaaty/statfin_ssaaty_pxt_121h.px/table/tableViewLayout1/ (accessed 20.12.2020).

Impact of immigration on the social and economic development of Finland

Immigration to Finland follows several routes. These are labour immigration, seasonal work, executive employment, business relocation, and immigration through marriage. Seasonal work, which is usual in agriculture and tourism, is done at specific times of the year. It is needed in crop harvesting, forestry, livestock farming, and related services. Hiring migrant labour is essential for businesses to make up for the shortage of workers. 'Although the foreign pickers are in a marginal position in the Finnish society and the Finnish welfare state, paradoxically they are of central importance as providers of labour to the berry and vegetable picking industry, which these days depends on non-native seasonal workers from Russia, Ukraine and Estonia' [5, p. 148–157]. Seasonal work includes ski resort jobs, short-term employment by tour operators, booking services, guide services, and passenger water transport. People from neighbouring countries partly fill these positions. In the near future, Finland will calibrate its migration policy to attract qualified specialists. New tools will encompass a grant system, academic mobility programmes, and long-term contracts. A special target group is entrepreneurs. Starting a business in Finland is not particularly difficult, but one must prove that it is responsible and potentially profitable. Russian-speaking immigrants, who constitute Finland's largest non-native community, own many small businesses in the country. Finland has a conducive environment for small businesses, and the regulatory framework is the same for all entrepreneurs. The path to small business ownership is open to everyone in the country, including non-natives.

There are about 260,000 companies in Finland; 93 per cent of them are small firms employing one to nine people. Firms founded by foreigners or non-natives (approximately 6,500) account for 3 per cent of all Finnish enterprises.

According to Toivo Utso, a specialist at the Helsinki Enterprise Service (Yritys Helsinki), young professionals are often willing to start their own business. He stresses that to do so, young immigrants should begin with studying the market and the demand in it. The Finnish consumer will not necessarily seek after what sells well in Russia. Most non-natives launch startups in commerce and services. Many immigrants purchase an existing business — a factory, a transport company, or commercial real estate. The number of such deals is rising. Russian businesspeople flock to Finland to live and work. Some, however, stay in Russia, running their Finnish businesses from afar.¹⁵ Table 7 shows statistics of the Finnish Migration Service on the number of entrepreneurs with Russian citizenship.

¹⁵ Practical advice for aspiring entrepreneurs. Your business in Finland, 2020, *thisisFINLAND*, available at: <https://finland.fi/ru/biznes-i-innovatsii/svoj-biznes-v-finlyandii-prakticheskie/> (accessed 20.10.2020).

Table 7

Entrepreneurs with Russian citizenship in Finland, people

2017	2018	2019	2020 (six months)
34	84	91	53

Source: Statistics of the Finnish migration service, 2020, Tilastot — Maahanmuuttovirasto, available at: <https://tilastot.migri.fi/#applications/21205/59/2/10?l=en&start=600> (accessed 05.11.2020).

Russian businesspeople are active in tourism, logistics, legal services, and catering. Russian-owned businesses are particularly widespread in the eastern regions. In Savonlinna and Laapenranta, there were over 60 registered Russian enterprises in 2015. They accounted for 15 per cent of all enterprises in the two territories. In Kotka-Hamina, Russian-run companies comprised 12 per cent of the market. Most of them operate in commercial real estate and service sectors. Immigration is the only source of population increase in many Finnish regions. The proportion of foreign citizens varies across the country. It is the largest on the Aland Islands (11.1 per cent), in Uusimaa (including Helsinki, 8.5 per cent), and Pohjanmaa (5.3 per cent). Northern Finland and Lapland have the lowest proportion of foreigners (2.3 per cent). The 2014–2016 massive immigration to Finland was accompanied by a rise in unemployment amongst foreign citizens living in the country (Table 8).

Table 8

**Unemployment amongst the foreign population of Finland
in 2000–2018, %**

2000	2002	2004	2006	2008	2010	2012	2014	2016	2018
31.7	19.3	23.1	18.1	14.8	13.6	14.2	16.8	17.6	14.1

Source: Foreign-born unemployment, 2020, OECD, available at: <https://data.oecd.org/migration/foreign-born-unemployment.htm> (accessed 20.10.2020).

In 2019, about 73 per cent of Finns aged 15 to 64 had a job. This proportion is above the OECD average of 68 per cent. About 74 per cent of men and 72 per cent of women had a job in the country (Fig. 2). The immigrant employment rate is much lower. It was 45.2 per cent in 2000 and 62.2 per cent in 2018. i. e. 54.9 per cent of females and 70 per cent of males had a job.¹⁶

¹⁶ Foreign-born employment, 2020, OECD, available at: <https://data.oecd.org/migration/foreign-born-employment.htm> (accessed 19.11.2020).

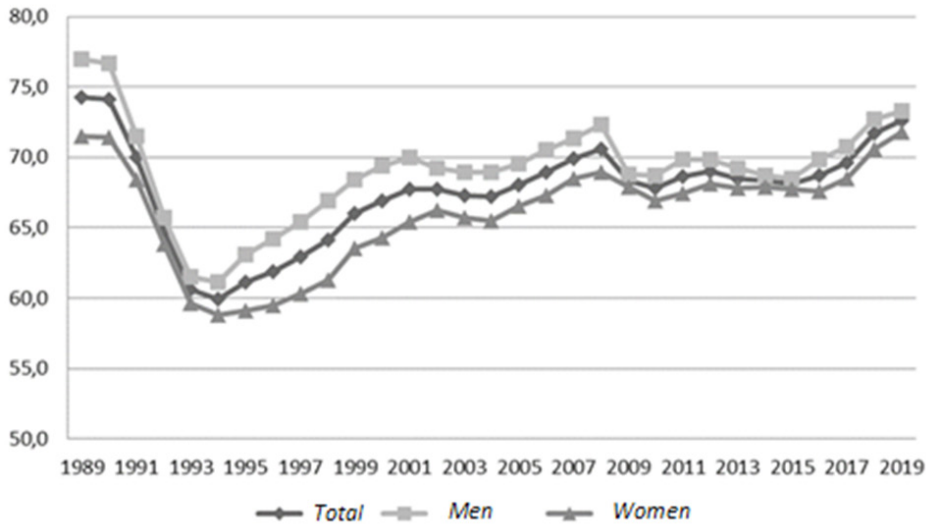


Fig. 2. The employment rate for the Finnish population aged 15 to 64, %

Source: Labour Market, 2020, Statistics Finland, available at: https://www.stat.fi/tup/suoluk/suoluk_tyoelama_en.html#employmentrate_personsaged15to64 (accessed 20.10.2020).

Jobs for immigrants are at the core of the Finnish integration policy. In October 2006, the Finnish Ministry of Employment adopted a migration policy agenda that encourages labour migration to the country. At the same time, Finnish laws never mention the term ‘labour migrants’. A principal organisation working with immigrants is the Employment Exchange (Työnvälitystoimisto), which deals with migrant recruitment. The Ministry of Employment provides information on jobs, work permits, and working conditions in Finland.

Integ of immigrants into Finnish society

Maria Pitukhina and Svetlana Sigova write that ‘immigrant integration efforts are targeted at education, professional and personal competencies in Finnish and Swedish, regular employment, healthcare, welfare, and struggle against discrimination. The latter concerns the use of unskilled labour, job search problems, and the sense of national belonging’ [18, p. 35–38]. Russian-speakers are often better educated than members of other immigrant groups [2, p. 233–242]. The Russophones who moved to Finland with their parents at preschool age are well-integrated into Finnish society. As a rule, they have few contacts with Russian-speaking peers, and their command of Russian is not perfect. Those who moved at school age think of themselves as bilinguals, yet their Russian is usually better than Finnish, and they may have difficulty communicating with their Finnish peers. Both groups tend to have a dual identity. At home and in their ethnic environment, they stay in touch with Russian culture and the Russian language.

Interactions with Finnish culture occur outside the family: at school, through the media, and in communication with peers. Those who moved to the country at an older age feel they are part of the Russian community. They communicate with their compatriots and celebrate Russian holidays together. Their circle of acquaintances is rather limited and is not likely to grow. Finnish is crucial for education, work, and social mobility, and a poor command of the language significantly reduces integration opportunities.

The Russian N., who moved to Finland (Joensuu) at pre-retirement age as part of the repatriation programme (her husband's grandmother was born in Finland), comes to similar conclusions in her interview taken in early December 2019.

Upon arrival in the country, I had to take integration courses. The language course was quite a challenge, probably because of my age. After that, I received my residence permit.

According to Finnish laws, I am not yet a pensioner (retirement in Finland is at 65, regardless of gender). I'm having huge problems with finding a job. Russians are reluctant to hire, and, of course, a local will have much greater chances of filling any job vacancy. My profession is not sought-after in a small town. I am a primary school teacher. It's difficult for me to find friends amongst the locals because my Finnish is not great. We have different mindsets and perceive many things in different ways. We have no mutual acquaintance or friends. We don't share memories. I mostly communicate with immigrants from Russia. We hold meetings in clubs where we celebrate holidays, birthdays, etc.

The best solution to the integration problems of the Russian-speaking population of Finland is bilingual education. The Finnish-Russian School, the Myllypuro Basic School in Helsinki, the Puolala School in Turku, the School of Eastern Finland in Imatra, Joensuu, and Lappeenranta offer programmes delivered in two languages [19, p. 46].

A Finnish language test is compulsory to acquire citizenship. However, it is not necessary for those who have obtained a secondary vocational education in the country. Many Russian-speaking immigrants choose the latter option, even when they have a degree from a Russian university.

Globalisation has blurred boundaries; this holds both for the movement of people and for national identities [20, p. 133]. 'Entirely new socio-cultural conditions have forced the "old" native Europeans to raise questions that previously seemed unnecessary or even inappropriate' [21, p. 179]. Russophons in Finland have many integration problems, one of which is finding one's identity. Davydova-Minguet concludes: 'migration from post-Soviet countries in the 2000s, growing cultural diversity of Finland, and shifts in public attitudes towards Russia (the subsiding fear of the "big neighbour") have made "Russianness" acceptable for immigrants as a cultural self-identification' [22, p. 26–39]. Olga Gurova stresses in her empirical research that Russian-speaking immigrants living in Finland build their ethnic identity by dressing in a particular way and using the so-called 'style repertoires' [23, p. 17–41].

The key to integration is the knowledge of Finnish. A poor command of the language complicates integration, along with discrimination (often latent) in the labour market and the uneasy attitude of the locals to Russians preserving their identity. In 1999, Finland adopted the Act on the Integration of Immigrants and Reception of Asylum Seekers (*See: Act on the Integration of Immigrants and Reception of Asylum Seekers*).¹⁷ In 2005, the growing number of immigrants necessitated significant amendments.

In 2011, the Act on Integration (KotoL) entered into force. Its primary aim is intersectoral cooperation for integration. The Ministry of Economic Affairs and Employment is responsible for immigrant integration and employment. The Minister of Integration is the Minister of Employment, Tula Haatainen.

Priorities of the country's integration policy:

- a. *support for immigrant families;*
- b. *jobs and housing for immigrants;*
- c. *civil society participation in immigrant integration;*
- d. *cooperation between the state and municipalities.*

In 2019, the Ministry of the Interior of Finland even started to accept applications from organisations and individuals to take part in the Immigrant Integration Program of the Asylum, Migration and Integration Fund (AMIF). Overall, the Ministry planned to receive¹⁸ about 4m euros, of which about 1m (966,418 euros) was to be spent on an immigrant integration programme.¹⁹

The AMIF was established for 2014–2020, totalling 3.137bn euros. Its priority initiatives are:

- fight against irregular migration;
- strengthening solidarity at all levels with EU countries affected by migrant crises;
- supporting regular migration to EU states in accordance with market needs and promoting the integration of non-EU citizens.

Integration policy facilitates the involvement of immigrants in all areas of society. Equal opportunities for all and a welcoming atmosphere that motivate immigrants to become full-fledged members of Finnish society are crucial for immigrant integration.

Young immigrants arriving in Finland need support at the early stages of integration. Not having enough resources, the authorities look for new creative

¹⁷ Act on the Integration of Immigrants and Reception of Asylum Seekers (493/1999; amendments up to 324/2009 included), 2009, *Legislationline*, available at: https://www.legislationline.org/download/id/6235/file/Finland_act_on_integration_of_immigrants_1999%20as%20of%202009%20ENG.pdf (accessed 15.10.2020).

¹⁸ Potential beneficiaries of programmes supported by the fund are national authorities, local government bodies, non-governmental and humanitarian organisations, private and public law firms, and educational and research organisations.

¹⁹ *Kotouttaminen.fi*, 2020, available at: https://kotouttaminen.fi/artikkeli/-/asset_publisher/amif-haku-kaynnistyy-marraskuussa-rahoituksesta-noin-miljoona-euroa-kotoutumistoimiin (accessed 30.10.2020).

solutions to enhance integration. One of them was the Guider mobile game.²⁰The game focuses on housing, work, healthcare, money, education, society, and culture. Immigrants can find answers to their questions while playing. The app provides general and specific information by teaching the rules and introducing the player to Finnish laws and political organisation. It has Finnish, Russian, Arabic, English, Somali, and Kurdish versions. The game is an effective language learning aid.

Finland's integration policy has become more active and efficient. Many immigrants who moved to the country some time ago believe that if such conditions for integration had existed earlier, their adaptation would have been faster and they would have avoided many problems when integrating into a new society.

Conclusion

With the growth of immigration in Finland, the country was forced to 'make some changes to its migration policy' [24, p. 136]. In securitising their migration policy, the Finns embraced the principle of selective migration. They welcome skilled labour, including that from outside the EU. The securitisation of migration policy is a necessary condition for 'maintaining an optimal level of security in the recipient country' [25, p. 38–42]. Amongst other things, this means safeguarding national security interests when recruiting labour migrants.

Seventy-five thousand Russian speakers live in Finland, and their number is increasing every year. The Russophone population of Finland is quite diverse: there are asylum seekers, returnees, labour migrants, students, and family members seeking reunion. Yet the chief motive for immigration, along with family reasons, is economic. Dezhina et al. confirm this conclusion: '... for the countries with catching-up development patterns, for instance, Russia, economic factors, including salary, are a major motive for emigration' [26, p. 119].

The Russian-speaking population of Finland usually has a good education. Their employment rate is close to that of the locals. Nevertheless, they earn less than the Finns, despite a comparable quality of life [27]. Still, 'Russophones living in Finland often fall victims to prejudices and everyday discrimination...' [28].

Finland is interested in an influx of labour migrants, especially those from bordering countries and regions: their decent education, acquaintance with the traditions of Finnish society and, most importantly, their desire to adapt reduces integration costs. The country's migration policy aims to create favourable conditions for immigrant integration. It engages the mechanisms of civil society, whilst the state is set to take important decisions.

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²⁰ *Guider Game*, 2020, available at: <https://gamu.fi/guider-game> (accessed 20.05.2020).

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MEDIA IMAGES OF THE KALININGRAD REGION IN THE STRUCTURE OF MIGRATION ATTITUDES OF MILLENNIALS AND THE REFORM GENERATION

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This article explores the role of a regional media image on migration attitudes. Attention is drawn to the Kaliningrad region, a Russian exclave whose population growth is solely due to migration. The study aims to determine how the media images of Kaliningrad affect the decision to move. The research draws on Radaev's concept of generations. It uses 2014–2018 regional and national publications about the Kaliningrad region (N=1913) and semi-structured interviews with informants (N=44). The research methods are publication analysis and in-depth interviews processed using the Atals.ti software. The five images identified are a region of international cooperation, a military outpost, an economically attractive area, a territory of developing infrastructure, and a tourist destination. The most substantial intergenerational differences concern the media images of a military outpost and an economically attractive area. Members of the reform generation are more likely than millennials to see a military threat and consider the security aspect when moving. Millennials showed greater awareness of what constitutes the image of an economically attractive region. It is concluded that differences between millennials and the reform generation in evaluating the significance of the region's media images depend crucially on the migration motives. For millennials, the priority is employment and career growth, whilst for the reform generation, it is finding a comfortable place to live in old age.

Keywords:

media image, Kaliningrad region, millennials, reform generation, migration attitudes

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Introduction

Globalisation and mediatisation are ushering in an age of open societies when anyone can compare their aspirations in life with how people live in other cities and states. The age of curtainless windows encourages to consider mobility channels, whilst education and career tracks are becoming linked to a change of residence. In line with the mobility theory, social mobility is turning into social capital, the accumulation of which gives an advantage and power over others [1, p. 95].

Considering mobility as social capital, the Kaliningrad region, which was populated and continues to grow through migration, presents an interesting case study [2, p. 73]. Its exclave position creates a social environment that is a unique combination of opportunities and limitations [3, p. 61]. Emphasising duality in the perception of the geography of the border city, Olga Vendina writes that one can never understand whether it is the 'façade of the country or its backyard' [4, p. 53]. This duality creates an ambiguous image among newcomers and questions the potential gain in social capital. On the one hand, there are prospects of international cooperation. On the other, there is a knot of problems and challenges [5].

Although the Kaliningrad region is among the primary destinations for domestic migration in Russia [6], it does not have a governmental programme for promoting its image. Recent studies prove that the media representation of a tourist destination is the principal source of information about the region [7] and a decisive factor behind the decision to travel [8] or relocate [9].

This study explores the connection between the decision to relocate to the Kaliningrad region and the image of the exclave created in the Russian media. Acknowledging the generation aspect makes it possible to track differences in awareness of the regional situation and understand how media representations affect the perception of opportunities and prospects in two age groups. In other words, this work aims to measure the presence and significance of media representations of the Kaliningrad regions in the structure of intentions to emigrate among millennials and the reform generation.

Media representations and migration attitudes

Three traditional areas can be distinguished within migration intention studies, depending on the object. These are spatial, socio-economic, and social

status investigations. Spatial studies focus on the ‘relationships between the territory of origin, the travel distance, and the temporal parameters of relocation’ [10, p. 95]. The groundwork for spatial mobility studies was laid down by Ernst Georg Ravenstein [11] and Dorothy Swaine Thomas [12]. In Russia, this area of research is represented by studies of inter- and intraregional migration [13]. Domestic migration in Russia is as active as in European countries. The decision to relocate correlates with both certain stages in human life and the attractiveness of the destination [14].

Socio-economic mobility investigations are associated with Everett Lee’s econometric model and Andrei Rogers and Luis J. Castro’s works [16]. They have led to the identification of pull and push migration factors and the mechanisms behind spatial relocation. These factors are operative laws, transport system characteristics, awareness of the destination, etc. [15]. All these factors are extensively explored in Russia [17–20].

Studies of the social status aspect of spatial mobility see migration as an opportunity to improve social standing. For example, Anthony J. Fielding [21] examines how migration affects the social status of migrants, and Oded Stark discusses the connection between the family and professional situations of migrants [22]. The findings of social mobility studies based on migration biographies are also of interest: ‘unlike those of respondents without a relocation experience, the biographies of migrants are closely connected to vertical mobility on both intra- and inter-generational levels’ [1, p. 102].

Another area of migration attitude studies [8–9; 23–24] has not yet received empirical support in Russia. These investigations focus on the place image and the territorial media brand as factors behind tourism and migration strategies. The approach proposed in these studies implies that migration attitudes are affected by the media images of an area [25–28]. John Nadeau & Anja H Olafsen [9] demonstrate a connection between the place image and migration attitudes. They conclude that a comprehensive evaluation of the image of a country is a more significant migration predictor than attractive employment prospects [9, p. 305].

Yet international theoretical and applied findings might not be transferrable to Russian place image studies. The problem lies in the lack of consensus in Russia and abroad about the scope of the term. In the English-language literature, the concept *country/place image* has undergone dramatic change over the past 40 years — from the perceived quality of goods manufactured in a country to the sum of ideas and beliefs a person has of a place [29, p. 86].

The Russian-language literature explores not only images but also representations of regions [30–32]. Having analysed principal approaches to the conceptualisation of these two notions, we concluded that the image of a territory is a ‘tool for communication [between the agent who uses it and the target audience] to achieve a goal’ [30, p. 423]. The representation of a place is an ‘idea of reality impressed on the audience by the media industry’ [31, p. 92] or the ‘media representation of a place’, which should be investigated based on analysis of representation of a region promoted in the local, federal, and international media [32, p. 121]. In a broad sense, a media representation is the ‘representation of reality in the texts constituting the media space. In a narrow sense, they are ‘fragments of reality described in texts written by professional journalists’ [31, p. 91].

In this work, we consider the representation of the Kaliningrad region in a narrow sense. We define it as the sum of thematically linked events displaying selected characteristics of the region in newspapers, journals, on the radio, television, Internet, and by information agencies. The media discourse generated by other information agents (YouTube bloggers, posts on social media, etc.) will be considered in further research.

The question raised by this study is as follows: how do migrants evaluate the effect of the Kaliningrad rhetoric created and disseminated by the Russian media on their intention to relocate to the region.

The theoretical basis of the research

Theoretically, the study draws on Vadim Radaev’s generation concept [33]. This concept builds chiefly on the ideas of Karl Mannheim [34], who was the first to explore the sociological dimension of the problem: ‘in actual fact, yet another link is needed to constitute a generation: participation in the common fate of the given historical and social community. a generation is real if people comprising it are connected by ties manifested in social and intellectual symptoms’ [34, p. 35]. Radaev deserves credit for viewing the historical context of generational socialisation through the prism of landmark events and processes in Russian history. In this study, the reform generation is defined as people born in 1968–1981. They socialised at the time of perestroika and the ensuing liberal reforms of 1985–1999. Millennials, born in 1982–2000, matured in the early 2000s, a period of relative stability and prosperity in Russia.

The study focuses on these two generations for several reasons. Firstly, these groups stand out for social mobility and migration activity [2, p. 76]. Therefore, migration brings to the region professional intellectual and labour resources. Secondly, the interaction between these generations ensures the reproduction of administrative and business elites in the region, the accumulation of social and cultural capital, and a shift in the paradigm of regional development.

Methods and empirical materials

At the first stage of the study, we analysed Kaliningrad-focused publications from Russian media. We used data from federal and regional Russian media, obtained with the help of the Medialogiya system. The sample was drawn from publications containing the word combination ‘Kaliningrad region’, which appeared in 2014–2018 in newspapers, journals, information agency materials, on the Internet, radio, and television. The period of the study coincided with geopolitical changes. We assumed that the incorporation of Crimea and the ensuing sanctions and counter-sanctions had affected the Russian rhetoric about the Kaliningrad region.

For each year, 1,000 news pieces from 100 different media outlets were obtained, whilst the sample (N=1913) included only those that met the following two criteria:

- a) the region was mentioned in the headline or the first paragraph;
- b) the piece did not cover recent local incidents.

Each piece of news (for instance, ‘Russian nuclear weapons approaching NATO’) was assigned a label (‘NATO’ in this case), after which similar pieces were subsumed under a single category (‘military outpost’). Only those media representations were further analysed that appeared in the media each study year (Table 1). Five main media representations of the Kaliningrad region are ‘a region of international cooperation’, ‘a military outpost’, ‘a region of economic prosperity’, ‘a region of developing infrastructure’, and ‘a tourist destination’.

Table 1

Representations of the Kaliningrad region in the Russian media

Representation	Percentage of all media representation, %					Average for 2014–2018, %
	2014	2015	2016	2017	2018	
A region of developing infrastructure	17.9	6.7	10.3	13.5	13.9	12.5
A region of international cooperation	14.2	9.2	13.7	8.1	5.0	10
A region of economic prosperity	7.2	18.3	15.6	18.3	22.4	16.4
Russia's military outpost	11.6	16.8	21.0	15.9	12.5	15.6
A tourist destination	7.5	10.7	10.3	9.2	9.1	9.4

Source: calculated by the authors based on an analysis of news reports

To verify the correlation between the Kaliningrad-focused media discourse and respondents' intentions to migrate, we asked them about their source of information about the region. Almost all answers included the two categories — locals (acquaintances, relatives, and friends who had recently moved to Kaliningrad) and the Internet (forums, bloggers, online media). Some respondents said that they had taken account of the opinions of tourists visiting Kaliningrad. A typical answer to the question 'When planning relocation, what information did you rely on to understand what was going on in the city and the region?' was as follows.

First, I talked to my acquaintances, my then future husband, his relative and friends. I surfed the Internet, searched for the best places to live, for some sights, nature, things like that.

Tatyana, 47 years

Respondent sample

At stage two of the study, we conducted a series of interviews with millennials and members of the reform generation who moved to Kaliningrad after 2014. Forty-four respondents took part in the survey. Several methods were employed to recruit participants in the survey. Firstly, we used contact information given by respondents of an earlier mass survey about the socio-economic, cultural, and political potential of the Kaliningrad region (2019). Secondly, we invited acquaintances, colleagues, and students to participate in the interview and posted relevant information to the social media accounts of the sociological laboratory at the Immanuel Kant Baltic Federal University. Thirdly, there was a snowball effect: new respondents were recruited by those interviewed earlier.

We interviewed 15 members of the reform generation (six men and nine women) and 29 millennials (10 men and 19 women). Most of them had arrived from other Russian regions (29 people). The most common cities of origin were Arkhangelsk (four people), Omsk (three people), Chelyabinsk (three people), Murmansk (two people), Saratov (two people), Vladivostok (two people), and Barnaul (two people). Most international migrants had come from former Soviet republics, such as Kazakhstan (ten people), Belarus (two people), Ukraine (two people), and Latvia (one person).

Since more millennials took part in the survey than members of the reform generation did, we processed the interviews using *c*-coefficient (Atlas.ti software). Code co-occurrence, or *c*-coefficient, indicates the strength of the relationship between two codes. It varies between 0 (no relation) and 1 (the maximum strength of the relation). *C*-coefficient values below 0.1 were interpreted as no relation. The coefficient was calculated from the formula: $c = n_{12} / (n_1 + n_2 - n_{12})$, where n_{12} is the frequency of co-occurrence of codes 1 and 2 in the selected fragment; n_1 and n_2 are the frequencies of occurrence of codes 1 and 2 respectively throughout the project.¹ According to the formula, the strength of the relationship between codes is affected more strongly by the number of co-occurrences than by the occurrence of each. This way, the quantitative difference between codes is levelled off (in our case, this is the difference between representatives of two generations). A computer-assisted analysis made it possible to establish the relation between millennials/members of the reform generation and several variables (media representations).

¹ Atlas.ti 8 Windows — Full Manual, p. 169.

Content of the main media representations of the Kaliningrad region

We dedicated a special publication to how the content of representations of the Kaliningrad region changed in Russian media in 2014–2018 [35]. Thus, this section merely outlines each of them. The media representation ‘a region of international cooperation’ is found in the statements of Russian and European officials about mutual commitment to cooperation and news pieces on daily contacts between Kaliningraders and Poles, the introduction of electronic visas for foreigners, and incidents of Russophobia in Poland and Lithuania.

The media representation ‘a region with developing infrastructure’ has three components — medical, logistic, and those related to the energy sector.

The ‘tourist destination’ representation is constructed by publications about the gambling zone, music and movie festivals moving to the region, the amber festival, the preparation for the 2018 FIFA World Cup, the preservation and *enhancement* of cultural sites, and the improvement of accessibility and convenience of local beaches and the Curonian Spit national park.

The media representation ‘a region of economic prosperity’ is comprised of news items about the offshore zone on Oktyabrsky Island, cryptocurrency mining prospects, and advances in production, the fishing industry, and agriculture, as well as of publications on the special economic zone in the Kaliningrad region and the territory’s ranking on the investment climate.

The ‘military outpost’ representation is made up of publications about militarisation in response to growing NATO presence, the development of the defence industry, and naval reinforcements in the region.

Media representations of the region and the migration attitudes of newcomers

When considering the representation ‘a region of international cooperation’, respondents focused on the exclave position of Kaliningrad, the advantages and disadvantages of proximity to the EU. We looked at what role regional geography had on respondents’ decision to move to Kaliningrad, i. e. whether they were motivated by prospects of international cooperation or viewed the exclave position as a spatial, cultural, and economic obstacle.

Analysing the co-occurrence of corresponding codes revealed a significant difference between the two generations (Table 2). For millennials, the border position of the region is a predominantly positive factor. The answers given by members of the reform generation revealed both negative and positive attitudes to the regional geography.

Table 2

Attitudes to the exclave position as a factor in international cooperation

Generation	The region's exclave position is a positive factor in international cooperation	The region's exclave position does not affect international cooperation	The region's exclave position is a negative factor in international cooperation
Millennials	0.63	—	0.33
Reform generation	0.25	0.19	0.32

Source: results of data analysis using Atlas.ti software.

Members of both generations named opportunities for travel and shopping in the EU as advantages of the region's exclave position:

The pros of moving to Kaliningrad are the easy of traveling to Europe, the opportunity to buy groceries in neighbouring countries and make trips there.

Tatyana, 47 years

When I lived in the Far East, I couldn't afford a trip to Korea, Japan, or China. It was rather costly... But when I moved here, I visited three countries in about six months. I went to Rome, Barcelona, and then flew to Paris right away. Of course, I thought about this when I was deciding to relocate.

Valentina, 22 years

When commenting on the downsides of the exclave position, members of both generations once again gave very similar answers. They believe that the main problems are poor transport connections to mainland Russia and the need to obtain visas for travelling overland.

We knew that, without a visa, you can travel to mainland Russia only by air or sea. To go by car or train you need a passport and a visa'

Vyacheslav, 46 years

The survey also highlighted inter-generational differences. For millennials, proximity to Europe is a strong motive for moving to the Kaliningrad region. They see the exclave position as an opportunity. The European factor was less relevant for the reform generation [36, p. 95].

To analyse attitudes to the ‘military outpost’ representation, we asked whether a possible threat from neighbouring NATO member states was a factor in respondents’ decision to move to the region. Most millennials did not anticipate any danger of this kind (Table 3).

Table 3

Attitudes to the military factor

Generation	NATO is not a threat	NATO is a threat
Millennials	0.49	0.14
Reform generation	0.26	0.25

Source: results of data analysis using Atlas.ti software

For the reform generation, the strength of the relation to the answers ‘NATO is a threat’ and ‘NATO is not a threat’ was almost equal.

Back there [the respondent arrived from Riga], anti-Russian propaganda began four years ago. So, I worried about proximity to NATO states, that is, about provocations from belligerent pro-American forces. For me, moving here meant joining friendly forces.

Vitaly, 43 years

Most millennials were indifferent to this topic. There were several reasons for such attitude. The first one was a lack of knowledge:

I didn’t know that the Kaliningrad region bordered on NATO states. I was never interested in what countries were members of the bloc.

Vasilisa, 20 years

The second was a humanistic stance:

I didn’t worry about that at all. And I still believe that people of the 21st century want to live in peace.

Ivan, 27 years

The third reason for millennials’ placidity was geopolitical considerations:

As long as the Russian Federation has nuclear weapons, we have nothing to worry about.

Yulia, 27 years

A casual attitude of Kaliningraders to NATO is uncommon for residents of Russian border regions. The survey showed that, as compared to Crimea and the Murmansk and Primorsky regions, Kaliningrad had the smallest percentage (44%) of those who regard a military attack on Russia as probable [37, p. 117] or consider a ‘military outpost’ development strategy optimal for their region [37, p. 122].

The influence of the ‘tourist destination’ representation on the migration attitudes of respondents was studied by examining how tourist trips to the region and the degree of awareness of its history, ecology, climate, and cultural and natural sites affected the decision to relocate.

Most members of the reform generation mentioned the historical components of the region’s attractiveness as a tourist destination (Table 4).

I decided just to have a look at first. I came to Kaliningrad, and I liked it a lot — the nature, the architecture. I love little old houses, especially German houses.

Irina, 50 years

Another significant factor was nature and climate.

Firstly, it’s the mild and moderate climate. Secondly, it’s easy access to the sea. It’s cold, of course, but it’s still a sea. And you can get there whenever you want.

Eduard, 44 years

Table 4

Social mobility incentives for millennials and the reform generation

Millennials			
Number one incentive	Number two incentive	Number three incentive	Number four incentive
Nature and climate (0.43)	Economy (0.41)	Geography (0.36)	Historical heritage (0.2)
Reform generation			
Number one-three incentives			Number four incentive
Nature and climate (0.23)	Historical heritage (0.23)	Family matters (0.23)	Geography (0.21)

Source: results of data analysis using Atlas.ti software.

For millennials, nature and climate are also among top migration priorities.

When relocating, we only considered what we saw ourselves when we were visiting friends here. We came in November, and there was no snow. And the trees were still green.

Pavel, 33 years

But the economy is more important than the historical and geographical factors.

Locals are obsessed with the German bi-level bridge... I don't understand what's so special about it. It's horrible, ugly, and inconvenient. Some even like the House of Soviets. Anyway, it's one of the sights too.

Daria, 29 years

The weight of the representation 'a region of economic prosperity' was estimated based on how respondents correlated their prospects after relocation with the economic situation in Russia's westernmost region. Millennials distinguished several components in this media representation.

The industry component:

I moved because I wanted to try my hand in a different kind of business — tourism. I thought that this region would offer great prospects in the area.

Ilya, 32 years

The projects and prices component:

Kaliningrad is constantly developing because of its offshore zone. There's a gambling zone too. Europe's investing in the region. What's also important is the pricing policy. Probably, only Naryan-Mar, Novaya Zemlya, Murmansk, and Franz Josef Land are more expensive than our part of the world [the respondent arrived from Arkhangelsk].

Evgeny, 36 years

The career component:

I had a goal, to work in my field of expertise. I came across a vacancy in Kaliningrad. World-renowned confectioner Elena Gnut lives here. She needed an assistant. I didn't even expect that she'd choose me...

Yana, 33 years

Nevertheless, members of the reform generation rarely linked their decision to migrate with the awareness of the socio-economic situation in the region. Three scenarios describe the attitude of respondents to the representation 'a region of economic prosperity'.

1. Passive scenario. The respondent was not interested in employment or asked acquaintances or relatives to find them a job.

Friends told me about this job, and they arranged a job interview. I came and got the job.

Elena, 45 years

2. Active scenario. The respondent was looking for a job but adopted a wait-and-see strategy.

I was sending out resumes. I waited for someone to reply. All the interviews were over the phone.

Viorika, 51 years

3. Proactive scenario. The respondent learnt about the situation in the region in advance and took full responsibility for employment.

I talked to some acquaintances and my husband. I monitored job search websites and applied for different jobs.

Tatyana, 47 years

The representation 'a region of developing infrastructure' had little effect on the migration attitudes of either generation. It was, however, mentioned by millennials a few times.

I was looking for a nice city with a developed infrastructure, especially children's facilities.

Yana, 33 years

Results and conclusions

This research of attitudes to migration has shown that the investigation of effects of place image on intention to migrate is at the stage of conceptualisation in Russia. The article aimed to contribute to the field of knowledge by correlating motives for migration with the media representations of the destination. When interviewing respondents, we did not encourage them to focus on any particular topic. We only tried to understand what idea of the Russian exclave they had when relocating.

In practical terms, the media representation ‘a region of international cooperation’ as a motive for migration means opportunities for travel and shopping in neighbouring countries. Respondents did not see incidents of Russophobia in Lithuania and Poland or simplified entry to the region for foreigners as factors in international cooperation. Nonetheless, both topics have been widely discussed in the Russian media. Members of either generation were not looking for cooperation opportunities pointed out by Russian and European officials (receiving education, business contacts, etc.).

The ‘military outpost’ representation appeared in the answers given by reform generation respondents. Some of them worried about the military situation in the Baltic Sea region. These concerns may be explained by the fact that the reform generation moved into adult life in the 1990s when the USSR disintegrated, and the country’s role in the international arena decreased. Millennials, who matured in the 2000s when the country was more active internationally, were much less affected by this media representation.

Only nature/climate and historical heritage, the region’s major tourist attractions, were mentioned by members of both generations. Local infrastructure projects earned little interest from respondents. Perhaps, media representations aimed at potential tourists have little effect on prospective migrants who focus on other things.

The region’s economic potential as a motive for migration has a different effect on millennials and the reform generation (Table 4). The strong presence of this media representation in the answers given by millennials may mean that their decision to move to the Kaliningrad region was mainly career-driven.

Some media representations of the Kaliningrad region (tourism and infrastructure) have a negligible effect on the structure of migration attitudes, whilst others (‘military outpost’ and international cooperation) had a concomitant influence. There were both similarities and differences in how millennials and the reform generation interpreted some of the representations (‘military outpost’, ‘a region of economic prosperity’).

The interviews demonstrated that the attitude to a media representation is closely linked to the respondent’s motive for relocation. For example, career-focused migrants were well aware of the situation in the local business community and international cooperation opportunities. Overall, the structure of motives for migration differed between the two generations. The highest priority for millen-

nials was career prospects, whilst the reform generation was looking for a comfortable place to live. Regional authorities should consider this conclusion when devising place-branding initiatives. Educational institutions and public and private companies may benefit from these findings by incorporating them into their recruitment programmes.

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