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International relations

Konyshev V.N., Skvortsova E.M. Foreign lobbying as an instrument of defense cooperation between Poland and the United States .................................................................4


Social dynamics

Simonyan R.H., Slutskin L.N. Comparative analysis of students’ collective consciousness in the Russia-EU and Russia-China border regions: mathematical modelling ................................................................. 40

Urazbaev E.E., Yamalova E.N. The ethnopolitical movement as a vehicle for nationalism institutionalisation in modern Latvia ................................................................. 54

Krishtal M.I., Shchekoturov A.V. Effective risk communication as a factor in managing protests attitudes in a local community ................................................................. 70

Agafoshin M.M., Gorokhov S.A. Impact of external migration on changes in the Swedish religious landscape ................................................................. 84

Economic geography and regional economics

Maksimtsev I.A., Mezhevich N.M., Sirota N.P. The theory of peripheral capitalism: on the applicability of the Latin American model to the Baltic States. An attempt at an inter-disciplinary analysis ................................................................. 100

Katalevsky D.Yu., Gareev T.R. Development of electric road transport: simulation modelling ................................................................. 118

Manakov A.G., Kondrateva S.V., Terenina N.K. Development of cross-border tourist and recreational regions on the Karelian section of the Russian-Finnish border ......................................................................................................................... 140

Akhunzhanova I.N., Tomashevskaya Yu.N., Osipov D.V. Tools for evaluating the competitiveness of innovative clusters (Silicon Saxony case) ................................................................. 153

Book Review

FOREIGN LOBBYING AS AN INSTRUMENT OF DEFENSE COOPERATION BETWEEN POLAND AND THE UNITED STATES

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Defence cooperation between Poland and the United States significantly affects the security agenda of Russia, the Baltic region, and Europe as a whole. On the one hand, Poland intends to become a key partner of the US in ensuring European security. On the other hand, it has ambitions to take the leading position in the security area among the Baltic States. The Polish leadership sees an additional advantage in expanding military cooperation with the United States, regarding it as a jumping board to accelerating its economic and technological development. This article examines a mechanism underlying defence cooperation between the US and Poland, i.e. lobbying Poland’s interests in another state. This allows Warsaw to actively promote its interests in the US. The research methodology employed includes the periodisation of Polish lobbying activities in the US and an empirical study of lobbying based on analysis of original documents, many of which have been analysed for the first time. It is shown that, under the existing party system, Poland will not abandon strategic partnership with the United States, primarily in security and defence. Over the study period, Poland quickly gained experience in promoting its interests in the US through direct lobbying, showing flexibility in negotiations, relying on the two-party support in the US Congress, successfully coordinating the activities of its governing bodies and various corporations which are submitted to tight state control.

Keywords:
foreign lobbying, USA, Poland, defence cooperation

Introduction

After the end of the Cold War, the conflict potential in relations between Poland and Russia manifests itself in various dimensions [1]. Modern Poland’s security policy is of particular interest against the background of troubled relations
between Russia and the Baltic countries as well as the decline in Russia’s interaction with the West in general [2, p. 5]. It is important that the impetus for the new waves of escalation is often provided by the USA, which is supported by the Baltic states and Poland [3, p. 28, 33]. The peculiarity of Poland lies in the fact that in recent years it has been trying to build relations with the USA as a higher priority comparing to ties with EU and NATO partners. Moreover, Warsaw demonstrates its ambitions to become regional leader in security issues [4, p. 170; 5, p. 147—148]. This directly affects Russia’s hard security interests in the Baltic region and in Europe as a whole [6].

However, there is a wider perspective of bilateral cooperation with the US, which Poland is primarily interested in. It explains the very active efforts of the Polish leadership to give new impetus to Polish-American relations, choosing military security issues as a lever and even pursuing a joint European security policy in partnership with the United States [7, p. 67]. According to the sentiments of some Polish elites, intensification of military cooperation will contribute to closer economic ties between Poland and the United States.

Having recently entered the arsenal of Polish foreign policy, lobbying is becoming an important instrument for such activity. Since the 2000s, Poland has been gradually developing its experience of working with American lobbying companies to advance its interests in the corridors of the executive and legislative branches of the United States government. A study of the main approaches to lobbying helps to clarify Poland’s priorities in cooperation with the United States, the problems of bilateral relations and their future prospects. Meanwhile, lobbying as an instrument of Poland’s foreign policy is not well understood. This article explores how Poland uses the mechanism of foreign lobbyism in the United States to deepen bilateral cooperation, primarily in the military field.

The study used institutional analysis to explore the structure, functions, and role of foreign lobbying in promoting military-technical cooperation between Poland and the USA; the method of periodization was used to identify stages in the development of Polish lobbyism in the corridors of US power; and the method of concrete historical analysis was used for a comprehensive study of lobbying practices basing on original documents, many of which are introduced into scientific discourse for the first time.

**Lobbying mechanism for promoting Polish interests in the USA**

Today the institute of lobbying is an ingrained part of the American political system [8, p. 107]. This institution serves as an intermediary between the client (who can be a private person, a public or a civic organization, a business structure) on the one hand, and US authorities on the other hand. It is important that both American and foreign political actors can serve as a client.

Lobbyists help to promote the interests of the client in the corridors of power, acting within the framework of special legislation, which is designed to ensure
transparency of the lobbying process and thereby prevent corruption. According to a number of laws of 1938, 1946, 1995 and 2007\(^1\), lobbying organizations are required to register with the Department of Justice and the US Congress, as well as regularly submit reports on the scope and content of their activities, funds received and information about their client [9]. The number of lobbyists speaks eloquently about the magnitude of the practice: Washington alone has over 10 thousand registered lobbyists [10]. Rare congressional law is passed without amendments introduced by them. Since the mid-1990s, there has been a significant increase in lobbying costs, as businesses expect to earn additional profits by interacting with political power rather than from the principle of “free hands” [11, p. 7—13]. The staff of lobbyists consists mainly of lawyers, former officials, politicians and other people with extensive ties in government and business.

The lobbyists use a very wide set of tools and techniques to exercise influence. For example, in addition to personally persuading Members of Congress (MOCs), lobbyists would offer assistance in drafting bills and analyzing issues, help in working with voters, financial support during election campaign, insider information, patronage after the end of public service. Influence is also achieved by indirect methods — through closest friends and relatives, celebrities from the MOC’s state, and even parish priests, or by organizing the necessary activity of voters of a district, and so on. It is not surprising that the attitude to the institution of lobbyism is ambiguous, since the actions of lobbyists sometimes go beyond the law, and their goal is to impose corporate interest on the authorities. On the other hand, lobbyists help official authorities to take into account the needs of various interest groups more accurately. In addition, in the United States phenomenon of corruption and lobbying are separated at the legislative level, while professional lobbyist associations regularly monitor compliance with the rules and ethics [12].

Foreign lobbyism plays a special role in the American politics as it allows foreign principals to influence decision-making at the level of federal authorities. Foreign lobbying addresses a wide range of issues, but the US law strongly restricts political propaganda [13, p. 18]. Many states and foreign non-state actors are using this lobbying mechanism [14—16]. According to the U.S. Department of Justice, lobbyists represented 665 foreign clients in the first half of 2018\(^2\).

Since 1944 Polish interests on the issues of military security have been represented in the United States by the public organization of the Polish diaspora, the Polish American Congress [17], whose mission was revised after successfully lobbying Poland’s joining NATO [18, p. 78, 81]. Since 2008, Warsaw has been

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using the services of American lobbyists to promote military cooperation of the two states. At the same time Polish society remains quite conservative with regard to lobbying activity and largely associates lobbying with corruption (according to polls in 2016, 56% of Poles called lobbying a negative phenomenon), and the lobbying institution in Poland itself is not developed much, although the law on its regulation was adopted back in 2005 [19]. According to some estimates, only about 370 lobbyists are registered in Poland [20, p. 9].

The practice of Poland’s appeal to the services of American lobbyists greatly depends on the understanding of the ruling party’s security policy and the content of partnership with the United States. During the reign of the “Civil Platform” (CP) in 2011-2014, no contract was signed for lobbying in the US in the military field. Despite the fact that CP favors developing strategic partnership with the United States, the party is considering relations with the United States as part of a two-tier security model. The first and main tier is represented by relations between the EU and NATO, and the second — by bilateral cooperation between European countries and the United States, which includes Polish-American cooperation as an integral part [21]. CP considers the United States primarily as an economic partner, and advocates the expansion of the American investment as well as its technological and intellectual presence in Poland.

Conversely, lobbying activity has increased during the years of the rule of the “Law and Justice” (L&J) party, which came to power in 2015. This party emphasizes the importance of national sovereignty and is gradually moving away from cooperation within NATO and the EU in favor of bilateral relations with the United States considered the main guarantor of Poland’s security [22]. The party has announced its intention to deploy US and NATO military facilities on Polish territory. As a result, 2/3 of US troops, military depots in Eastern Europe, and most of their headquarters are stationed in Poland [23, c.180]. The strategic goals of L&J imply giving a powerful impetus to Polish-American relations through a joint security policy in the European region based on shared interests.

It is not surprising that in recent years Poland has been showing increased interest in lobbying in the United States precisely in the field of military cooperation. Since 2008, nine contracts have been signed with lobbying organizations to promote issues of military security and cooperation, including 5 contracts during 2015—2018 (Table 1).

---


Poland contracts for lobbying in the US

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of contracts</th>
<th>Contracts on military cooperation and defense according to services</th>
<th>Lobbying</th>
<th>Consulting on US policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>4</td>
<td></td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
<td></td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>2010</td>
<td>3</td>
<td></td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>2016</td>
<td>4</td>
<td></td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>2017</td>
<td>4</td>
<td></td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>2018 (half year)</td>
<td>7</td>
<td></td>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

Poland has mainly been using the services of the two lobbying organizations *BGR Government Affairs Limited Liability Company (BGR)* and *Park Strategies Limited Liability Company (Park Strategies)* as well individual lobbyists. At the same time, *BGR* got more than 70% of contracts\(^6\) (Table 2).

US companies / lobbyists hired to promote Poland’s military interests

<table>
<thead>
<tr>
<th>Year</th>
<th>Companies/lobbyists</th>
<th>Foreign Principal</th>
<th>Costs, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td><em>BGR</em></td>
<td>Poland Embassy in the U.S.</td>
<td>10 150 000</td>
</tr>
<tr>
<td>2009</td>
<td><em>BGR</em></td>
<td>Poland Embassy in the U.S.</td>
<td>34 140 236</td>
</tr>
<tr>
<td>2010</td>
<td><em>BGR</em></td>
<td>Poland Embassy in the U.S.</td>
<td>30 83 300</td>
</tr>
<tr>
<td>2016</td>
<td><em>Park Strategies</em></td>
<td><em>PGZ</em></td>
<td>18 000 000</td>
</tr>
<tr>
<td>2017</td>
<td><em>BGR</em></td>
<td><em>PGZ</em></td>
<td>21 000 000</td>
</tr>
<tr>
<td>2018</td>
<td><em>BGR</em></td>
<td><em>PGZ</em></td>
<td>12 000 000 (half year)</td>
</tr>
<tr>
<td>2018</td>
<td>John Holl-jr.</td>
<td><em>POLSA</em>(^**)</td>
<td>12,000.00 (half year)</td>
</tr>
</tbody>
</table>

Remarks: \(^*\) *PGZ* — *Polska Grupa Zbrojeniowa* (Polish Group of Weapons); \(^**\) *POLSA* — *Polska Agencja Kosmiczna* (Polish Space Agency).

From the Polish side, only government bodies and state-owned companies were the principals of lobbying services. In 2008-2010 the first four contracts with lobbyists were signed by the Embassy of the Republic of Poland in the United States, but after 2016 the situation has changed. Instead of the Embassy, the Polish Arms Group (*PGZ*) holding became the main principal in the contracts. The establishment of a unified defense holding which included more than 60 companies\(^7\) contributed to the strengthening of the national defense industry [24] by improving coordination of defense enterprises, preventing competition in the domestic market between their manufacturers, and increasing the confidence of

\(^6\) FARA Reports to Congress. The United States Department of Justies. URL: https://www.justice.gov/nsp-dfa/fara-reports-congress (access date: 01.12.2019).

\(^7\) Polska Grupa Zbrojeniowa SA — *PGZ* SA. URL: http://pgzsa.pl/ (access date: 02.12.2019).
foreign partners. This had a positive effect on the practice of lobbying of Poland defense interests. In 2018, the Polish Space Agency (POLSA) also used lobbying services. The Agency supports the Polish space industry by deepening cooperation with the American academic and business communities.

However, regardless of who acts as the principal of contracts, lobbying in military cooperation is being realized under the strong control of the Polish government and primarily pursues national rather than private interests.

The first stage of Poland lobbying activities: ballistic missile defense and armed forces modernization

The history of Polish lobbying in the field of military security and defense can be divided into two periods. The first one lasted from 2008 to 2010 when the Embassy of the Republic of Poland realized four contracts with the lobbying company BGR. Contracts with total amount of $473,735 stipulated the development of recommendations about US foreign and military policy towards Poland, the establishment of meetings between Polish and American officials, and the promotion of Poland’s interests in the US Congress and executive bodies.

Key directions of this activity were ballistic missile defense (BMD), modernization of the Polish armed forces, and defense cooperation. Negotiations on the deployment of BMD defense facilities in Poland began in 2007 [25, p. 43]. Initial results of Polish-American BMD-cooperation were promising. In 2008, the countries signed the Declaration on Strategic Cooperation and the Agreement on the deployment of BMD interceptors in Poland. For bilateral interaction, special working groups were created to discuss BMD issues: the Advisory Group on Strategic Cooperation between the United States and Poland and the Top Level Team on Security.

12 Deklaracja w sprawie współpracy strategicznej między Rzecząpospolitą Polską a Stanami Zjednoczonymi Ameryki, Warszawa, 20.08.2008
14 Deklaracja w sprawie współpracy strategicznej między Rzecząpospolitą Polską a Stanami Zjednoczonymi Ameryki, Warszawa, 20.08.2008
Although the Bush administration had a positive attitude towards the deployment of BMD elements in Poland, attempts of the Polish authorities to include the modernization of the Polish Air Force in these agreements caused a sharp negative reaction in the White House. Warsaw looked on additional increase in the national defense capability if Polish air forces could be integrated in American BMD system [26, p. 123]. However, this project failed. Apparently, the Polish leadership was not able to correctly set the task for the American lobbyists, since in reality the activity of BGR was mainly focused on the deployment of BMD elements. Moreover, Warsaw was forced to quickly accept American conditions with regard to the beginning of the Russian-Georgian conflict in August 2008, which caused serious concerns of the Polish leadership [27, p. 206]. During the signing ceremony, a declaration of US military assistance in the case of “a third state” attack on Poland was hastily announced\(^\text{16}\).

Obviously, the BGR could not foresee risks associated with the change in Barack Obama’s course in deploying BMD in Europe, possibly having no timely access to the necessary insider information. As a result, Poland faced the fact of the new US administration in 2009 unilaterally revising the BMD deployment policy [28, p. 9]. The US European Phased Adaptive Approach envisaged deploying BMD elements in four phases\(^\text{17}\). This meant the cancellation of the deployment of ground-based interceptors and X-band radars agreed upon with Warsaw in Central Europe. The activities of the Advisory Group on Strategic Cooperation were also frozen.

It should be noted that, according to reports on lobbying activities, BGR placed the main emphasis on promoting the interests of Poland in the executive branch. Lobbyists met with officers of the State Department, Department of Defense, and the National Security Council\(^\text{18}\). They would pay special attention to contacts with American military, but the meetings were not regular, and contact persons from the American side would often change. By 2010, meetings of lobbyists with representatives of executive bodies had practically ceased due to a shift in the official position of the United States\(^\text{19}\).

As for the legislature, the BGR worked with congressmen from two House committees: the Foreign Affairs Committee and the Armed Forces Committee,
but such contacts were episodic with the exception of Republicans Roger Zach- eim and Kari Bingen (both of them held positions in the office of the US Secretary of Defense over the years) throughout 2009\textsuperscript{20}. Lobbyists held personal meetings with Congressman Mark Kirk’s assistants, but no contact was recorded with the Congressman himself. In the Senate, the number of personal meetings was greater, but all of them took place with the assistants of the Senators. Lobbyists tried to establish interaction with the Republicans Jon Kyl, Jimmy DeMint, George Voinovich, Christopher Smith\textsuperscript{21}. Only in 2010, lobbyists achieved a personal meeting with Jon Kyl, but this had no an effect because Democrat Barak Obama came to power. The lobbyists’ bet on the Republican Party alone was fundamentally wrong, and in 2010 they changed their tactics by contacting the office of the Democratic Senator Mike Quigley\textsuperscript{22}.

Summing up, the activities of the lobbying company of this period were not justified in terms of political targets and in reality, adaptation to the new conditions on BMD deployment in Europe took place through official bilateral contacts rather than through lobbying efforts. As a result, in 2010, the dialogue between the United States and Poland resumed and the work of the Advisory Group on Strategic Cooperation was re-launched\textsuperscript{23}. A Protocol was adopted to amend the Agreement on the deployment of interceptor missiles in Poland\textsuperscript{24}.

Thus, at the first stage of lobbying activity the lack of experience in organizing lobbying and the domestic situation inside Poland did not contribute to the timely correction of the negotiating position. The lobbying mechanism for promoting national interests was not adequately demanded by Polish authori-


ties [29, p. 205]. Weak coordination of the Polish institutions, changes in the political situation in the United States and the uncertainty for Poland also led to failures in lobbying.

The second stage in the evolution of lobbying: expanding cooperation

After a pause in lobbyism related to the reign of the CP party, the L&J wins again in 2016, and the second stage of Poland lobbying activity began. Warsaw tried to learn from the past mistakes. The PGZ holding decided to sign the first contract with lobbying company Park Strategies as the main principal instead of previous BGR. The change of the traditional partner was explained by sentiments in the Polish leadership that saw the reasons for the political failures of 2009-2010 including questionable performance of BGR, although arguably, much larger contribution to the failures came about as a result of the change in the foreign policy positions of Obama administration [30]. Indirectly, BGR’s high reputation in Washington also supports the organization’s quality work.25

Since 2016, Park Strategies represented the interests of the Polish principals in the US Congress. Lobbyists provided a wide range of services:

— supporting Poland security initiatives, including increasing financial obligations before NATO and developing NATO infrastructure in Poland;
— promoting a positive image of bilateral relations in the media, in particular on security in Eastern Europe, as well as explanation of Poland official and business circles policy for American media;
— ensuring coordination of US and Polish policies ahead of the 2016 NATO Warsaw Summit;
— assisting in deepening cooperation between the American and Polish military-industrial complex;
— organizing meetings at the level of the Atlantic Council, Center for Strategic and International Studies, Council on Foreign Relations;
— holding meetings with MOCs and other authorities to support Polish strategic initiatives26.

Lobbyists managed to establish cooperation with MOCs on issues such as meetings with Minister of Defense Anthony Matsarevich to discuss political relations between Poland and the United States and NATO, expanding Polish-American cooperation on military issues, future participation of Polish delegation in the conference on countering ISIS, promotion military assistance to Poland through NATO.

During the meeting with President Donald Trump, lobbyists emphasized how responsively Poland follows financial obligations to NATO to increase expenses. In addition, in interviews with *Defense News* and *Newsmax Media* they demonstrate again Poland’s commitment to NATO values. Actual issues of Polish national security were also discussed with representatives of the Lugar Center. Lobbyists Alphonse D’Amato, Craig Siracusa and John Zagame were responsible for interacting with the government officials. Personal meetings were held with Republican Chairman John McCain and two members of the House of Representatives, Democrat Dan Lipinski, the co-chairmen of the Polish Caucus of the US Congress, and Republican Chris Gibson.

In general, the collaboration with *Park Strategies* was successful and paid off. The Polish leadership was able to gain US political support during the Warsaw NATO summit. However, it is worth paying attention to the general favorable political background: the improvement of Polish-American relations was facilitated by Trump coming to power, with many of Obama’s foreign policy objectives being reviewed, including those related to the BMD problem in Europe.

Yet, despite the good results, the activity of American lobbyists received an ambiguous assessment in the Seimas, primarily due to the contract for the acquisition of American Black Hawk helicopters negotiated by *Park Strategies*. Criticism of this contract was caused by the fact that the L&J party, which had come to power, refused to purchase Eurocopter EC725 Caracal helicopters from France, which had won the tender. The tender was announced again but with the only supplier, meaning that the contract would be signed with the United States rather than France.

The Seimas repeatedly raised the issue of providing the government with confirmation of how urgent the acquisition of helicopters for the needs of the national defense was, since L&J representatives continuously referred to it in justification. But the ruling party never brought convincing arguments in favor of its decision. Following this, the Minister of Defense Matsarevich was accused of being unscrupulous with regard to the contract concluded with the USA. According to Caesar Tomczyk, a member of the Seimas National Defense Committee,

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representing the opposition party CP, lobbyist D’Amato worked simultaneously with Polish PGZ and the American Lockheed Martin Corporation (LMCO). Due to these circumstances, he had no right to represent the Ministry of Defense of Poland because of a conflict of interest. The situation resulted in serious investigation and subsequent resignation of Matsarevich, following offenses detected in the activities of PGZ and its subsidiaries.

After the anti-corruption investigation of 2017 regarding the activities of Park Strategies, the PGZ returned to cooperation with the lobbying corporation BGR. According to the new contract, the company had to provide the following services:

— to advise the Polish holding on strategic communications with the US government, including on foreign policy, legislation and public policy;
— to represent PGZ interests in the USA and assistance in strengthening Polish-American military cooperation;
— to inform U.S. congressmen and the White House about the position of PGZ on various issues;
— to promote interests of PGZ regarding the development of the Polish “Wisła” air/missile defense system with the participation of several American companies, as well as the “Khomar” program, which provides for the acquisition of three divisions of operational-tactical mobile missile systems from the American LMCO (range over 300 km).

It is very important that the development of the Polish armed forces under the “Wisła” and “Homer” programs provides partial localization of production in Poland that can give a powerful impetus to technological cooperation with the American military-industrial complex.

The lobbying of the BGR led to the conclusion of a number of arms trade contracts from the United States. For example, in 2018 the US Congress approved the sale of “HIMARS” rocket launchers to Poland. The Polish Ministry of Defense regarded the contract as “another breakthrough in building up the country’s

defense potential”. However, the mood of the department regarding the cost was not so optimistic: the price of the contract was called “relatively good”\textsuperscript{36}.

In 2018 Poland signed one of the largest and most important contracts in the history of the country for the acquisition of American “Patriot” systems\textsuperscript{37}, the main air defense elements that protect NATO and Europe from air threats. The Patriot Procurement Agreement is the first phase of the “Wisla” program for integrated procurement of air/missile defense equipment\textsuperscript{38}. Poland hoped to become the second country after the United States with a similar automated air defense system\textsuperscript{39}. The deal is beneficial for Poland both from a military and economic point of view as it involves the creation of new high-tech jobs and the transfer of “Patriot” technologies to Polish defense companies for their production of key elements\textsuperscript{40}.

The success of BRG lobbying for PGZ interests was reinforced by the signing of a letter of intent with the American company Raytheon, which establishes a strategic partnership between the companies. This cooperation enables the transfer of technologies, as well as the participation of Polish industry in the design of BMD shield. In addition, the possibilities of developing radar and missile technologies with the participation of Polish industry are still under consideration. These prospects are of great importance for Poland in the light of the country’s focus on the creation of a national BMD system by 2023. This system should be able to complement the European BMD system and, if necessary, subordinate to NATO command [31, p. 52].

In the US Congress, the main focus of the lobbyists’ activity was to promote the decision on a permanent US military presence in Poland. In this regard a

\begin{footnotesize}
\begin{itemize}
\item[\textsuperscript{38}] Poland to acquire Patriot defense system, Agreement will create new defense industry jobs in U.S., Poland. \url{https://www.raytheon.com/news/feature/poland-signs-loa-for-patriot} (access date: 01.12.2019).
\item[\textsuperscript{40}] Raytheon i PGZ rozszerzyły współpracę // Ministerstwo Obrony Narodowej. \url{http://m.mon.gov.pl/aktualnosci/artykul/najnowsze/raytheon-i-pgz-rozszerzyly-wspolprace-o2016-07-04/} (access date: 04.12.2019).
\end{itemize}
\end{footnotesize}
letter was sent to US Secretary of Defense James Mattis\textsuperscript{41}. Lobbyists developed the ideas from seven MOCs who urged Mattis to pay attention to this issue\textsuperscript{42}. As a result of joint efforts, two Polish-American working groups were created to increase the presence of American troops and to create a military base in Poland.

The letter from \textit{BGR} contained several arguments. In particular, lobbyists pointed to the military strengthening of Russia on the borders of NATO’s Eastern flank. The threat was associated with the intensification of military cooperation between Russia and Belarus, the buildup of the Russian military group near the northern border of Poland and in the Kaliningrad region, as well as with Russia’s “aggressive behavior” towards the Baltic states. Lobbyists paid particular attention to the vulnerability of the Baltic states, which could be quickly isolated from other NATO members in the Suvalki corridor. This idea was inspired by the results of the Russian-Belarusian “West-2017” exercises. An eloquent proof of Russia’s aggressive intentions was the “Russian invasion” in the Crimea and the Donbas. Strategically, it was implied that Russia’s ambition was to split NATO. The lobbyists convinced the US government that these actions and intentions of Russia should receive a corresponding reaction from the United States in the form of deploying a permanent American military base on the Polish territory.

The lobbyists explained the advantage of strengthening military cooperation with Poland by the fact that the Polish state is the most reliable US ally in NATO. Unlike some NATO allies, Poland strictly fulfills its obligations to increase defense spending in connection with the wishes of President Trump. Finally, Poland has a unique geostrategic position as the most eastern outpost of the West. In their view, a permanent US military presence will create the potential for a quick response to any threats from Russia.

Despite the efforts of lobbyists, the agreement was reached. Even Poland’s readiness to finance a project to create an American base, which the Poles had given the eloquent name of “Fort Trump”, didn’t help in negotiations\textsuperscript{43}. Moreover, Poland saw a toughening of the US position suggesting a universal formula for calculating “Price + 50%”. This way the cost of deploying US forces in other


\textsuperscript{42} \textit{Szef MON rozmawiał w Waszyngtonie o współpracy wojskowej Polski i USA // polsat-news.pl. URL: http://www.polsatnews.pl/wiadomosc/2018-09-15/szef-mon-rozmawial-w-waszyngtonie-o-wspolpracy-wojskowej-polski-i-usa/ (access date: 04.12.2019).}

countries was doubled\textsuperscript{44}. But the final point in this project was the failure of the US Congress to vote the agreement\textsuperscript{45}. At the same time, the United States indicated that they were open for further discussion on the subject\textsuperscript{46}. Thus, BGR only partially realized the tasks set for it.

Another important client of lobbying services was POLSA, whose activities focused on implementation of national space strategy published in 2017. The contract was signed with individual lobbyist John F. Hall-Jr. who provided consulting on the development of US space policy and law in this field\textsuperscript{47}. Formerly a NASA officer, Hall oversaw the export of space technology. During 2018 he organized meetings of the head of POLSA with the Executive Secretary of the National Space Council of the White House and NASA; consultations in the UN Committee on the Peaceful Uses of Outer Space in Vienna; meeting with officers of the Vandenberg Air Force Base. During the meetings, the prospects of launching Polish satellites as part of NASA program to planet Mars, as well as the future visits of NASA scientists to Poland for deeper cooperation were discussed\textsuperscript{48}.

Later, Hall helped to establishing more close contacts between NASA and the White House, including interaction on issues of the Joint Statement of Intent in space cooperation. He accompanied Poland’s participation in the International Space Symposium in April 2019 at the Paris Air Show in May 2019, and during meetings of the UN Committee on the Peaceful Uses of Outer Space\textsuperscript{49}. Additionally, Hall prepared reference materials about US space activities for POLSA and participated in television interviews.\textsuperscript{50} Collaboration with Hall helped POLSA

\textsuperscript{44} Trump wanted five times more money for the deployment of US troops in other countries // Lenta.ru. 10.03.2019. URL: https://lenta.ru/news/2019/03/10/trmp/ (access date: 05.12.2019).

\textsuperscript{45} The US and Poland agreed to strengthen NATO’s eastern flank // Broadcasting Company of the RF Armed Forces «ZVEZDA». 11.05.2019. URL: https://tvzvezda.ru/news/vstrane_i_mire/content/2019511647-lzull.html (access date: 05.12.2019).

\textsuperscript{46} Zwiekszenie obecności wojsk USA w Polsce to większe bezpieczeństwo dla kraju i całego NATO, Ministerstwo Obrony Narodowej. URL: https://www.gov.pl/web/obrona-narodowa/zwiekszenie-obecnosci-wojsk-usa-w-polsce-to-wieksze-bezpieczenstwo-dla-kraju-i-calego-nato (access date: 05.12.2019)


prepare the signing in April 2019 of an agreement with the US Strategic Command on the exchange of data on events in space and significantly facilitated POLSA’s engagement with NASA.

The Ministry of National Defense of Poland also used the services of American lobbyists. An agreement for consulting services with BGR for a period of a year was concluded in February 2019 with the list of services including assistance in contacts with the US government, Congress, other government departments, the media, and the expert community. These consultations were designed to help Poland in the planning of military policy and to strengthen military-technical cooperation with the United States. Lobbyists also pledged to advance the interests of Poland in Congress and US executive departments when necessary. The Ministry of National Defense of Poland committed to pay $70,000 per month, while BGR was obliged to submit monthly reports on activities and expenditures. Thus, the total annual cost of contract reached $840,000. Under this contract, lobbyists met with House representatives and their assistants. Among them were Democrat Philemon Vela (from the Subcommittee on Cybersecurity, Infrastructure Protection and Security Technologies), as well as members of the Democratic Armed Services Committee John Garamendi, Rick Larsen, Joe Courtney and Republican Mac Thornberry (head of the committee). In general, lobbyists got support from representatives of both parties, which helped to reach their goals in shaping decisions.

A feature of the 2019 contract was the promotion of Poland’s interests through American think tanks, universities, and business corporations. Active electronic correspondence was conducted with representatives of the Heritage Foundation, the Atlantic Council, the Carnegie Endowment, the Center for the Analysis of European Politics, the Council on Foreign Relations, and the Center for Strategic and International Studies. This practice does not seem accidental, as experts from these institutions are often invited to congressional hearings. Among corporations, lobbyists paid special attention to LMCO and Raytheon, which are Poland’s potential partners for deepen military-technical cooperation and joint production.


The lobbyists continued consultations on strengthening security on NATO’s Eastern flank, returning to the project of a permanent US military presence in Poland. As a result, in the summer of 2019 the US decided to increase the number of the American troops in Poland from 4,500 to 5,500\textsuperscript{55}. The discussions on the most suitable place in Poland for the permanent deployment of the US Army armored brigade are continuing. Thus, quite a successful trend has been demonstrated in promoting Poland’s interests in military security, military-technical cooperation, and the development of joint space programs.

**Conclusions**

Polish efforts aimed at developing a strategic partnership with the United States remain a constant in its foreign policy, regardless of the ruling party. \textit{L&J} places a relatively greater emphasis on military cooperation, viewing it as a locomotive for developing a comprehensive partnership. In turn, \textit{CP} believes that economic cooperation should be the top priority. In this sense, in the future, one can expect a decrease in lobbying activity in the case of \textit{CP} coming to power, and growth in the case of \textit{L&J} victory.

Using the services of professional lobbying organizations allows Poland to gradually develop channels of influence in the US Congress, executive departments, American think tanks and defense industry enterprises. This provides Poland increased influence on decision-making in the United States in her favor, as can be seen in the example of the first steps to expand cooperation from the military to space issues.

Initially Poland faced a number of difficulties in achieving goals through lobbying organizations. Among them are incorrect setting goals for lobbyists, irregular and insufficiently coordinated work with lobbying organizations, instability of their own foreign policy related to the specific policy of the \textit{L&J} and \textit{CP} parties when coming to power, an unfavorable conjuncture in the world policy prompted by the Obama administration changing the security agenda, and the later election of Donald J. Trump. And the last factor — Poland’s strong dependence on US policy — will continue to have a decisive influence.

Nevertheless, Poland’s lobbying of national interests in defense policy and military cooperation with the United States proved to be an effective instrument of foreign policy. Warsaw quickly learned the mistakes of its first steps: abandoned the stake on supporting only one party in the US Congress, moving on to the search for bipartisan support for its initiatives; learned to take a more flexible position in negotiations with the United States and attract not only government

bodies and ministries, but also specialized corporations as principals, all of this without weakening state control. It also improved coordination of lobbying activities and the work of traditional foreign affairs agencies and officials.

The practice of lobbying has contributed to the deepening of bilateral cooperation in the military sphere, which has the following prospects directly affecting Russia’s security interests: military-technical cooperation, joint military production, a permanent US military presence in Poland, building up NATO infrastructure and BMD elements. Poland uses the idea of Russian military threat to deepen ties with the United States, seeking to assume the role of the most important security partner on NATO’s eastern flank. However, in addition to close military cooperation, Poland also has a broader perspective - “spillover” cooperation to high-tech civilian sectors of the economy due to product localization, as seen from the first steps taken in establishing cooperation between Poland and the United States in the space industry.

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A ‘SECRET ALLIANCE’ OR ‘FREEDOM FROM ANY ALLIANCES’? NATO ACCESSION DEBATE IN SWEDEN AND FINLAND, 1991—2016

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The authors analyze the NATO relations with Sweden and Finland, the neutral states of Northern Europe, in 1991—2016. The authors emphasize that Finland and Sweden have always been of high strategic importance for NATO and the EU defence policy. The authors investigate the main areas of cooperation between NATO and the non-aligned countries of Northern Europe and describe the prerequisites, prospects and possible consequences of Sweden and Finland’s membership in NATO. Special attention is paid to the evolution of the policy of neutrality of these countries before and after their accession to the European Union. The aim of this research is to assess the evolution of political views of Sweden and Finland on the development and implementation of the policy of neutrality in 1991—2016. To achieve this goal, the authors use comparative analysis to explore the stance of the governments of Sweden and Finland on the cooperation with NATO or membership in it. The authors reflect on the concepts of “Finlandization”, “freedom from alliances”, “neutrality” and “secret alliance”, which are often used in academic descriptions of the evolution of the position of both countries towards NATO. The authors hold that Finland and Sweden may become NATO members only if there is a direct threat to their security. Russian politics in the region may provoke them to take such a step. A referendum on joining the bloc seems to be highly unlikely; even though after the Crimean events, the number of NATO supporters in the two countries increased, they remained a minority. The authors conclude that both countries are involved in a “creeping” integration with NATO after they have become actors of the EU defence strategy. There is a minimum probability of Sweden and Finland becoming full members of the Alliance. However, the traditional policy of neutrality of both countries is often compromised, particularly towards Russia.

Keywords: neutrality, Finlandization, preventive diplomacy, NATO, EU

Introduction

Sweden and Finland have been playing a special role in complex interaction mechanism between NATO and neutral states. Both countries hold an important military and strategic position. Sweden controls the major part of the Baltic sea western coast, connecting Norway and Denmark, and together with the latter controlling the exit from the Baltic to the Northern sea. Finland, spanning 1265 km from south to north along the Russian border, controls the northern shore of the Gulf of Finland. While remaining outside the NATO structures, both states interact with the Alliance actively on various issues, e.g. military and intelligence information exchange, peacekeeping operations, including enterprises under the UN auspices. In this way the two countries contribute to NATO activities, particularly those held along the northern frontiers of Russia, despite being formally free from any alliances.

The purpose of the paper is to reveal grounds for Sweden and Finland to join NATO that emerged between 1991 and 2016. The issue first appeared on the agenda after their acceptance to the EU and admission of the nearby Baltic states to NATO in 2004. As the result of these two events, Sweden and Finland have tight contacts with their neighbors who are included into the Alliance, follow the EU joint security and foreign policy and are involved in the united European defense area for the US and Canadian allies.

Methodology and methods

“The main condition for preserving stability in Northern Europe is Swedish and Finnish non-alignment to military alliances” is a dominating thesis in Russian political thought and historiography towards the issue [1, p. 71]. This persistent opinion makes an independent survey of the non-alignment policy largely impossible. Over the last few years, especially after Crimea merged into Russia, numerous critical articles have appeared regarding the tentative admission of Sweden and Finland to NATO. Nonetheless, the issue remains a subject for debate and a topic for academic inquiry, as demonstrated by the present research.

Sweden and Finland have a long history of relations with Russia in various forms. Of these, the military factor remained one of the crucial ones, as it was

connected with geopolitical interests of Sweden, Russia, and, as of 1917, Finland, as well as with interests of third parties, such as France, Great Britain, Germany, and the USA. It created tension in Europe and brought the situation closer to a conflict. As a result of its struggle with Russia, Denmark and Prussia, by 1721 Sweden had lost both its dominating role and unilateral control over the Baltic sea. Stockholm had ceased to be one of the key players in the Baltic area in 1808 with the loss of Finland and lost even more of its power in 1905, when the Swedish-Norwegian union collapsed.

Sweden remained neutral during both World wars with significant concessions in favor of Germany, especially when it came to trade in strategic minerals and military transit via Lapland, which made Swedish foreign policy a subject to criticism both within the country and abroad. After the attempt to create a Scandinavian Defense Union under the Swedish leadership with the participation of Norway and Denmark failed in late 1940-s due to the admission of Oslo and Copenhagen into NATO, the country became formally “free of alliances”. This concept and its synonym, “neutrality”, are widely used in both academic and political discussions to describe Swedish relation towards military blocs. To maintain its independent status and fighting capacity of its armed forces, the country invested heavily into its military production facilities during the Cold War [2]. De facto, Sweden assisted NATO in intelligence information exchange in the Baltic sea area and facilitated defense cooperation with Denmark and Norway. After the end of the Cold War Stockholm cut its armed forces and military production, and enhanced cooperation with NATO within the information exchange and the Partnership for Peace program.

After gaining its sovereignty in 1917 and until 1947, Finland had a long-lasting conflict with the USSR due to territorial tensions, which included a threat to Leningrad from Finnish invasion and a possibility of closing the entrance to Gulf of Finland for Soviet vessels. Both countries developed a hostile image of its neighbor. These tensions led to the “Winter war” of the 1939-1940 and to Finnish participation in the war against the USSR on German side in 1941—1944. The contemporary Russian-Finnish border was established as the outcome of these conflicts. Finland was also to fulfill a number of obligations towards the Soviet Union, including those in the sphere of defense policy. Thus, Soviet troops were now stationed in Porkkala-Udd military base, a situation which lasted until 1956, when the peninsula once became Finnish sovereign territory and the troops had to leave the area. The ensuing military and defense cooperation between the two countries took the form of information exchange and Soviet military exports to Finland. Bilateral trade experienced a rapid growth, having at one point reached 25% of all Finnish foreign trade [3], with bilateral cooperation in education, culture, youth exchange and twin cities programs [4] in tow. All of those forms of cooperation continued to grow after 1991, now with the Russian Federation. Experts and politicians have dubbed such a model of interaction “Finlandization”, thus defining a country formally free of alliances that gets sucked into cooperation with a superpower — leader of an opposing bloc.
While this topic is studied from a variety of perspectives, it remains highly politicized. Since 1945 until now, the “freedom of alliances” of Sweden and Finland would usually be studied separately due to differences in historical experience of these countries and the peculiarities of their cooperation with superpowers. Thus, Sweden was known for its tight cooperation with Germany during the Second World War, and Finland had vast political obligations to one of the superpowers and extensive economic cooperation with it, now referred to as “finlandization”. Comparative studies of the two counties in this respect are a recent trend.

At present we can consider two approaches as prevailing towards the subject. The first one, presented by M. Holmström in his book *Hidden Alliance: secret bounds between Sweden and NATO* [20], defines the Swedish bounds with the Alliance as a high level of integration into NATO structures even without formal membership. K. Korhonen uses the same approach towards Finland in his work *A Transfer Treaty. In This Way Finland is Being Dragged* [15], so do I. Novikova and N. Mezhevich [19]. The similarity is that all of them recognize the status of both countries as a “creeping integration” into NATO, reaching its highest possible level outside the formal membership in the bloc. The second approach stresses regional cooperation between two countries and their neighbors in defense policy regardless of the bloc affiliation, while maintaining that both countries preserve the “freedom of alliances”. The advocates of this approach include G. Åselius, H. Ojanen, J. Tarkka, T. Forsberg [2; 8; 13; 18]. These studies can also be framed as security culture analysis in defense strategy, connections with the certain partners, or regionalism in international policy of a country. The proponents of this approach often position their work as analysis applicable for adjusting the governmental course in the case. U. Möller and U. Bjergeld refer to “post-neutrality” concept as an evolving one, including a dynamic formal non-alignment strategy that is a subject to regular ‘revisits’ for political and ideological purposes [16].

**Results and discussion**

Discussions on the alignment of Sweden and Finland to NATO began in the early 1990s. After the reunification of Germany in autumn of 1990, the Finnish government announced that the Peace Treaty articles of 1947 concerning obligations of the country to repel German aggression lost their force. In addition, Finland now considered itself free from military and technical restrictions stipulated by the Treaty. On January, 20 1992\(^2\) the Russian Federation and Finland signed an agreement replacing the former Treaty on friendship, cooperation and mutual assistance between the Union of Soviet Socialist Republics and the Republic of Finland originally signed on April 6, 1948 [5]. In accordance with the new agreement, Finland was free to enter any political or military alliance with a third party [6, p. 206]. The “third party” war revealed shortly afterwards: in his speech in

May of 1992, the Finnish Prime Minister Esko Aho emphasized the historical significance of NATO as a security guarantor for Denmark and Norway [8], which signaled the policy change towards NATO from Finnish perspective.

Still, both Finland and Sweden maintain their official military non-alignment policies, which is explained, first of all, by geopolitical factors, namely by territorial proximity to Russia and, accordingly, by heightened sensitivity to Russian take on the matter5.

The fact that NATO aims included crisis management and partnership development with other countries made an impact to the approaches of Sweden and Finland towards their relations with the bloc. It correlated with the foreign policy objectives in both countries, which started to implement preventive diplomacy approach. In 1992 both countries became observers at the North Atlantic Cooperation Council (NACC), which was later transformed into the Euro-Atlantic Partnership Council (EAPC). They also joined the Partnership for Peace (PfP) program4. Both Finland and Sweden participated in NATO operation aimed to implement the Dayton Agreements on Bosnia, and later in the Stabilization Force (SFOR)5. Moreover, both countries contributed to including Russia and the Baltic States in activities within the “Partnership for Peace” framework. Being more interested in stable relations with its Eastern neighbor, Finland, in contrast to Sweden, has been more active in lobbying Russia’s interests, in particular within the framework of the above-mentioned program.

In Sweden, the need to revise the basic principles of foreign policy in the new international relations became a subject of active discussion in 1991, when Carl Bildt government came into power. The question of maintaining traditional neutrality in the foreign policy appeared on the agenda. Carl Bildt and leaders of the Christian Democratic party (Kristdemokraterna) and People’s liberal party (Folkpartiet — liberalerna) believed that the country should abandon its neutral status [9]. Anders Björck, the then Minister of Defense, argued that the country needed this to maintain the appropriate level of national security in the face of the planned cuts to military spending6.

6 Trukhachev, V. NATO gotovit neozhidannyi “udar” po Evrope [NATO’s surprise “attack” on Europe is in the works]. URL: https://www.pravda.ru/world/europe/european/22-08-2008/280291-nato-0/ (access date: 26.09.2018) (in Russ.).
7 According to Dayton agreements NATO troops (Implementation Force — IFOR) entered Bosnia and Herzegovina on November 21, 1995. The SFOR mission emerged according to the UN Security Council Resolution No. 1088 on December 12, 1996 as IFOR continuation.
The thesis, that the country would “preserve the non-alignment principle towards military alliances in order to maintain the neutrality in case of war” was a compromise achieved within the Swedish political elites after this discussion of the first half of the 1990s. In the end of the 1995 the Swedish Parliament reinstated the two principles of the country’s foreign policy — maintaining both neutrality and high defense capability. Anna Lindh, the new Minister of Foreign Affairs of Sweden noted during her speech at the Swedish Institute of International Relations in 1998 that neutrality still contributed to security in the Baltic Sea region [21, p. 180-181].

Still, the Swedish army actively cooperates with NATO by participating in military exercises and joint operations. The economic argument is still on the agenda, too: since the Swedish army requires significant annual funding, amounting to 1.7% of the country’s GDP, the NATO membership is often seen by the Swedish politicians as an opportunity to cut national defense expenditures [10].

The special role of Sweden in relations with NATO is also manifested in the sub-regional Nordic Defense Cooperation program established in 2009 that includes Sweden, Finland and three NATO members: Denmark, Iceland and Norway. While outside NATO, Sweden has a position similar to the Alliance making sure there is a unity of defense policy among the Nordic Defense Cooperation countries. In 2014, Sweden denounced Crimea’s merging into Russia and joined anti-Russian sanctions. In April 2014, Sweden, Norway, Finland, Denmark and Iceland signed an agreement on enforcing their military cooperation. Some analysts have already dubbed this alliance an “Atlantic mini-NATO”. Sweden also restored its military presence on Gotland. Politicians link the decision on the deployment of troops to the Ukrainian crisis and the Swedish position on the Crimean issue. In May 2016, Riksdag ratified a cooperation treaty, allowing the NATO contingent to participate in military exercises on Swedish territory. Additionally, in case of war, Sweden is to be ready to host the NATO troops.

The Ukrainian crisis became a subject to reflection in the strategic document of the Moderate Coalition Party (Moderaterna), in the part dealing with defense policy. “Russian aggression in the Ukraine alongside with growing military activities of Russia has led to growth of tensions and military conflict risks. Sweden can be a subject to involvement into them”, reads the document. It further em-

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8 During the period of 2005 to 2016, there were no regular military units of the Swedish army on Gotland. In September 2016, military exercises of 150 motorized infantry company were held there; the company, upon completion of the exercises, was ordered to remain on Gotland on a permanent basis.

phasizes that “contemporary threats towards global security appear to be more complex than before, which justifies the unification of efforts and cooperation development with other countries and organizations, including NATO”\textsuperscript{10}.

The position of the ruling Social Democratic party on the issue of the “freedom of alliances” (\textit{Alliansfrihet})\textsuperscript{11} is that Sweden should preserve cooperation with NATO within certain programs, in peace-keeping operations sanctioned by the UN, in struggle against international terrorism, or in defense cooperation in the Baltic sea area. Social democrats state that the country should avoid participation in military operations held without the UN sanction.

The third most influential party in the country (17.6\% in 2018 General elections), the conservative nationalist Swedish Democrats (\textit{Sverigedemokraterna}), advocates for the increase of military expenses up to 2.5\% of the GDP and enforcing the Armed forces without NATO membership. The party maintains that NATO membership is an unprofitable affair since Sweden can be subject to involvement into war on the side of the Alliance. Furthermore, “the majority of Swedish people will protest against risking the lives of their soldiers to forward the interests of foreign state”. What generally remains supported is the cooperation with the Baltic sea area states, and the Partnership for Peace program\textsuperscript{12}. The “Russian threat” is a subject to discussion in the party’s strategic documents as one of the key determiners of foreign policy.

To sum up, three major political parties of Sweden do not have a shared position on Swedish “freedom of alliances”. The Moderates rely heavily on the “Russian threat”, Social democrats and Swedish democrats justify their position through calls to participation in peace-keeping missions and answering global threats. The parties either avoid mentioning NATO membership, or claim it is irrelevant for national interests. Yet the NATO membership issue remains one of the those having the most potential to provoke a breakup in the Swedish political elite and to become a detonator to a more general political crisis.

NATO membership advocates in Finland remain a minority, though disputes on the issue have been taking place for a long time. NATO expansion to the east launched in the 1990s after the unification of Germany and the fall of communist regimes in Central and Eastern Europe stimulated this discussion. Max Jakobson, a well-known Finnish diplomat and political observer was one of the ideologists for the country’s accession to the Alliance. He believed that the admission of Poland, Czech Republic and Hungary to NATO in 1999 had shifted the balance of forces in Europe, and reinstated the need for reconsideration of Swedish and

\textsuperscript{10} Moderaterna. Den nya svenska Modellen. URL: https://moderaterna.se/forsvar (access date: 01.12.2018).

\textsuperscript{11} The concept is implemented in documents and materials of Social Democratic party towards neutrality. E.g.: Socialdemokraterna. Alliansfrihet (21.02.2018). URL: https://www.socialdemokraterna.se/var-politik/a-till-o/Alliansfrihet/ (access date: 30.11.2018)

\textsuperscript{12} Sverigedemokraterna. Forsvars-politik. URL: https://sd.se/vad-vi-vill/forsvars-politik/ (access date: 02.12.2018).
Finnish neutrality\textsuperscript{13}. At the same time, he noted that it is a shared fear in Finland that acceptance of the Baltic states into NATO would undermine stability in Northern Europe, and, thus, the relations with Russia. According to Max Jakobson, the position of Sweden and Finland regarding their possible accession to the Alliance will not change the intentions of Russia in maintaining of its dominance in the Baltic region. Thus, there is no sense to connect the position of Finland with the perceived reaction of a country whose actions the Finnish government is unable to influence. He further argued that “if NATO were to remain the guarantor of European security, Finland and Sweden with their neutral status could turn out to be in the position of secondary players in the decision-making process regarding European security”\textsuperscript{14}.

In Finland, the official course of the government remains the same despite the debate on tentative NATO membership: Finland does not join the existing military blocs, NATO membership is seen as a very distant perspective for the future\textsuperscript{15}. The 1995 government report, *Security in the Changing World*, contained a statement that within all changes happening in Europe, “Finland would continue to pursue a non-alignment policy towards military alliances and that Finland managed to create a world-trusted reliable defense potential on its own”\textsuperscript{16}. The Finnish military command has always emphasized that the independent defense capability of the country is the only reliable guarantor of avoiding war in case of any insignificant crisis\textsuperscript{17}. According to many Finnish politicians, accession to NATO is not an absolute necessity, as for Finland there is no need in any security guarantees from the bloc. On the contrary, accession to the NATO would significantly change the situation and create a threat to the stability in the region.

Inside Finland, there is a small group of politicians who support the idea of joining NATO. Originally, this group mainly consisted of members of the “Young Finns” minority party (*Nuorsuomalaiset*) led by Ristö Penttilä. In addition, the


\textsuperscript{16} In: Mikhailov, D. Politika nacionalnoi bezopasnosti Severnykh stran posle okonchanija Holodnoi Voiny: problem I perspektivi Severnogo sostrudnichestva (National security policies of the Nordic Countries after the Cold War: issues and perspectives of Northern cooperation) URL: http://old.nasledie.ru/politvne/18_10/article.php?art=29 (access date: 12.03.2020) (in Russ.).

\textsuperscript{17} Malyshkin, A. RF v kolte “druzej”: Shvecija i Finlandija zadumalis o chlenstve v NATO [“Encircled” by friends: Sweden and Finland are thinking of joining NATO] URL: https://ria.ru/world/20140903/1022627620.html (access date: 26.09.2018) (in Russ.).
former head of the EU Military Committee and Defense Minister of Finland, General Gustav Hägglund, actively supported the idea of joining NATO. In 2004, he presented the idea of turning the common foreign policy of the EU into a “European pillar” of NATO. While the “American pillar of NATO”, according to Hägglund, was to be engaged in global struggle against terrorism, the “European pillar” was to ensure the regional crisis management\(^\text{18}\) \cite{Sierla2007}. Finnish researcher Christen Pursiainen believes that admission of the country to NATO is necessary since Finland indirectly supports the idea that Russia and NATO are opponents. According to Pursiainen, NATO membership will give the country new opportunities for further integration of Russia into Western institutions: being outside NATO, Finland also remains outside the development of relations between NATO and Russia and therefore cannot influence significant number of factors directly related to its security \cite{Pursiainen2007, p. 27}. However, the official position of Helsinki is that of non-alignment with military alliances.

A well-known Finnish politician, one of the candidates during presidential elections in 2018, Matti Vanhanen, welcomed the partnership and discussion on closer cooperation between Finland and NATO, but emphasized that it would not be a step towards the membership in the alliance\(^\text{19}\). Finnish President Saule Niinistö and former Minister of Foreign Affairs Alexander Stubb are both actively promoting the NATO membership idea. In his interview in 2014, Stubb stated that he was the one who personally supported membership of the country in NATO, but did not think that it was the moment for it. The fact that only 25% of Finns approved this idea was very important\(^\text{20}\). Finnish President Saule Niinistö believes that the early 1990s seemed to be a good time for joining NATO, but the opportunity has since passed\(^\text{21}\). At the same time, Erkki Tuomioja, Minister of Foreign Affairs between 2011 and 2015 gave this evasive assessment of the country’s possible NATO membership: “according to the Government official strategy, Finland is not a member of any military alliance, but it cooperates with NATO and maintains the possibility of applying for membership\(^\text{22}\).

The Finnish advocates of NATO membership put forward a number of arguments, the first of which is national security. According to them, even under the threat of losing some of its sovereignty, the country should seek protection


\(^{19}\) Ibid.


from the more powerful political player. To this end, a number of Finns believe terrorism and imperial ambitions of Russia to be the main threats to international security [12; 13]. The second argument stipulates that joining NATO can raise the status and significance of Finland. Conversely, the authors of the monograph *Northern Europe: Region of New Development* believe that Finland and Sweden ascension into NATO can significantly reduce the ability of these countries to play significant role in the European Union. The present system of regional and sub-regional cooperation (above all, the cooperation with Russia) may also suffer as a result of such development [14, p. 418—440].

The political establishment of Finland also has critics of the country’s tentative NATO membership. They believe that it will turn Finland into a convenient base for Alliance’s military infrastructure close to the Russian border. Many Finnish politicians maintain that NATO wants its non-member partners to more actively participate in crisis management and decision-making programs so that the Alliance could have more trained military specialists in complicated missions. The former Finnish ambassador in the Russian Federation, Heikki Talvitie, believes that the country’s admission to NATO would not lead to security improvement, because Western countries are not really interested in the defense of the Finnish territory. The size of the hypothetical help from the Alliance, as well as preparedness of other member states to provide it, are subjects to doubts. Therefore, it would be unreasonable for Finland to start a confrontation with Russia, having such an illusory security guarantees from NATO. While not doubting the long-term benefits of joining the Alliance, Heikki Talvitie argued against this process speeding up, since it would spell complications on the border with Russia

In the meantime, significant efforts have been made to involve Finland in the North Atlantic Alliance [15]: the armed forces and weapon systems of the country have been changed according to NATO standards, while practical interaction skills of the troops have been developed during joint military exercises and in the framework of the Partnership for Peace program. In 2013, wishing to emphasize good relations with the NATO, Finland ordered various types of missiles and additional equipment from the USA for a total of $277 million. Admiral Juhani Kaskeala said that the Finnish army was fully ready to join NATO; this statement, made by the former commander of the Finnish army in 2001–2009 confirms that there are no guarantees that “freedom of alliances” means eternal neutrality [6; 16].

In their foreign and defense policies, both countries wish to maintain cooperation with NATO in order to keep stability in the Baltic region: “NATO is the only international organization which is capable of holding the military crisis

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management and handling peacekeeping operations”, and “NATO expansion has increased the level of security of the territories adjacent to Finland” [17, p. 28]. Many Swedish politicians emphasize that not a single major European state should unilaterally dominate in Northern Europe, and the presence of the United States is thus seen as a counterbalance to such an occurrence. Furthermore, both countries welcome various “non-military” cooperation with NATO: e.g., in minimizing environmental footprint of military activities, conducting peacekeeping operations, or in responding to crises [10]. The Partnership for Peace program is of particular importance for Finland and Sweden, since the central part of cooperation is connected with the increasing interoperability of the participating armed forces for improved success of joint operations25. It is important to emphasize that operations under the Alliance command with the participation of partner countries are recognized as primary response to the possible European crises within the foreign policy doctrines of both Nordic countries under consideration, although the EU with its Common Foreign and Security Policy (CFSP) is also seen an important tool in this regard.

In the early 2000s, Swedish and Finnish support for transatlantic solidarity increased, especially after the events of September 11, 2001. Finnish and Swedish foreign ministers declared that “if an EU member state were under a terrorist attack, both Finland and Sweden would undoubtedly provide appropriate assistance”. Both countries made steps in this direction by proposing improvements in the functions of the Council of the Euro-Atlantic Partnership in order to address this threat. Neither Helsinki nor Stockholm consider an alternative to NATO when it comes to the demands of war on terrorism.

What is certain is that Finland and Sweden will only join NATO if they feel a real threat. In the early 1990s Swedish Foreign Minister Margaretha af Ugglas stressed that non-alignment policy was only a means, but not an end in itself26. Yet this is the furthest the Swedish government has gone in its official statements to date. Despite the repeated declarations being made by both conservatives (from the Moderate Coalition Party, Moderaterna) and liberals (Liberalerna) about the necessity to join NATO, the government firmly follows its formal line.

The Social Democrat Erkki Tuomioja, who from 2011 to 2015 served as the Minister of Foreign Affairs of Finland, believes that his country should consider the possibility of closer military cooperation with Sweden. The integration of


26 Kantokoski, O. Sotrudnichestvo stran Skandinavii i Finlandii v sfere borbi s mezhdunarodnim terrorismom [Cooperation of Scandinavian countries and Finland in the war on international terrorism]. URL: http://www.kunstkamera.ru/lib/rubrikator/03/03_05/978-5-88451-162-6/ (access date: 26.09.2018) (in Russ.)

27 Poplavsky, A. Formirovanie politiki bezopasnosti Norvegii i Shveции v 1990-e g.g. [Development of Norway’s and Sweden’s security policies in the 1990s]. URL: http://www.evoluto.info/content/view/907/215/ (access date: 26.09.2018) (in Russ.)
The image of Russian foreign policy as “hostile” or “aggressive” may serve as a trigger to such a process. For example, the Commander-in-Chief of Swedish armed forces, General Michael Bydén directly stated that the possibility of conflict between NATO and Russia had rapidly grown. During his visit to Lithuania in February 2016, he emphasized that “the arrival of NATO military equipment to the region during the Russian demonstration of willingness to use military means to pursue its political goals” makes conflict and provocations more likely.

At the moment the Swedish Ministry of Defense is studying legal implications of signing such an agreement with Finland. The former Prime Minister of Finland, Matti Vanhanen, is confident that the creation of such a union can serve as the main component for further development of the joint security apparatus. He supports the point of view that it is essential to be very careful in matters of war and peace. Finland, says Matti Vanhanen, can never be sure that, if necessary, its neighbor’s resources will be at Finnish disposal especially if cooperation with Sweden takes place on a voluntary basis. Vanhanen is also convinced that a defense alliance between the two countries cannot even be possible unless the two states have a shared foreign policy. Only in this case a true union between two national states is feasible, says he [18, p. 1177]. A bilateral treaty and a defensive alliance, in his opinion, would allow to overcome various uncertainties of the future, as well as to outline the framework for using common resources.

The Chairman of the Defense Commission of the Swedish Parliament, Allan Widman, believes that the government of Sweden, first of all, needs to identify long-term prospects for Swedish-Finnish cooperation. The Liberal Party (Liberalerna), of which Allan Widman is a member, generally supports the creation of a military alliance, which is considered to be a step towards a possible NATO membership. The Moderate Coalition Party (Moderaterna) support this position, urging the government to create a roadmap for Sweden to join NATO. The Moderates believe that the amendments to the NATO-Sweden Host Nation Support

29 The Commander-in-Chief of the Swedish armed forces (Swedish: Överbefälhavaren) — is a highest ranking military officer in Sweden, or Swedish Chief of Defense in NATO’s terminology.
30 In: Bondina, V. Ibid.
31 In: Malyshkin, A. Ibid.
agreement (2014) to be proposed today still leave the kingdom isolated, unprotected and without any guarantees that the Alliance will help in case of war. This treaty already allows NATO to send troops across the territory of Sweden, but only in peacetime. The document also allows for the participation of NATO forces in military exercises within the territory of Sweden. At the moment, some changes to this document, for example those allowing the Alliance troops to move across the country not only in peacetime but also in the case a military conflict, are being considered by the Swedish politicians.

However, two-thirds of the citizens of both states believe that military issues should be solved independently from the other country. At the same time, approximately every fourth of the citizens is in favor of a common defense policy of the two states. According to Swedish experts, the reason for such beliefs in their country is not the distrust for its neighbor, but a generally shared skepticism towards military blocs. Apparently, the same can be said about the Finns.

This conclusion is confirmed indirectly by the attitude towards NATO. More than half of the Finnish citizens participating in the survey about the issue are convinced that cooperation with NATO should not be extended. In Sweden, approximately the same number of citizens express the same views. In both countries, about 40% of those surveyed are in favor of deepening cooperation with NATO. Sociologists believe that the number of supporters of NATO membership has increased after the Crimea merged into Russia, but people holding such views still remain a minority. The voices of the “Atlanticists” appear only at the level of certain parties or as personal opinions. For instance, Swedish liberals from the Center Party (Centerpartiet) propose to reconsider the neutral status of the country. However, as noted above, the political elites of both countries continue to demonstrate restraint in this matter.

The balance in Northern Europe in general and in the Baltic region in particular will change if Finland and Sweden, with their highly developed military potential, join NATO. The line of contact between Russia and NATO member states will run across the entire northern part of Europe from the Barents sea to Kaliningrad and Pskov. Russia will have to develop different scenarios for carrying out of its policies towards the Baltic sea states and the North Atlantic Alliance, to consider its options for resolving the issue of guarantees of its own security, including mutually beneficial conditions for the countries of the region. Regular mutual state visits of the presidents of Russia and Finland prove that the process of forming of a new political course is underway. Considering the Baltic states admission to NATO and emergence of NATO troops in close proximity to

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32 In: Malyshkin, A. Ibid.
33 In: Yermolaeva, N. Ibid.
St. Petersburg, the Finnish factor is to become the decisive one for security in the North-Western Russian frontiers. It is also crucial to maintain free exit from the Gulf of Finland, unimpeded sea communication with the Kaliningrad region and the Atlantic Ocean, as well as the possibility for laying of gas mains under the Baltic Sea.

When asked about the possibility of Finland’s joining NATO, the Russian President Vladimir Putin replied, “This issue comes up so often in various political and public circles in Finland. You are well aware of our attitude towards the expansion of military-political blocs in general and to that of the North Atlantic Alliance in particular. We do not think it will help to enhance security in the world. Finland is a full member of the Western community of countries and a member of the European Union. Bringing NATO’s military infrastructure closer to Russian borders by expanding it into Finnish territory will not improve relations between our countries, but what is more important is that today’s threats are mostly in the area of fighting terrorism, drugs trafficking, human trafficking, organized crime, proliferation of weapons of mass destruction and the means of their delivery. We can only resolve these problems by working together and outside blocs. As far as I know, the Finnish leadership shares this view. Still, the final choice is up to the Finnish people and leadership”36.

Former Prime Minister of Finland, and a candidate for presidential elections of 2018, Matti Vanhanen, believes that joining NATO would be a “genuine choice” for Finland, despite the fact that Russian risks would be counted in37. In his opinion, Finland’s interest in NATO has been spiked by Russia’s actions and subsequent aggressive behavior in the region. Timo Soini, the current Minister for Foreign Affairs of Finland, emphasizes the importance of common security and defense policy of the EU, but at the same time, in his opinion, the very possibility of his country joining NATO should serve as a background for that38.

**Conclusion**

The discussion on the possibility of admission of Finland and Sweden to NATO faced the following issues in the political establishments of the two countries:

1) Stockholm and Helsinki strategy in pursuing contacts with the Alliance: both countries have tight connections with NATO through programs, cooperation

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37 In: Bondina, V. Ibid.

boards, joint operations and attempts to participate in both executive and decision-making institutions. The fight against terrorism appears to be the corner stone of these efforts. Despite that, the NATO membership on its own is not considered acceptable, albeit in the long term. Both countries make bilateral cooperation in defense a higher priority. Yet, Finnish political leaders have recently expressed an opinion that NATO membership is a “necessary”, but “missed” opportunity. Sweden, on the other hand, follows the “freedom of alliances” principle strictly. Cooperation within the EU defense structures appears to be a priority for both countries, despite its role as a catalyst for “creeping integration” into NATO;

2) Main advocates and opponents in governments and political parties: in general, right-centric and liberal parties have shown themselves as supportive of NATO membership. In Sweden these are the Moderate-coalitionist party (Moderaterna), the Center party (Centerpartiet) and the Liberal party (Liberalerna); in Finland it is the National coalition party. Social democrats and nationalist parties oppose tentative NATO membership, positioning it as an additional obligation to their countries with a minimal coverage of possible expenses;

3) Positions of military command and military potential: both countries had completed rearmament and restructuring of their Armed forces according to the NATO standards. Military command of both countries in general claims the maximum level of preparedness to NATO admission. Here, the difference between Sweden and Finland lies in military industry potential: while Sweden is able to cover the needs of its Armed forces with its own facilities and minimal arms import, Finland depends on military imports. The position of Stockholm is connected to its military industry extension and positioning the country as independent from major international players. For Finland, on the contrary, the position of Russia is a factor the Finnish military command and government need to consider as a sensitive one, despite their active participation in NATO initiatives and programs;

4) Tentative referendum on NATO membership appears to indicate political defeat of the Alliance advocates. It is based on the sociological surveys, and on the General elections results: NATO advocates from the Moderate Party (Moderaterna) lost a majority in Riksdag, while the Swedish Democrats turned out to become the third party in the parliament due to the protest voting. These factors indicate grounds for political breakup in the Swedish elites;

5) General perspective on NATO membership in both countries: in both cases it is presented as a “long-lasting perspective”. Instead of underlining the military power of the Alliance, both Stockholm and Helsinki put an emphasis on crisis management and preventive diplomacy, as accompanied by EU defense initiatives. The issues of the de-facto “freedom of alliances” have moved to the background, making the “creeping integration” into NATO structures possible. So the formal “freedom of alliances” of either Sweden or Finland, especially when it comes to relationships with Russia, seems illusory from that perspective.
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Given the unique diversity of Russian regions, regional studies are becoming particularly important for ensuring the stability and development of Russia. There is an extensive body of literature on the economic and social characteristics of Russian regions, their types and ranking whereas the study of collective consciousness requires further attention. It is the collective consciousness that shapes human activity, the results of which largely determine the development of countries and their regions. The authors study the spiritual sphere of regions, the inner world of people, who are human capital. This study is particularly important in relation to Russian youth, who have become one of the most active social groups. The public demand for the analysis of collective consciousness has been constantly growing. The authors argue that there are regional differences in collective consciousness, which are manifested most prominently in the comparison of eastern and western regions. The growing intensity of interaction between Europe and Asia makes the comparison of the western and eastern border regions of Russia particularly important from the geopolitical point of view. The authors employ the principles of an emerging scientific direction, border regional studies, for a comparative analysis of the collective consciousness of students from two border regions located on the Russia-European Union and Russia-China borders. The authors present the results of the survey they conducted in the Immanuel Kant Baltic Federal University (Kaliningrad) and Amur State University (Blagoveshchensk). They examine the sociological phenomenon of ‘regional consciousness’ and substantiate the criteria for selecting the objects of research. It is the first time in sociology that logistic regression models reflecting the main characteristics of regional consciousness have been built. The article aims to confirm the multiplicity of types of regional consciousness and to demonstrate that in the socially homogeneous group, Russian graduate students, there are still regional differences even in the generally similar assessments of the ongoing social processes.

Keywords:
regional studies, regional consciousness, border regions, active social groups, sociological surveys, logit models, asymmetry

Regional consciousness

In Russian public discourse, the belief that we, the country’s nationals, do not know our homeland well has become commonplace [1; 2]. This statement, which, among other things, gives Russian social scientists some criticism, is not entirely new. Naturally, there is an objective reason for it — Russia’s constituent regions are extremely diverse in geographical, economic, social, demographic, historical, cultural, ethnic, confessional, political, administrative, legal, and environmental terms. Uneven post-Soviet development has made these differences even more visible. This holds true especially for regional disparities in economic prosperity. According to the World Bank, Russia has the highest level of regional inequality among large developing countries. This recent research area owes its immense popularity to societal concerns about sustainability and national socio-economic development.

Russia’s regional diversity is reflected in the mass consciousness of regional populations, which, in its turn, affects all areas of social life, including the one that is taking a new urgency today, i.e. environmental management. Studying individual, group, and public consciousness is important both theoretically and practically since human actions are a product of thoughts and feelings. This may well apply to regional consciousness. It is a form of perception of group cohesion rooted in the feeling of territorial integrity. The territorial integrity component gives regional consciousness a political slant.

An integrated part of its country, the region constitutes an independent area of knowledge, and regional consciousness, which is part of national public consciousness, constitutes one too.

One of the basic concepts formulated by founders of the sociology of consciousness is as follows: the condition of mass consciousness can be described as one of the forms only at a very concrete level and in view of distinctive characteristics of the agent of mass consciousness [3—5]. The Russian theoretician of the sociology of mass consciousness, Boris Grushin, introduced in his authoritative work Mass Consciousness: an attempt at a definition and problems of research the concept of plurality of mass consciousness among different parts of society. He also highlighted the need to study individual carriers of mass consciousness [6]. Later on, individuals have been the focus of both Russian [7—10] and international [10—12] research into mass consciousness. The more concrete the object, the more operational the study is.

Historically rooted regional consciousness is one of the most stable forms of the practical existence of collective consciousness. Regional consciousness embodies collective consciousness in its very concrete state — that in which it reflects day-to-day life, the most permanent part of human experience associated with a special form of encountering and perceiving a given environment. In this sense, regional consciousness is closely linked to territorial identity, the meaning of which, as practice shows, has been increasing. Regional context affects the
consciousness of people living in a certain region. This circumstance takes on special significance in the process of regionalisation, which goes hand in hand with globalisation.

An important global process is the growing intensity of inter-civilisational, cross-cultural, and intergovernmental cooperation. It gives an ever more pivotal role to border regions, in which these collaborations take place. This holds especially for Russia, which has the longest national border in the world and is in contact with a vast number of civilisations, cultures, and states. Out of 85 Russian regions, 46 are border territories. Alongside general regional differences, there are border-specific characteristics. The border region is a remote periphery, an area with poorly developed industrial production, usually as a result of reluctance to erect large manufacturing facilities near borders. All this explains why Russian borderlands are so sparsely populated and why their economic development options are so few.

A principal characteristic of border regions is their ambivalent status. On the one hand, they are part of the distant provinces. On the other, they are politically visible centres and junctions where two neighbouring countries, two neighbouring societies, interact to create a third, intermediate border society, which is the focus of a new area of regional studies — border region studies. To explore regional consciousness of border area populations, we employed the concept of social mesosystems, which we proposed [13, p. 22—23] and successfully tested [14] in our earlier works.

Not only is the border an international legal institution that facilitates cooperation between neighbouring countries and ensures the inviolability of territorial integrity, but it is an object of activities undertaken by people living in the border districts that perform the mentioned functions. In the consciousness of the border district population, the border appears as an important symbolic sign of national affiliation [15]. The idiosyncrasy of the borderland mindset has been described in the literature. For example, as early as the beginning of the 20th century, Goerg Simmel cogently noted: ‘[t]he boundary is not a spatial fact with sociological consequences, but a sociological fact that forms itself spatially’ [16, p. 143].

Studies into the mass consciousness and day-to-day behaviour of people living in border areas reveal how the space of cross-cultural dialogue emerges, how its elements function, what rules determine the behaviour strategies of the local population, what role the border has in these processes, and how border regions differ in these parameters.

An attempt to explore the above was made in mid-2018. At the time, we carried out a comparative analysis of the mass consciousness of final-year university students from the Russian–EU and Russian–Chinese borderlands. Students were selected as the most digitally skilled and spatially dynamic homogenous social
group that is active across all the spheres of social life because all social processes, either directly or indirectly, affect their life, social standing, and image of the future. In their turn, society and authorities increasingly view young people as the most promising age group that has the greatest innovation potential and can solve the problems of Russia’s socio-economic development [17; 18].

Over the last decade, young people across Russia have become more politically active. This fact lends further urgency to studying this age group: the psychology of the new, post-Soviet Russian generation is attracting interest from the general public. Unlike older generations, this highly mobile social group has access to vast information. It is open to discovering new cultures. It is less geographically dependent and thus less susceptible to the ‘native soil’ ideology. All the above makes a comparative analysis of the mass consciousness of the western and eastern borderlands more objective and ‘chemically purer’. The theoretical and methodological vision should be supplemented by practical considerations: the social groups in question, the graduates of Russian universities, will soon have to solve the problems of the borderlands.

With this in mind, the following hypothesis was formulated. The socio-political consciousness of young people living in the western and eastern borderlands is largely shaped by the major forms of mass consciousness: economic, legal, historical, civilisational/cultural, and existential. To test the hypothesis, five factors were selected:

1) the economic factor: the financial situation of the respondent;
2) the legal factor, which, through the knowledge of laws, forms an idea about the functions of the state, helps to sort out priorities (a strong state vs high standards of living), and indicates the level of respondents’ legal consciousness and their political orientation (liberal or statist);
3) the historical factor: the perception of the past and the vision of the future;
4) the civilisational/cultural factor, which shows how the civilisational identity of respondents affects their beliefs and opinions;
5) the existential factor, which deals with the ideas of security and viability of the country.

The criteria used to select objects for comparison

The criteria for border region selection allowed for Russia’s bi-continental geography and its geostrategic position between two of the world’s three largest economies — the EU (22.6% of the global GDP) and China (16.5% of the global GDP). The Russian–EU (western) borderlands comprise five territories — the Murmansk, Leningrad, Pskov, and Kaliningrad regions and the Republic of Karelia. The Russian–Chinese (eastern) borderlands also include five regions: Zabaikalsky, Khabarovsk, Primorsky, Amursky, and the Jewish autonomous re-
gion. We chose for analysis the regional centres that best represented the west and the east. Key representativeness criteria were the involvement of the region in the economic and sociocultural collaborations with the neighbouring state and the proximity of the regional capital to the state border.

The Kaliningrad region has an edge over other western regions: it is situated within the EU. The Amursky region has the longest, 1250 km-long, border with China, which runs along the River Amur. Russian–Chinese collaborations are thriving throughout the length of the border. Out of 19 districts in the region, the most densely populated ones are located along the Amur.

Sandwiched between Poland and Lithuania, the Kaliningrad enclave is the epitome of Russia’s western borderlands. The sociocultural diffusion between Russia and the EU is at its highest there. Many joint ventures have been arranged in the region with Lithuanian and Polish businesses. The EU accounts for 65—70% of the territory’s international trade. There is yet another important factor — the region’s small area (15 000 km², a third of that of the Moscow region). Its capital is 37 km away from the Polish border. This proximity gives one a ‘feeling of the border’. Kaliningraders often visit Lithuania and even more often Poland. To get to mainland Russia, the region’s residents have to travel through two other countries — Lithuania and Belarus.

The Amursky region is, in its turn, the epitome of the eastern borderlands in terms of its location, past, and traditions of the neighbourhood. This holds especially for the region’s capital — Blagoveshchensk. The city is a site of intense economic, recreational, and personal contacts between Russians and the Chinese. The river, which separates Blagoveshchensk and the Chinese city of Heihe is 520m wide. In effect, these two cities form an agglomeration held together by numerous connections — administrative, educational, cultural, and commercial ties and information transfer.

The Russian–Chinese borderlands have no other city that could match Blagoveshchensk in the scope and intensity of inter-civilisational cooperation. Both the Kaliningrad and Amursky regions are perfect examples of the sociocultural phenomenon of borderlands, whereas the residents of their capital cities sufficiently represent the urban population of the Russian–EU and the Russian–Chinese borderlands.

**Regional consciousness of young people: differences between the west and the east**

To conduct a comparative analysis of mass and group consciousness in the two borderlands, 200 final-year students of Kaliningrad and Blagoveshchensk universities were surveyed in mid-2018. The sample, which is represented by the students’ faculties and specialisations, was calculated by the staff of sociology departments who carried out the survey.

Overall, differences in regional consciousness in the west and the east were clearly visible.
Although the Amursky region ranks lower than the Kaliningrad region on standards of living (52nd and 37th respectively, as of 2018), 40% of Blagoveshchensk residents and 29% of Kaliningraders see their financial situation as good. This is largely explained by the fact that when assessing their situation, the former compared themselves with the Chinese, and the latter, with more affluent Lithuanians and Poles.

There were significant differences in views on the cultural and civilisational place of Russia. In the east, 22% of respondents believe that Russia constitutes a special civilisation rather than belongs to the European one; in the west, this opinion is shared by 32%. This difference suggests that Kaliningraders have a better idea of the European civilisation.

The borderlands differ dramatically in the perception of external and internal threats to the country. In the east, 52% of respondents report fear of external threats, and 26%, of internal ones (as compared to 31 and 54% in the west). The neighbours of Kaliningrad are smaller states, whereas Blagoveshchensk borders on a large, ambitious, and rapidly developing country with a population and GDP that are ten times those of Russia.

The percentage of those who believe in the great future of their country is slightly higher in the east than it is in the west (32.5% and 29% respectively). There are, however, fewer pessimists in the east: only 11.5% believe that a great Russia is a thing of the past. In the west, 21% share this point of view. Remoteness from the centre of globalisation events makes the residents of Blagoveshchensk more optimistic about the future.

Although eastern and western respondents differed on most points, they had some similar attitudes and beliefs. There were no statistical differences in answers to legal-factor questions. In the west, 16% of respondents believed that national laws should make the state stronger; 78%, that they should work towards higher standards of living (as compared to 14.5% and 74.5% in the east).

Respondents had very similar opinions of the current socio-political processes. In the west, 38% strongly or somewhat agreed that the country was heading in the right direction; in the east, 36%. The percentage of those who strongly or somewhat disagreed was also almost the same: 53% in the west and 51% in the east.

Table 1 summarises statistics on the political ($q_{polit}$), economic ($q_{econ}$), legal ($q_{leg}$), cultural/civilisational ($q_{civ}$), historical ($q_{hist}$), and existential ($q_{exist}$) forms of consciousness.

The number of respondents who gave no answer ranged from 6% to 56% depending on the question. The only question that was not answered by more than half of respondents in both the east and the west was $q_{hist}$. Overall, there were more undecided respondents in the east regardless of the question.
Survey result statistics, %

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>West</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our country is heading in the right direction ( (q_{poli}) )</td>
<td>Strongly/somewhat agree (1)</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Strongly/somewhat disagree (2)</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>No answer (3)</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>What is the financial position of your family? ( (q_{econ}) )</td>
<td>Above average (1)</td>
<td>29</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Average or below average (2)</td>
<td>71</td>
<td>60</td>
</tr>
<tr>
<td>What should national laws be aimed at? ( (q_{leg}) )</td>
<td>Creating a strong state (1)</td>
<td>16</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>Ensuring high standards of living (2)</td>
<td>78</td>
<td>74.5</td>
</tr>
<tr>
<td></td>
<td>No answer (3)</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Are the Russians part of the European civilisation ( (q_{civ}) )</td>
<td>Yes, they are (1)</td>
<td>54</td>
<td>49.5</td>
</tr>
<tr>
<td></td>
<td>No, they are not (2)</td>
<td>32</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>No answer (3)</td>
<td>14</td>
<td>28.5</td>
</tr>
<tr>
<td>What is the historical destiny of Russia? ( (q_{hist}) )</td>
<td>Russia has a great future (1)</td>
<td>29</td>
<td>52.5</td>
</tr>
<tr>
<td></td>
<td>A great Russia is a thing of the past (2)</td>
<td>21</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>No answer (3)</td>
<td>50</td>
<td>56</td>
</tr>
<tr>
<td>What is more dangerous for Russia? ( (q_{exist}) )</td>
<td>External threats (1)</td>
<td>31</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Internal threats (2)</td>
<td>54</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>No answer (3)</td>
<td>15</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 2 contains a statistical analysis of the difference in answers given in the west and the east.

Statistical analysis of the difference \( (d) \) in answers given by respondents in the west and the east

<table>
<thead>
<tr>
<th>Question</th>
<th>Difference, ( d_{sample} )</th>
<th>95% confidence interval</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>( q_{poli} ) 1</td>
<td>0.020 (0.059)</td>
<td>(-0.10 &lt; d_{poli} ) 1 &lt; 0.14</td>
<td>—</td>
</tr>
<tr>
<td>( q_{poli} ) 2</td>
<td>0.020 (0.061)</td>
<td>(-0.10 &lt; d_{poli} ) 2 &lt; 0.14</td>
<td>—</td>
</tr>
<tr>
<td>( q_{econ} ) 1</td>
<td>-0.110 (0.057)</td>
<td>(-0.22 &lt; d_{econ} ) 1 &lt; 0.00</td>
<td>*</td>
</tr>
<tr>
<td>( q_{leg} ) 1</td>
<td>0.015 (0.045)</td>
<td>(-0.07 &lt; d_{leg} ) 1 &lt; 0.10</td>
<td>—</td>
</tr>
<tr>
<td>( q_{leg} ) 2</td>
<td>0.035 (0.052)</td>
<td>(-0.07 &lt; d_{leg} ) 2 &lt; 0.14</td>
<td>—</td>
</tr>
<tr>
<td>( q_{civ} ) 1</td>
<td>0.045 (0.120)</td>
<td>(-0.08 &lt; d_{civ} ) 1 &lt; 0.17</td>
<td>—</td>
</tr>
<tr>
<td>( q_{civ} ) 2</td>
<td>0.100 (0.055)</td>
<td>(-0.01 &lt; d_{civ} ) 2 &lt; 0.21</td>
<td>*</td>
</tr>
<tr>
<td>( q_{hist} ) 1</td>
<td>-0.035 (0.111)</td>
<td>(-0.15 &lt; d_{hist} ) 1 &lt; 0.08</td>
<td>—</td>
</tr>
<tr>
<td>( q_{hist} ) 2</td>
<td>0.095 (0.047)</td>
<td>(0.00 &lt; d_{hist} ) 2 &lt; 0.19</td>
<td>**</td>
</tr>
<tr>
<td>( q_{exist} ) 1</td>
<td>-0.210 (0.058)</td>
<td>(-0.32 &lt; d_{exist} ) 1 &lt; -0.10</td>
<td>***</td>
</tr>
<tr>
<td>( q_{exist} ) 2</td>
<td>0.280 (0.059)</td>
<td>(0.16 &lt; d_{exist} ) 2 &lt; 0.40</td>
<td>***</td>
</tr>
</tbody>
</table>

Comment 1: *, **, *** — 10 %, 5 %, and 1 % are respective levels of significance.

Comment 2. The table does not contain results for the second answer \( (q_{econ,2}, \text{‘our financial position is average or below average’}) \) since they are the plane reflection of those for the first answer: \( d_{econ,2} = -d_{econ,1} \). Results for the ‘no answer’ option have also been omitted.
The greatest difference (significance level of 1%) between the east and the west was the perception of external and internal threats ($q_{\text{exist}}$). The question about the destiny of Russia ($q_{\text{hist}}$) was also answered differently in the two regions. Although almost the same number of respondents believed that Russia had a great future, the difference in the number of answers ‘a great Russia is a thing of the past’ had a 5% significance level.

Figure 1 shows the results from Table 2 as a diagram.

Figure 1. 95% confidence intervals for $d$

Comment: midpoints of confidence intervals correspond to differences in answers given in the west and the east.

Modelling east-west differences in regional consciousness

To test the hypothesis formulated at the end of the first section of this article, we selected five factors that affected the socio-political consciousness of Russian young people ($q_{\text{poli}}$): economic ($q_{\text{econ}}$), legal ($q_{\text{leg}}$), cultural/civilisational ($q_{\text{civ}}$), historical ($q_{\text{hist}}$), and existential ($q_{\text{exist}}$) [19]. Each factor, except $q_{\text{econ}}$, had three answers (see Table 1), including the ‘no answer’ option. As mentioned above, the distribution of answers by questions was not the same in the west and the east. Since the effect of differences in answers on the dependent variable ($q_{\text{poli}}$) was statistically insignificant, it was reasonable to assume that the effect of the factors was not the same in the two regions. To test whether that was true, two polynomial logistic regression models were constructed: one for the west and the other for the east. The results were unsatisfactory. In each regression, only the factor $q_{\text{hist}}$ was significant. That did not come as a surprise since the uncertainty [20] contained in the ‘no answer’ option was modelled too.

Four logistic regression models with binary regressions were produced: two for the west and two for the east. All calculations were performed using the SPSS Statistics 24 software and Microsoft Excel.

1 If the level of significance is not specified, it is 95%.
Logistical regression models (logit models) are widely used in sociology, particularly, in the statistical analysis of survey results (repressors) [21]. Sociologists prefer logit- to probit models for simple result interpretation [22]. A logistic regression models the probability $p$ of the event $y$, which takes the value 0 or 1 depending on the series of accompanying factors (repressors) $x_1, x_2, ..., x_k$. The basic assumption of the logit model is

$$p(y = 1|x_1, x_2, ..., x_k) = \frac{1}{1+e^{-(b_0+b_1x_1+b_2x_2+...+b_kx_k)}}, \tag{1}$$

where $X = (1, x_1, ..., x_k)$, $B = (b_0, b_1, ..., b_k)$ is the vector of required parameters; the scale product of the vectors is enclosed in the angle brackets $\langle \rangle$.

Formula (1) is usually written as

$$\logit(p) = \ln \frac{p}{1-p} = b_0 + b_1x_1 + \cdots + b_kx_k, \tag{2}$$

where $p = p(y = 1|x_1, x_2, ..., x_k)$. It is assumed that there are no $x_1, x_2, ..., x_k$ such that $p = 0$ or $p = 1$.

The interpretation of logit model coefficients differs from that characteristic of analysis of simple linear regressions. For the factor $x_i$, the factor $b_i$, $i = 1, ..., k$ is interpreted as a change in the function logit$(p)$ when $x_i$ is incremented by 1; the value of the coefficient $b_0$ equals that of logit$(p)$ when the regressors are ‘turned off’, i.e. $x_1 = x_2 = \cdots = x_k = 0$.

The likelihood function corresponding to the events $y_1, ..., y_N$ is

$$L(B;y_1, y_2, ..., y_N) = \prod_{i=1}^{N} \left(\frac{1}{1+e^{-(b_0+b_1x_1+b_2x_2+...+b_kx_k)}}\right)^{y_i} \left(1-\frac{1}{1+e^{-(b_0+b_1x_1+b_2x_2+...+b_kx_k)}}\right)^{1-y_i}, \tag{3}$$

where $X_i$ is the vector of the regressors, which correlates to the observed object $i$. The vector $B = (\hat{b}_0, \hat{b}_1, ..., \hat{b}_k)$, which maximises the rhs of formula (3) is taken to be the maximum likelihood estimation of the vector of parameters $B$.

Each of the factors $q_{leg}$, $q_{civ}$, $q_{hist}$, $q_{exist}$ is represented by two binary regressors. For the factor $q_{hist}$, these are the regressors $q_{hist,1}$ ($1 -$ Russia has a great future, 0 — a different answer) and $q_{hist,2}$ ($1 -$ a great Russia is a thing of the past, 0 — a different answer). These regressors are not additional, i.e. $q_{hist, 2} \neq 1 - q_{hist, 1}$. The same holds for three more factors (see Table 1). The factor $q_{econ}$ has one regressor, $q_{econ,2}$ (‘our financial position is average or below average’).

Two logit models were constructed, one for the west and the other for the east, for the dependent binary variable $q_{poli,1}$. Two more logit models were produced for the binary variable $q_{poli,2}$.

Models were chosen by exclusion. The initial regression contained all nine regressors. The likelihood-ratio test was used as the model selection criterion. Table 3 shows the results of the logit regressions.

---

2 Another model assumption: the observations are mutually dependent.
Table 3

<table>
<thead>
<tr>
<th>Factor</th>
<th>Model I (agree, the west)</th>
<th>Model II (agree, the east)</th>
<th>Model III (disagree, the west)</th>
<th>Model IV (disagree, the east)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$q_{\text{econ}, 2}$</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.73** (0.34) 0.08 &lt; b &lt; 1.37</td>
</tr>
<tr>
<td>$q_{\text{leg}, 1}$</td>
<td>1.97** (0.78) 0.44 &lt; b &lt; 3.51</td>
<td>0.86* (0.47) - 0.07 &lt; b &lt; 1.79</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>$q_{\text{leg}, 2}$</td>
<td>—</td>
<td>—</td>
<td>1.63** (0.73) 0.20 &lt; b &lt; 3.06</td>
<td>—</td>
</tr>
<tr>
<td>$q_{\text{civ}, 1}$</td>
<td>1.39** (0.56) 0.28 &lt; b &lt; 2.50</td>
<td>—</td>
<td>—</td>
<td>0.62* (0.34) - 0.01 &lt; b &lt; 1.26</td>
</tr>
<tr>
<td>$q_{\text{civ}, 2}$</td>
<td>—</td>
<td>—</td>
<td>1.42** (0.63) 0.19 &lt; b &lt; 2.65</td>
<td>—</td>
</tr>
<tr>
<td>$q_{\text{hist}, 1}$</td>
<td>2.24*** (0.58) 1.09 &lt; b &lt; 3.39</td>
<td>1.84*** (0.35) 1.16 &lt; b &lt; 2.53</td>
<td>- 2.39*** (0.66) - 3.68 &lt; b &lt; - 1.09</td>
<td>- 1.58*** (0.34) - 2.27 &lt; b &lt; - 0.89</td>
</tr>
<tr>
<td>$q_{\text{exist}, 1}$</td>
<td>—</td>
<td>0.97*** (0.35) 0.29 &lt; b &lt; 1.65</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>$q_{\text{exist}, 2}$</td>
<td>—</td>
<td>—</td>
<td>0.87* (0.51) - 0.13 &lt; b &lt; 1.87</td>
<td>1.08*** (0.34) 0.35 &lt; b &lt; 1.82</td>
</tr>
<tr>
<td>Constant</td>
<td>- 2.31</td>
<td>- 1.92</td>
<td>- 1.46</td>
<td>- 0.46</td>
</tr>
<tr>
<td>% of accurately predicted 1 values</td>
<td>55.3</td>
<td>48.6</td>
<td>90.6</td>
<td>78.4</td>
</tr>
<tr>
<td>Total % of accurate predictions</td>
<td>79.0</td>
<td>76.9</td>
<td>78</td>
<td>68.3</td>
</tr>
<tr>
<td>Number of observations, N</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

In each regressor section in Table 3, the first line contains the coefficient estimate for that regressor, whereas the standard deviation of the estimate is given in round brackets. The second line shows the 95% confidence interval for the coefficient. The table demonstrates coefficient estimates for only those regressors that were included in the final models. The regressor $q_{\text{hist}, 2}$ was not included in any of the models, nor is it shown in the table. To classify observations, the cutoff point of 0.5 was chosen. For the first two models, the percentage of accurately predicted 1 values was low, whereas that of accurately predicted 0 values was rather high. For more balanced predictions, ROC curves can be used to select the cutoff point [23, pp. 228—230].

Each pair of models reveals both differences and similarities between the two regions.

Or its asymptotic estimate, to be exact (see [23, pp. 193—194]).
For the first pair (I and II) significant answers were ‘National laws should be aimed primarily at making the state stronger’ (5% and 10% levels respectively) and ‘Russia has a great future’ (1% for both regions). The answer ‘Russians are part of the European civilisation’ was significant only in the west; ‘The most dangerous threats to our country are external’, only in the east (1% level).

For the second pair (III and IV), a significant answer was ‘Russia has a great future’ (a 1% level for both regions). The answer ‘The most dangerous threats to our country are internal’ was significant at a 10% level in the west and a 1% level in the east. The answer ‘Laws should work towards higher standards of living’ was significant only in the west; ‘The financial position of my family is average or below average’, only in the east. As to the question whether Russia is part of the European civilisation, different answers were significant: ‘The Russians are not part of the European civilisation’ in the west and ‘The Russians are part of the European civilisation’ in the east (10% level). This difference is easily explained: living in the westernmost region of Russia, Kaliningraders have a realistic idea of the European civilisation, whereas, for residents of Blagoveshchensk, Europe is mostly vicarious experience.

The only answer that was significant in all models (at a 1% level) was given to the question about the historical destiny of Russia.

Finally, two integrated models were constructed to cover all 400 observations from the west and the east for both dependent variables – $q_{\text{polit}, 1}$ and $q_{\text{polit}, 2}$. Alongside the ten initial regressors (including the constant), the model included ten more regressors, which were obtained by multiplying each regressor by the dummy variable $q_{\text{east}}$ (1 — the respondent is from the east, 0 — the respondent is from the west). When the regional specificity of answers was taken into account, the models corroborated the significance and signs of all regressors obtained for individual models. For same-sign regressors common for the west and the east, significant differences among coefficients were not confirmed.

**Conclusion**

Our comparative analysis of regional consciousness of students in Russia’s western and eastern border regions, which was conducted for the first time in Russian social science, reveals significant regional differences even in functionally homogenous border territories and in the most homogenous social group. In most cases, these differences are accounted for by the geographical factor. The

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4 Remarkably, that was the only answer that had the negative sign before regressors. This means that, overall, the group tended to disagree with the statement that ‘Russia has a great future’ rather than to agree with that ‘a great Russia is a thing of the past’.

5 Model IV was the only one, for which the factor $q_{\text{econ}}$ was significant.
percentage of the undecided was different too: the percentage of those who chose the ‘no answer’ option was much higher in the east than it was in the west. Many social phenomena have already been digested in the west, whereas the east is still trying to grasp them. Despite pronounced regional differences, there is an important similarity in the state of the socio-political consciousness of students. Even in this case, regional idiosyncrasies have their say: similar opinions about the way Russia is developing today are products of different combinations of many region-specific factors.

The four models of logistic regression proved the hypothesis that the socio-political consciousness of students in two Russian borderlands was strongly affected by the basic forms of mass consciousness: economic, legal, historical, cultural/civilisational, and existential. Each regressor was significant at a 5% level in at least one model. The models have a high predictive capacity. The first three models had a total percentage of accurately predicted observations of above 75%; the fourth model, of 69.3%. Mathematical modelling is, therefore, effective in studying regional consciousness.

Our data analysis uncovered the effect of mass consciousness asymmetry, which means that some factors change differently in the west and the east as long as alternative questions are concerned. For example, the answer ‘Russia has a great future’ did not reveal significant differences between the west and the east, whereas the difference in the number of those who answered that ‘A great Russia was a thing of the past’ was statistically significant. This effect is rooted in the uncertainty the respondents are facing. The effect of asymmetry was corroborated by the model analysis. For example, the factor $q_{\text{econ}}$ was insignificant both for the west or the east in the first pair of models. Yet, it was significant in the east and insignificant in the west when respondents were answering the alternative question ‘Do you agree or disagree that our country is heading in the right direction’.

The models proved experimentally the initial hypothesis of this research: regional differences continue to have effect even when opinions and ideas about the current socio-political processes are rather similar.

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THE ETHNOPOLITICAL MOVEMENT
AS A VEHICLE FOR NATIONALISM
INSTITUTIONALISATION IN MODERN LATVIA

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This article investigates the Popular Front of Latvia, a public ethnopolitical movement that substantially contributed to the independence of the modern Republic of Latvia. The study aims to identify how much the movement influenced the development of ethnic nationalism, which has become essential to statehood and the identification of politics. It continues to reinforce group inequality in this multiethnic country. The article describes the background and main landmarks of the movement. Content analysis of manifestos has been carried out to trace changes in the Popular Front’s ideological vision. It is shown that the shift in priorities that took place during the 1988—1991 struggle for Latvia’s political and economic independence led to a non-democratic political regime. Particular attention is paid to the movement’s proposals concerning the principles of statehood restoration and citizenship acquisition as well as to approaches to solving ethnic problems. The focus is on why and under what circumstances the Popular Front dissolved itself and the supra-ethnic opposition, its main rivals, left the political scene. It is argued that the Popular Front of Latvia created conditions both for the titular nation taking precedence over other ethnic groups and for the exclusion of one-third of the country’s resident population from political life. It is concluded that, as the movement transformed and gradually abandoned its democratic principles, it became the main vehicle for the institutionalisation of ethnic nationalism in Latvia.

Keywords: Republic of Latvia, Popular Front of Latvia, nationalism, ethnopolitical movement

Introduction

Studies of the modern Baltic States are of both theoretical and practical interest since the relationship with non-titular ethnic groups still works in these countries on the principles of political and social inequality, despite the officially declared commitment to the ideals of liberal democracy. The institutionalisation of nationalism in Latvia, Lithuania, and Estonia merits special attention. The process was driven by popular ethnopolitical movements, which, once in power,
both expedited Baltic independence and laid the foundations for a political regime defined by experts as ethnic democracy. According to Sammy Smooha, ethnic democracies shape the symbols, laws and policies of the state for the benefit of the ethnic nation that constitutes the majority whereas minorities might be perceived as a threat [1]. These regimes present ample opportunities for research, which may stimulate the development of national movement theories, methods for nationalism studies, as well as the research fields of ethnopolitical mobilisation and nationalism-based identity policies of states.

Ethnopolitical movements in the Soviet Baltic republics, particularly, the Latvian SSR, were a product of authorities-approved activities of the national intelligentsia. Later, the general public embraced their ideas. Having gained support amid liberalisation and glasnost, the organisations began to exert a strong influence on political processes. The consolidation of the movements was prompted by the crises of the Soviet system, the demands of republican authorities for greater powers, growing protest and separatist sentiment, the debate on the revision of the Baltics’ history, and the emergence of independent grassroots associations. In all the three Baltic republics, an important impetus was the official Soviet policy of perestroika introduced in 1985 — a package of fundamental reforms aimed at improving the socio-political and economic situation.

The reforms were advocated by political fronts — popular civil associations that had their own coordinating bodies and whose aims and values enjoyed broad support. On the one hand, they represented opposition to ‘old Communism’ and struggle against the flaws and problems of the Soviet system. On the other, they were allies of the Union authorities headed by Secretary-general of the Central Committee (CC) of the Communist Party of the Soviet Union (CPSU) Mikhail Gorbachev and helped him to control both public sentiment and the activities of various groups and organisations. The popular fronts of the Baltics did manage to mobilise society. Their ultimate goal, however, was a far cry from reforms in the USSR.

Many studies have explored various aspects of the emergence of popular ethnopolitical movements in Latvia, Lithuania, and Estonia as well as the formation of ethnocentric regimes in these countries. Publications that are most relevant to this study can be divided into two groups. The first one brings together works focusing on the emergence, development, and activities of ethnopolitical movements in the Baltics as well as on the circumstances of their secession from the USSR. These are publications by Viktor Gushchin [2], Rasma Karklins and Brigita Zepa [3], Stanislav Kinka [4], Mara Lazda [5], Aleksandr Potapov [6], Ronald Simonyan [7], Yulia Ulyanova [8], Daina Eglitis [9], and others. The second group comprises studies of ethnonational politics and ethnic nationalism in the Baltics after the collapse of the USSR. These are books and contributions by Timofey Agarin [10], Vladislav Vorotinikov [11], Mary Dakin [12], Aleksandr Dyukov and Vladimir Siminidey [13], Vadim Musaev [13], Vadim Smirnov [15],
Aleksandr Sytin [16], and Ammon Cheskin [17]. Another important exploration of the ethnopolitical problems of Latvia, Lithuania, and Estonia is the collection of papers *Ethnic Policy in the Baltic States* [18].

Analysis of the literature suggests that, despite the abundance of relevant studies, researchers often overlook how the transformation of the ethnopolitical movements, which propelled the Baltic towards independence, affected the political evolution of Latvia, Lithuania, and Estonia.

This article aims to find out how much the movement influenced the development of ethnic nationalism in modern Latvia. To this end, we consider the key development stages of Latvia’s popular ethnopolitical movement after 1985, identified and compare its changing ideological positions, and describe the process of transformation as well as its role in the rise of an ethnocentric regime.

**Methods**

We assume that nationalism is a political ideology and practice that seeks to assert the priority of the nation as well as to develop an identity rooted in embracing by individuals their belonging to that nation. Ethnic nationalism is the dominance of one ethnic group, which is believed to have the primary right to the statehood and territory, over other groups in political and social life.

Research into the institutionalisation of nationalism carried out in this article draws on the theoretical principles of constructivism. This approach suggests that ethnicity built on the idea of, or belief in, a common culture and history is a form of the social construction of cultural differences and that it allows actors to influence both nation-building and the development of nationalism.

This study relies for analytics and data on relevant literature, programmes, and the media. The method of qualitative content analysis is employed to analyse the ideological positions of the Latvian ethnopolitical movement, whereas the historical method is used to explore the development and manifestations of Latvian nationalism.

**The Popular Front of Latvia on its way to reforms**

Although the popular fronts of Latvia, Lithuania, and Estonia were officially established in 1988, the creation of such associations had been discussed with the CPSU Central Committee among other bodies, for several years after the declaration of reforms by the Soviet Union authorities. The Latvian initiators of the popular movement raised their voices in June 1988 at an extended plenary meeting of artistic unions. The meeting was organised in Riga by the president of the Union of Soviet Authors of the Latvian SSR, a member of the Central Committee of the Communist Party of Latvia (CPL), Jānis Peters. Most of the participants in the meeting were members of the CPL leadership and the intelligentsia. Encouraged
by anti-Soviet rallies, the latter would become the founding force behind the Popular Front of Latvia (PFL) [6, p. 38]. The artistic convention became a platform for political discussion on the status of the Latvian language, demography and migration, and the legitimacy of Latvia’s accession to the USSR. The meeting stressed the need for popular involvement in grassroots perestroika to ensure the irreversibility of the reforms. After the convention, supporters of the PFL, which included very different groups, started to participate in public events organized by Latvian opposition. Gradually, independence appeared on the agenda. ‘Symbolic reclamation of the nation was a centrepiece of collective action in the early opposition period. Although overt political demands were still risky, and few in the opposition were prepared to ask for full national independence, symbolic demands, like those related to environmental protection, or symbolic deeds, such as commemorating the Stalinist mass deportations of Balts, were important. It was because ‘they laid bare problems widely believed to be symptomatic of a larger problem, the Soviet regime itself, Eglitis writes when describing public activity in Latvia from 1986 to the establishment of the Popular Front, which consolidated the opposition [9, p. 37].

The founding congress of the PFL, which took place on October 8—9, 1988, brought together 1,100 delegates who represented, according to estimates, up to 110,000 people. The first factor in the popularity of the fronts was growing oppositional sentiment and anti-communist solidarity [3, p. 335]. The second factor was firm support for popular movements, which were to become drivers of perestroika, from Gorbachev and his entourage. Opponents of the PFL noted that, from 1988, ideologists from the CPSU CC consulted the artistic intelligentsia and their allies about the founding of the organisation. The efforts of the initiators were supported by state security bodies: the activists had full access to the republican media, whereas workplace party organisations were required to form local PFL groups.1 Probably, the Union leadership did count on the fronts to limit the influence of the conservative CPSU. Dmitry Lukashevich links the activity of the movements with the plans of Gorbachev and his supporters to introduce a multi-party system in the USSR. ‘Gorbachev understood that the CPSU was ceasing to be a tool to expedite perestroika; the party was putting the brakes on perestroika and threatening the political integrity of the secretary-general. The party had to be subdued, and Gorbachev had to ensure the irreversibility of perestroika by assuming the office of President of the USSR’ [19, p. 48].

The first congress elected the governing body of the Popular Front: the one hundred strong Duma was chaired by the journalist Dianis Ivans. The congress adopted a charter [20, l. 200—207] and a resolution and agreed on a manifesto

The principal media outlet of the PFL was the Atmoda — a newspaper published in both Latvian and Russian. The name of the periodical, which means ‘awakening’, was an allusion to emerging national consciousness. The term was also applied to the Popular Front and the Latvian stage of the Baltic Singing Revolution.

The primary goal of the PFL was ‘to establish true popular rule and a democratic state, to ensure cultural and economic prosperity, and to solve national problems’ [20, l. 200]. The first edition of the PFL manifesto focused on the role and principles of a socio-political organisation, democratisation and true popular rule, human rights, national relations, culture, ethics, education and research, social justice and humanisation, the economy, the environment, healthcare, and sports. The most radical points in the document waged a campaign against Stalinism, the administrative-bureaucratic system of neo-Stalinism, and centralisation.

It was proposed that the Latvian SSR be granted the right to veto any decision concerning the republic as well as the right to accede to international organisations. The need for sovereignty was voiced. The manifesto emphasised that citizens of Latvia had to be masters of their land and solve all possible problems independently [20, l. 209]. The document stressed the need for an independent constitutional court and constitutional control exercised by the republican prosecution service, for the division of powers in the republic, and for the separation of the party from the state. Although all the above questioned the leading role and political monopoly of the CPSU, the manifesto did not call for an open confrontation with the party, nor did it mention Latvia’s possible secession from the USSR. Moreover, all the ideas and plans of the PFL were presented as being in good agreement with the ideas of Leninism, Soviet perestroika, and the principles of socialism and humanism. The final resolution declared determined and unwavering support for the new party line.

In its manifesto, the Popular Front urged the reform of citizenship laws, an end to immigration, and a revision of the ethnonational policy. The PFL, which welcomed an objective interpretation of Latvian history, demanded in the same document that the incorporation of the republic in the USSR be recognised as forcible. The Soviet policy of national nihilism was viewed as the cause of the deformation and deterioration of national relations — the processes that, alongside immigration, had wronged the Latvians and other ethnic groups. The manifesto argued that uncontrolled migration had made the Latvian people, for the first time in its history, a minority in its own land and threatened its existence and statehood [20, l.??]. Although the PFL did not support the idea of expelling ‘non-natives’, it saw immigrants from other Soviet republics as victims of Stalin’s national policy. The Latvian authorities had to help those willing to return to their homelands. The PFL condemned the mechanical unification of nationalities, especially in schools and kindergartens.

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The PFL demanded that the Latvian language be recognised as the official language. The movement addressed the problem of representation of the titular nation in the Soviets of the republic and proposed that legislative and representative ethnic quotas should be introduced. The manifesto read that the Latvian people had the status of the indigenous nation since Latvia was the historical land of the Latvians, the only place in the world where the Latvian nation, the Latvian language, and Latvian culture could preserve themselves and develop [20, l. 213]. The PFL, however, advocated the rights of any national minority for educational and cultural autonomy. That way, the movement could ensure the loyalty of local Russian speakers and recruit new supporters. At the time, non-titular ethnic groups accounted for about half the population of the republic. The PFL was active in protecting the ethnic interests of all nationalities living in Latvia, their languages, cultures, education, and religious consciousness. The movement denounced any attempts to stir ethnic hostility or to destroy the dignity of any resident of the Latvian SSR. The manifesto emphasised that the protection of the native tongue and culture should be the responsibility of any citizen of the republic, regardless of his or her nationality [20, l. 213].

Thus, the central demands of those who supported the reform of the Soviet system were sovereignty and broad autonomy in a federative structure. From the perspective of national relations, the future of Latvia lay in building a single poly-ethnic state that guarded the interests of the majority. Right at the start, however, the foundation was laid for the ethnopolitical mobilisation of the Latvians through appeals to their indigenous origins and discriminated-against position in the Soviet Union.

### The emergence of the ethnopolitical movement

The PFL was immediately supported by the Republican leadership while the Union authorities were losing ideological and recruitment control over Latvia’s elite. The ideas of the PFL were shared by part of the Communist nomenklatura, the so-called ‘ethnic appointees’. As Sytin writes, members of the economic and party leadership of the Baltic republics mostly encouraged the popular fronts, trying to infiltrate them in an attempt to preserve their own high standing [16]. High-ranking opponents of the fronts were accused of provocations and benefiting from the stagnation.

One of the most influential advocates of the PFL was the secretary for ideology of the CPL CC, Anatoly Gorbunov, who was elected the chair of the Supreme Soviet of the Latvian SSR on October 6, 1988. On the same day, he signed the resolution of the Supreme Soviet ‘On the status of the Latvian language’, which recognised Latvian as the official language of the republic and instructed the

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executive bodies to develop measures to enshrine the language in the Constitution, to promote its study and use in education and official communication. The resolution was declared to follow the principles of Lenin’s national politics, resolutions of the 19th All-union Conference of the CPSU, and the postulate that national values and the Latvian language had not been neglected in the republic. According to the document, the Russian language retained its role of the language of federal relations; citizens had the right to use the language in communication with authorities. The very first initiative to assert the priority of the Latvian language was the first step towards the institutionalisation of ethnic nationalism in its practice aspect [21].

The PFL gained representation in republican authorities after its first electoral success of March–April 1989. The Popular Front of Latvia, which had established its commitment to the transformation of the state as well as the political and economic sovereignty of the republic, won 30 seats in the supreme Union authority. Latvian voters elected deputies across 40 national-territorial and territorial districts. Only five seats were secured by the CPL and the International Front of Workers (Interfront). The impressive results of the PFL were partly owed to the peculiar division into electoral districts, which translated into an uneven representation of urban and rural residents, the titular nation and minorities [12, pp. 17—18].

In spring-summer 1989, the PFL was preparing for the second congress. In the process, it radically revised its proposals on the socio-political future of Latvia. On May 31 the board of the Duma published an appeal to the members of the Popular Front. The document stressed the impossibility of securing sovereignty while being part of the USSR and justified parliamentary struggle for political and economic independence as well as for a transformation of the governance structure. The leadership of the PFL thought it necessary to amend the constitution to abolish the supremacy of Soviet laws in Latvia and, for the Supreme Soviet of the Latvian USSR, to adopt a declaration of sovereignty and laws on economic independence. This appeal of the Popular Front could be explained by final disillusionment with perestroika [22, l. 5]. Further decisions taken by the PFL suggests that it was considering a plan for Front-led secession from the USSR.

On July 16, 1989, the Ideological Platform of the PFL was adopted to consolidate the Latvian population of different nationalities [20, l. 261—262]. The declaration of independence by democratic Latvia was announced the primary goal of the organisation. The Latvian nation was named the foundation of sovereignty. Remarkably, alongside acknowledging all rights and freedoms of the residents of the republic regardless of their social status, nationality, and religious beliefs, the document proposed to grant citizenship only to those who supported the idea of independence and had lived in Latvia for at least ten years before the registration. On the one hand, this measure had to stop immigration. On the other, its main consequence would have been discrimination against a significant part of Latvian
Russian speakers who did not want to leave the republic. The idea of residential qualification was so controversial that, by autumn 1989, the Popular Front did not insist on the immediate adoption of new citizenship laws any more [2, p. 19].

In response to the appeals of the PFL, the secession of the republic from the USSR was expedited by regulations adopted by the Latvian Supreme Soviet in 1989, including the declaration ‘On the state sovereignty of Latvia’. The document declared that Latvia had to become the successor of the independent democratic republic of 1917—1920, which was stripped of its sovereignty by ‘Stalin’s unlawful foreign policy’. Therefore, the ultimate goal was to restore the statehood established for the Latvian people, which had preserved its unique language and culture, to exercise its right to independent development and national self-determination. This approach provided an ideological framework for the new line of policy [23]. Although the declaration said that the independence of the people of Latvia was a formal guarantee of the prosperity of the Latvian nation and all the other ethnic groups living in the republic, it gave an impetus to official struggle against the Soviet legacy, particularly, changes to the interpretation of the historical past. Later it had an immediate effect on the ethnonational policy since the doctrine of occupation both led to discord and gave grounds for a discriminatory policy against national minorities. Vorotnikov writes that the myth of occupation contributed to the image of Russia as the primaeval enemy that pursues an imperial and aggressive policy towards smaller nations, on the one hand, and justified the ‘return to Europe’, on the other [11].

In October 1989, the second PFL congress took place. The movement finally rejected perestroika in favour of a ‘national-democratic revolution’ [8, p. 141]. At the time, the Popular Front had over 210,000 members who were represented at the congress by 1,061 delegates, mostly ethnic Latvians. Ivans retained his position of the chair, and the duma was re-elected at the convention. Orientation towards independence and a democratic parliamentary republic with a market economy required changes to the basic documents of the organisation.

The second edition of the PFL manifesto contained sections dedicated to the political system and independence of Latvia, as well as to the freedom of consciousness and religion, ecology, and demilitarisation. Another significant part of the document openly denied the monopoly of the CPSU to power and its ideological control over social life. The manifesto also declared the intention of the Popular Front as an independent political force to take part in the upcoming election to the Supreme Soviet of the Latvian SSR.

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As to the national question, the second edition of the manifesto advocated the rights and freedoms of all people regardless of their origin, social standing, beliefs, and occupation. The Popular Front supported the idea of integration within the current multi-national structure of society and stressed the importance of meeting the cultural needs of all ethnic groups. It denounced the image of the enemy, national arrogance, chauvinism, anti-Semitism, Russophobia, national protectionism, nihilism, and imperial attitudes. It was articulated at the congress that the way to independence lay through democratisation [24, l. 116].

Of equal significance were the resolutions that the PFL adopted at the second congress. In relation to state-building, the documents called for the republican authorities to proclaim the declaration of Latvia’s accession to the USSR illegal. It was also proposed to grant citizenship only to those who had lived in the republic before 1940. The position of the Popular Front on citizenship was not entirely consistent: the manifesto did not mention residential qualification or any other naturalisation condition for permanent residents. Citizenship was promised to anyone who voiced his or her intention to acquire Latvian citizenship and pursue a future in the republic. That way, the Popular Front of Latvia was leading Russian speakers to expect democratic inclusion and Latvians, ethnic democracy [25, p. 18].

The inclusive attitudes of the manifesto and the political appeals made by members of the movement in 1988—1989 encourage some Western researchers to classify the PFL as a trans-ethnic or transnational civil association. This point of view is made explicit by the historian Mara Lazda, who attempts at a revision of the ethnonational interpretation of the PFL’s activities [5]. Having analysed publications in the Atmoda, the membership of the Popular Front, and its international contacts, she concludes that the movement was open to all ethnic groups and it envisaged an association of national and cultural autonomies. Lazda believes that the Popular Front married the nationalism of the titular nation with the ideas of integration and kept itself at a distance from the Soviet policy of internationalism. She admits, however, that civil and language laws adopted later on the initiative of the Popular Front turned into an ideational framework to strengthen Latvia’s independence were a deviation from democratic ideals. Moreover, as other international experts emphasise, those measures were overt attempts to prompt the emigration of non-Latvian residents [12, p. 34]. We believe that it is important to discuss the transformation of the PFL when exploring these issues. Already during the preparation for the election to the Supreme Soviet of the Latvian SSR in March — April 1990, the PFL, once a civil society institution [26, pp. 113—114], turned into a separatist ethnopolitical movement.

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6 Amendments to the Constitution of the Latvian SSR of January 1990 stripped the Communist Party of its special status. The citizens were granted the right to create independent political parties.
that was supported by most of the population and had enormous influence on political processes in the republic. Although the democratic values expressed in the manifesto and publications of the PFL remained a priority, the plan to establish them lost its urgency.

The turn to ethnocracy

In the parliamentary election, the PFL-led coalition won 131 out of 201 seats: the anti-system opposition became the ruling force. The supporter of the movement, Gorbunov, kept his position of the chair of the Supreme Council. Ivans became the vice-speaker of the Parliament; the deputy chair of the Popular Front, Ivars Godmanis, headed the cabinet of the republic. Some key positions in the government were also taken by PFL members.

On May 4, 1990, the Supreme Council of the Latvian SSR adopted the declaration ‘On the restoration of independence of the Republic of Latvia’. The document was prepared by the PFL. One hundred thirty-eight deputies, most of them ethnic Latvians, voted for the document; one abstained; fifty-seven refused to take part in the voting. The declaration proclaimed the USSR’s ‘act of aggression’ of 1940 a war crime and the Soviet rule illegal and anti-constitutional. It also announced the ‘restoration’ of Latvia’s sovereignty and the enactment of four articles of the 1992 constitution: on independence, power vested in the people, national borders, and elections to the Saeima. The document marked the beginning of the transition to actual independence. In the process, the PFL encountered growing discontent among non-titular ethnic groups, Moscow’s refusal to support the declaration adopted by the Supreme Council of the republic, the rise of new opposition in the parliament, including the ‘Equal Rights’ faction, and legal inconsistencies. Despite the declared sovereignty, the country had to observe pre-Soviet and Soviet laws and international legal rules. Technically, that made it possible for Latvian citizens to exercise their economic, cultural, social, and political rights. Until today, the question whether the Supreme Soviet of the Latvian SSR had the power to ‘restore’ laws, including the outdated constitution, which was immediately revised, remains a subject of legal debate. The ‘restoration’ of the republican constitution pursued primarily symbolic goals and reinforced the official doctrine of occupation.

The ideology of the transitional period was approved at the third PFL congress, which took place in October 1990. The convention elected a new chair — a doctor of Lithuanian descent, Romualds Ražuks. It discussed the preparation of new PFL first- and second-line leaders. The latter were to replace their seniors who had taken public office. PFL leaders were instructed to devise a development plan for the republic.

Dramatically new accents appeared in the resulting manifesto, namely, radicalisation and commitment to ethnic nationalism. The new footing of the movement was the vision of both democratic and ‘Latvian’ Latvia. The nation was interpreted from a primordial perspective. Nationalism was institutionalised and turned into the ideological framework for solidarity and identity [27, p. 92]. The new PFL manifesto subjected international relations to the right of the Latvians to self-determination. The document declared the support of the Latvian state for the economic and cultural development of the indigenous peoples of Latvia — Latvians and Livonians [24, l. 210]. The mention of the small ethnic group was mostly symbolic. The notions ‘national’ and ‘Latvian’ were to be treated as equal. The PFL became the organisation that protected the Latvian people, its existence, and survival [24, l. 206]. The manifesto said that the PFL would struggle to reclaim the Latvian nation and to ensure its revival and the prosperity of all citizens of Latvia.

Remarkably, the third congress of the PFL demanded that Latvian citizenship be granted only to those who had been citizens of the republic as of June 17, 1940, and their direct descendants. Citizens’ committees, which were declared the PFL’s allies by its chair, and the Movement for National Independence, with which the organisation had never agreed before in public, pursued the same goal.

The antipathy of Moscow, the CPSU, and the CPL to the new opposition and the political decisions made under the aegis of the PFL led to diarchy and growing conflict. In effect, Latvia became independent only in 1991. On August 21, the republican Supreme Council adopted the constitutional law ‘On the national status of the Republic of Latvia’, which marked the end of the transitional period. The Soviet was vested with the supreme power until the convocation of the Saeima. On August 24, the decree ‘On the recognition of the independence of the Republic of Latvia’ was signed by the president of the USSR. On September 5, independence was recognised by the State Council of the USSR.

Latvian independence made a bad situation worse for those who wanted Latvia to remain part of the USSR and for members of non-titular nations whose loyalty was questioned by the republican authorities. On October 15, 1991, the Supreme Soviet rejected the idea of automatic citizenship for all residents of the republic and adopted the resolution ‘On the restoration of the right of citizens and the basic conditions for naturalisation’. The legal framework for citizenship was developed more than three years later. Immediately after independence, however, the authorities of ‘democratic’ Latvia made a major contribution to discrimination against approximately a third of the country’s population (primarily, Russian speakers who had moved to the republic after 1940 and their descendants); that was very much in line with the plans of the PFL and the appeals of nationalists [18, p. 72]. As a result, only 64% of the population were eligible to participate

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in elections and protect their interests in the political arena [28]. The problem of citizenship still prevents the country from reaching a satisfactory level of democratic development [29].

During Latvia’s secession from the USSR, its Russian speakers were atomised and ideologically adrift. Some of them supported the Communist authorities; others, reforms, the Popular front, and independence. The latter placed their trust in the new leadership, which did not feel urged to declared its plans to discriminate against the ‘immigrants’, whom it viewed as the legacy of the ‘Soviet occupation’ [14]. At the peak of the transition, over a half of the Russian speakers either supported or was neutral to the PFL. As a result, Latvia’s way to independence was relatively peaceful [15]. Anti-system and supra-ethnic opposition emerged as a response to the insufficient inclusivity of the political system, as a self-organisation effort of future ‘aliens’. The Popular Front failed to ensure democratisation after destroying Soviet authoritarianism, as some researchers believe [4, p. 127].

Secession from the Soviet Union was countered by Interfront from October 1988. After the 1990 election, some of its members joined the ‘Equal Rights’ party. Founded by ethnic Russians and communists [16] as a response to the PFL’s radical statements regarding national minorities, Interfront had about 500,000 members. Unable to block decisions made by the PFL in the Supreme Soviet of the republic, Latvia’s Interfront took it to the streets to raise awareness of the official language controversy and the rights of the non-titular population. The movement went as far as to demand that a state of emergency be imposed and the republic be governed directly from Moscow. All those efforts were, however, futile. After the recognition of Latvian independence by the Union leadership, Interfront was banned alongside the CPL. Their members, who ‘acted against the republic’ after January 13, 1991, are still officially denied Latvian citizenship.

In the 1993 Saeima election, in which about 716,000 people could not take part, ethnic Latvians won 88 out of 100 seats. For comparison, in the Supreme Soviet, the titular nation was represented by 139 people out of the 201 deputies. Having secured slightly over 2.6% of the votes, the PFL did not pass the 4% electoral threshold. Six years later, after unsuccessful attempts to become a political party, the Popular Front dissolved. There are manifold reasons why the PFL failed in the 1993 election: the movement had neither new ideas nor concrete proposals except for the populist mantra that sovereignty was ‘divine grace’ and a cure-all; new parties were recruiting PFL members amid internal conflicts in the movement; its leaders were lacking skills of political administration; its popularity was declining, particularly, among non-titular ethnic groups; workplace organisations were disbanded after the CPL and trade unions had lost their controlling influence.

The winner of the Saeima election was the right-wing party ‘Latvian Way’, established in 1993. It got 32.4% of the votes. Among its founders was the member of the PFL, Gorbunov, who once again headed the parliament. The National
Independence Movement, which had been transformed into a party, came second with 13.3%. Alongside the newly-popular nationalist and right parties, the ‘Equal Rights’ party was also represented in the parliament. It took, however, only seven seats. The party was founded on the basis of the ‘Equal Rights’ faction, which had 57 seats in the Supreme Soviet and advanced the interests of Latvian Russian speakers, former communists, and supporters of the USSR.

Popular anti-systemic supra-ethnic opposition in Latvia disappeared for the following reasons: the illegal status of higher-level organisations; the absence of a clear course of action; the low morale of the followers after the disintegration of the USSR; a relatively low level of international tension explained, among other things, by partial support for independence by the Russian speakers; naturalisation opportunities and the absence of barriers in day-to-day life for most minorities. The ethnonational policy, which asserted the priority of the titular nation, confronted now stateless Russian speakers with the choice — to assimilate or to remain excluded from the political process. From the mid-1990s, the number of residents reduced by more than 500,000 people. As on July 1, 2019, they accounted for only 10.5% of the population.\(^\text{10}\)

Few in number, Russian-leaning parties and organisations tried to make a difference by protecting the interests and rights of the community. Most of their efforts were countered by the authorities, and they lacked electoral support. The other political forces played by the rules that had been established with the help of the PFL. Therefore, the supra-ethnic oppositional parties that advocate the idea of a civil nation are not anti-systemic. Despite the fragmented and often inconsistent identity of the Russian speakers, proof of which is the insufficient political and territorial unification around common cultural preferences [17], most of them vote for left and social-democratic parties.\(^\text{11}\)

Regardless of its actual post-Communist achievements in democratic building, Latvia remains the least democratic Baltic State because of its alien problem. After independence, the percentage of the discriminated population has fallen. The result has been attained, however, by assimilation and emigration rather than the integration of non-titular ethnic groups. Against this background, nationalism continues to give the elite a political foothold and grants access to power, its resources, and tools to keep it. Having provided an ideological framework for nation-building, nationalism is uniting the titular population. Neither the elite nor ordinary members of the ethnic majority are willing to make radical changes. Therefore, in the near future, the ethic democracy model will not be replaced by a better alternative.


\(^\text{11}\) A vivid example is the opposition party Harmony, which has been coming first in parliamentary elections since 2011.
Conclusion

When the USSR leadership announced perestroika at the turn of the 1990s, the Popular Front of Latvia, a socio-political movement was established to support reforms and to lead Latvia to independence. It did not take long for the Popular Front to evolve from a late-Soviet civil institution first into a separatist ethnopolitical movement and later into a major political force. Without significant opposition from communists and the Union authorities, it initiated the ‘restoration’ of Latvia’s sovereignty, leading to ethnic segregation of the population.

As the ideology of the Popular Front of Latvia, which once counted on support from national minorities, started to change, the idea of standing up for the democratic rights and interests of all residents of the Republic was abandoned. The Popular Front ensured the ethnopolitical mobilisation of the Latvians and created grounds for the exclusion of the Russian speakers who had moved to Latvia after 1940 and their descendants from political life.

Having achieved its primary goal, the independence of the country, the Popular Front of Latvia could neither function politically nor exist in the system that it had created. The PFL-encouraged attitude to minorities, who faced political, social, economic, and cultural discrimination, and the priority given to the titular nation contributed to the institutionalisation of ethnical nationalism as well as the emergence of a regime that is not democratic since it eliminated national equality and abandoned the principles of universal suffrage.

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EFFECTIVE RISK COMMUNICATION AS A FACTOR IN MANAGING PROTESTS ATTITUDES IN A LOCAL COMMUNITY

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Contemporary research into the perception of environmental risks suffers from poor knowledge of risk communication in a local community and of how different ways of risk communication affect protest attitudes. This study aims to clarify communication strategies and practices used by members of local communities as a protest response to environmental threats. The work builds on the cultural theory developed by Douglas, Dake, Bremen, and others. This theory distinguishes between several cultural types (hierarchism, individualism, communitarianism, and egalitarianism), which differ in how environmental risks are perceived and what forms risk communication takes. The study investigates the case of the village of Nivenskoie in the Kaliningrad region in Russia where residents opposed the development of a potash deposit. It is concluded that egalitarians and communitarians are more likely than hierarchical elitists and individualists to participate in protests when a serious environmental threat arises. Respondents of all cultural types tend to trust information coming from their close social network, public figures, and environmentalists whereas people of business are trusted the least.

Keywords:  
risk communication, cultural theory, local community, protest

Risk communication has a decisive role in the perception of risks since it sets criteria for detecting dangerous situations and prompts individuals to unite in preventing and minimising negative consequences [1]. There is evidence that inapposite forms of communication with citizens contribute to risk and uncertainty [2; 3].

The choice of risk communication methods and the overall vision of the problem are affected by the ‘localisation and concentration’ of the ecological conflict [4, p. 105]. For instance, people living in metropolises pay considerable attention to the ecological situation; this is explained by their greater affluence and de-
mands [5, p. 57—58]. For the majority of the country’s nationals, the most urgent problems are low salaries and growing prices. Ignoring environmental problems can only aggravate strained economic conditions.

Environmental risks can cause social tensions and even protests as well as lead to political and economic losses [6]. Spelling out technical and scientific details is not an effective solution because participants in communication do not see each other as neutral communicating agents. Problem perception and construction, as well as the actions taken by participants in communication, depend on their social standing and cultural and political attitudes.

One of the many cases of social tension caused by environmental risks is the conflict between residents of the village of Nivenskoe in the Kaliningrad region and the management of the industrial combine. The enterprise is responsible for communication and influences the configuration of the social space of the local community. The way information has been communicated may lead to a rise in protest attitudes. Although certain measures have been taken (greenspace improvements, buffer zone expansion, etc.), the situation remains volatile because of popular distrust of the combine management [7].

This study aims to clarify the role of risk communication in the emergence of protest attitudes among different social groups in a local community. To this end, we will consider the case of the potash deposit in the village of Nivenskoe.

To attain the aims of the study, we set the following objectives:

1) to measure the trust of residents of Nivenskoe in different sources of information on environmental risks;
2) to measure the awareness of the ecological conflict among residents;
3) to determine whether residents are ready to attend rallies should the ecological situation get worse;
4) to understand how residents of Nivenskoe view different measures taken to resolve the conflict.

In this work, we define risk communication as ‘a targeted process of exchanging information on various types of risks by shareholders: government agencies, organisations, trade unions, non-profits, mass media, etc.)’ [8, p. 235].

Risk communication consists of ‘organising interactions among different actors, institutions, and practices, including those representing the civil society within which information about risks is exchanged and analysed’ [9, p. 133]. Our analysis pays particular attention to sources of information about environmental risks, trust in these sources, and social protest as an instance of risk communication.

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This study explores risk communication in the perception of ecological risks; its focus is the forms of risk communication among different social groups in a local community in the context of an outcry over the threat of an environmental disaster.

Methodologically, this work draws on Mary Douglas’s grid/group concept, which has grown into the cultural theory of risk [10]. The concept holds that people embrace values and norms as well as enter the system of social relations under the influence of two universal forces: group cohesion and social control. Accordingly, risk perception and behaviour under threat depend on the attitude to group norms and the possibility to control the situation [11].

The cultural theory of risk and environmental threat perception

As mentioned above, the theory of cultural theory originates from the work of Mary Douglas [10], who was the first to use grid/group analysis in studying different types of cultures. This theory can be summarised in three statements [12, pp. 396—397]: 1) the beliefs of individuals, their judgements and attitudes are determined by culture; 2) there are several types of cultures, which are identified according to two dimensions: group cohesion (group) and social control within the group (grid) [10, p. 8]; 3) cultural types are universal because they manifest the social nature of the human being.

Based on these two dimensions, Douglas identifies four ideal types of culture, which correspond to four approaches to risk perception: individualists (quadrant A), fatalists (quadrant B), hierarchical elitists (quadrant C), and egalitarians (quadrant D)\(^2\) (Fig. 1).

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\(^2\) Douglas herself called type C ‘isolates’ and type D ‘enclavists’. The research community, however, has adopted the terms ‘fatalists’ and ‘egalitarians’. The development of grid/group analysis and cultural theory and changes in connotations have been considered by Virginie Mamadouh [12].
Each cultural type is defined as a combination of social and cultural patterns characteristic of an individual’s social environment and manifested in his or her behaviour, the system of values, and attitudes to social reality [12, p. 400].

Since the publication of the book, Douglas has recurrently revised and modified her grid/group approach. An appropriate adjustment was made by Michael Thompson (Fig. 1), who introduced a third universal dimension of social life — manipulation. That way, he obtained the fifth cultural type — autonomous individuals [13]. This type is distinguished by weak group cohesion, weak influence on other people, and minimum sociocultural barriers and limits. Other authors have classified it as an asocial cultural type [14].

![Fig. 2. Thompson’s analysis model](image)

Thompson’s modification, however, did not solve the problem of multiple belongingness of individuals, which made it more difficult to evaluate the influence of a certain cultural pattern. As a response to the problem, cultural types began to be considered as two continuums: the hierarchism — egalitarianism and individualism — communitarianism [15; 16].

A statistical reliability test has shown the efficiency of this approach in studying cultural types [17].

The first, hierarchism — egalitarianism, scale shows whether social control is strong or weak. If the individual is closer to hierarchism, his or her behaviour is governed by what society deems acceptable. This concerns gender, social status, etc. Representatives of the hierarchical cultural type rely on traditional structures and values. They see inequality of opportunities and resources as inherent in social organisation. If an individual is closer to egalitarianism, he or she believes that his or her behaviour is ruled by individual preferences and volition and, to a much lesser extent, by social norms and institutions. Unlike hierarchical elitists, they stand for equal opportunities across all aspects of life.

The second, individualism — communitarianism, scale shows how much social relations and expectations are affected by the ‘us and them’ categories. Those who are closer to individualism do not draw the boundary between ‘us’ and
‘them’. Individualists are advocates of a free market, fair competition, and are ready to take on responsibility. When making decisions, they tend to rely on their own powers rather than external structures and circumstances. For individuals who are closer to communitarianism the ‘us’ and ‘them’ category has an important role in the matters of identity. They support tighter government control and public monopoly in the market. Communitarians believe that the state is the most influential institution and it must have as much power as possible.

**Methods**

In conducting the study, we surveyed 300 respondents - residents of the village of Nivenskoe (a 95% confidence probability, a ± 5% confidence interval). The quota sampling method was used to represent the age and sex structure of Bagrationovsk district’s population; the village of Nivenskoe is a part of the district. The door-to-door survey was chosen as the method of the study. The data array was analysed using the SPSS (V23) software.

The cultural type of the respondent was determined using the methodology proposed by Dan Kahan [16]: the respondent rated his or her attitude to certain phenomena on a scale from -2 (strongly disagree) to +2 (strongly agree). Each answer placed the respondent within a certain cultural type (hierarchism, individualism, communitarianism, and egalitarianism). The ratings were summed to obtain a score that defined the cultural type of the respondent. On the one hand, this method made it possible to measure cultural types on a quantitative scale and carry out a correlation and regression analysis. On the other, the range of answers ordered on the ‘hierarchism — egalitarianism’ and ‘individualism — communitarianism’ scale made it possible to identify what type was dominant for each dichotomy. The cultural type was treated as a nominal variable to facilitate the analysis of two-way tables.

**Trust in sources of information on environmental risks**

Using the correlation analysis, we established connections between belongingness to a cultural type and trust in sources of information on environmental risks amid environmental concerns. The pairwise correlation coefficient matrix (Table 1) demonstrates significant dependencies at 0.01 (***) and 0.05 (*) levels. The values that did not meet these conditions were not shown (‘-’).

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3 The Kolmogorov-Smirnov test demonstrated that the distribution differed from the normal (p < 0.05), the Spearman’s rank correlation coefficient r was used.
Table 1

Connections between belongingness to a cultural type and trust in sources of information on environmental risks amid environmental concerns

<table>
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<tr>
<th>Sources of information</th>
<th>Hierarchical elitists</th>
<th>Egalitarians</th>
<th>Individualists</th>
<th>Communitarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental organisations</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Businesses</td>
<td>—</td>
<td>— 0.19**</td>
<td>—</td>
<td>— 0.21**</td>
</tr>
<tr>
<td>Friends and acquaintances</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Authorities</td>
<td>— 0.16*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Human rights defenders</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>State media</td>
<td>— 0.15*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Private media</td>
<td>— 0.15**</td>
<td>— 0.18**</td>
<td>—</td>
<td>— 0.21**</td>
</tr>
</tbody>
</table>

*Source: calculated by the authors based on data from the KMG survey provider.*

All significant correlations were negative. Belongingness to egalitarians and communitarians has a negative effect on trust in businesses and private mass media. This is very much in line with the attitudes of the two cultural types: communitarians support government control and monopoly in the market, whereas egalitarians stand for equality. There was a negative correlation between belongingness to hierarchical elitists and trust in the media (both public and private) and the authorities. Individualism, on the contrary, had little correlation with trust in sources of information.

The values of these dependencies are rather low, ranging from -0.15 to -0.21. Thus, belongingness to hierarchical elitists, egalitarians, and communitarians is a factor affecting trust in some sources of information; yet it is not decisive.

The index of trust in sources of information on environmental risks was calculated for the studied cultural types. To that end, respondents’ ratings on a five-point scale from -2 (not at all) to 2 (a great deal) were analysed. Each rating was multiplied by the percentage of respondents who gave the corresponding answer; then, the values were summed: \((-2) \cdot n_1 + (-1) \cdot n_2 + 0 \cdot n_3 + 1^*n_4 + 2 \cdot n_5\). Communitarians stand out for their distrust of any sources of information (Table 2).
Table 2

Trust of different cultural types in sources of information on environmental risks amid environmental concerns

<table>
<thead>
<tr>
<th>Sources of information</th>
<th>Hierarchical elitists</th>
<th>Egalitarians</th>
<th>Individualists</th>
<th>Communitarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human rights defenders</td>
<td>20.2</td>
<td>19.5</td>
<td>19.9++</td>
<td>19</td>
</tr>
<tr>
<td>Environmental organisations</td>
<td>19.3</td>
<td>19</td>
<td>18.9</td>
<td>17.4</td>
</tr>
<tr>
<td>Friends and acquaintances</td>
<td>20.2</td>
<td>15.8</td>
<td>19.4</td>
<td>12.5</td>
</tr>
<tr>
<td>State media</td>
<td>5.8</td>
<td>5.5</td>
<td>5.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Authorities</td>
<td>4.8</td>
<td>6</td>
<td>5.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Private media</td>
<td>3.4</td>
<td>5.1</td>
<td>4.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Businesses</td>
<td>– 13.2</td>
<td>– 15.2</td>
<td>– 13.4</td>
<td>– 18.2</td>
</tr>
</tbody>
</table>

Source: calculated by the authors based on data from the KMG survey provider.

Respondents were asked to name their preferred sources of information on environmental risks. Regardless of the cultural type, respondents preferred information from people considered experts in the field, ranging from the staff of the Ministry of Emergency Situations (MES) to ecologists (Table 3). Only a few representatives of each type named the Internet a priority source of information.

Table 3

Responses to ‘What is your preferred source of information on environmental risks?’, %

<table>
<thead>
<tr>
<th>Sources of information</th>
<th>Hierarchical elitists</th>
<th>Egalitarians</th>
<th>Individualists</th>
<th>Communitarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>MES</td>
<td>32.7</td>
<td>28.6</td>
<td>30.8</td>
<td>28.7</td>
</tr>
<tr>
<td>Ecologists</td>
<td>30.8</td>
<td>26.7</td>
<td>24.3</td>
<td>27.3</td>
</tr>
<tr>
<td>Authorities</td>
<td>9.6</td>
<td>14.3</td>
<td>15.9</td>
<td>12</td>
</tr>
<tr>
<td>Internet, social media</td>
<td>9.6</td>
<td>6.5</td>
<td>7.5</td>
<td>8</td>
</tr>
<tr>
<td>Reports in the media</td>
<td>5.8</td>
<td>9.2</td>
<td>12.1</td>
<td>8</td>
</tr>
<tr>
<td>Colleagues/friends/relations</td>
<td>5.8</td>
<td>6.5</td>
<td>4.7</td>
<td>6.7</td>
</tr>
<tr>
<td>No answer</td>
<td>5.8</td>
<td>8.3</td>
<td>4.7</td>
<td>9.3</td>
</tr>
</tbody>
</table>

Source: calculated by the authors based on data from the KMG survey provider.
Awareness of the environmental conflict and emergency sources of information

The websites, which were searched through to get information about the conflict in the region, can be classified as search engines (Google, Mail, Yandex), news portals (New Kaliningrad, Klops, Rugrad), video-sharing platforms (YouTube), and the website dedicated to the criticism of the project in Nivenskoe (Rezonans39). The latter was accessed most often by individualists (13.9 %) and hierarchical elitists (19.2 %). Less than half of representatives of these types browsed websites: 44.2 and 40.2% respectively. Among communitarians and egalitarians, the proportion of those who were looking for information on the Internet was even lower: 33.2 and 32.7 % respectively. The most frequently mentioned social media page was Rezonans39.ru on VKontakte. The page reposts news from the Rezonans39 website. Almost each fourth hierarchical elitist (26.8 %) and each fifth individualist (21.4 %) identified that page as a source of information on the potential development of the potash deposit. Among egalitarians and communitarians, the proportion of people who gave that answer was somewhat lower: 15.2 and 14.7 % respectively.

The printed media were less popular among respondents as a source of information than the Internet. The data obtained suggest that about 70% in each cultural type did not read the printed media.

Relatively more often, respondents named television as a source of information about the environmental conflict. Almost two-thirds of hierarchical elitists (61.6 %), half of individualists (47.7 %), and one-third of egalitarians (37.8 %) and communitarians (38 %) noted that they watched different TV channels to learn about the situation.

The survey demonstrated that hierarchical elitists and individualists more often than the other cultural types looked for information on the environmental problem in different media and on the Internet. Probably, that is why they consider themselves more informed about different opinions on the safety of the potash deposit development in the village of Nivenskoe (Table 4).
Table 4

Responses to ‘Are you familiar with different opinions about the safety of the potash deposit development in the village of Nivenskoe?’, %

<table>
<thead>
<tr>
<th>Level of awareness</th>
<th>Hierarchical elitists</th>
<th>Egalitarians</th>
<th>Individualists</th>
<th>Communitarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I am</td>
<td>50</td>
<td>41.9</td>
<td>52.3</td>
<td>35.3</td>
</tr>
<tr>
<td>Somewhat familiar</td>
<td>44.2</td>
<td>53.5</td>
<td>41.1</td>
<td>61.3</td>
</tr>
<tr>
<td>Not at all</td>
<td>1.9</td>
<td>2.8</td>
<td>3.7</td>
<td>2.7</td>
</tr>
<tr>
<td>No answer</td>
<td>3.8</td>
<td>1.8</td>
<td>2.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Source: calculated by the authors based on data from the KMG survey provider.

Protest activity amid environmental concerns

Egalitarians and especially communitarians have considerable experience of protest activity in response to serious environmental problems. Moreover, they are more inclined to attend rallies than hierarchical elitists and individualists are (Tables 5, 6). This might be explained by that the set of beliefs of the two former types (equal rights, equality, the absence of competition, etc.) is weakly implemented in today’s Russia.

The most popular forms of potential and actual protests among cultural types are collecting signatures to petition local, regional, and federal authorities as well as attending rallies (Tables 5, 6).

Table 5

The types of protest actions in which respondents took part, %

<table>
<thead>
<tr>
<th>Type</th>
<th>None</th>
<th>Ranked first</th>
<th>Ranked second</th>
<th>Ranked third</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchical elitists</td>
<td>55.8</td>
<td>Rally (25)</td>
<td>Call for signatures to petition regional authorities (25)</td>
<td>Call for signatures to petition federal authorities (25)</td>
</tr>
<tr>
<td>Egalitarians</td>
<td>47.9</td>
<td>Call for signatures to petition federal authorities (32.3)</td>
<td>Call for signatures to petition local authorities (26.3)</td>
<td>Call for signatures to petition regional authorities (26.3)</td>
</tr>
</tbody>
</table>
### Table 6

<table>
<thead>
<tr>
<th>Type</th>
<th>None</th>
<th>Ranked first</th>
<th>Ranked second</th>
<th>Ranked third</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualists</td>
<td>57.9</td>
<td>Rally (24.3)</td>
<td>Call for signatures to petition federal authorities (23.4)</td>
<td>Call for signatures to petition regional authorities (20.6)</td>
</tr>
<tr>
<td>Communitarians</td>
<td>37.3</td>
<td>Call for signatures to petition federal authorities (40)</td>
<td>Call for signatures to petition local authorities (34)</td>
<td>Call for signatures to petition regional authorities (33.3)</td>
</tr>
</tbody>
</table>

*Source: calculated by the authors based on data from the KMG survey provider.*

### Measures to stop rumours of environmental risks

Respondents named the best measures that large companies could take to stop rumours of environmental risks (Table 7); multiple answers were possible. In descending frequency order, the measures mentioned by respondents of all types were as follows: creating conditions for maximum government control over production; close collaborations with expert ecologists; public visits to the production facilities.
Table 7

### Attitudes of different cultural types to the measures that large companies can take to stop rumours of environmental risks, %

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hierarchical elitists</th>
<th>Egalitarians</th>
<th>Individualists</th>
<th>Communitarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating conditions for maximum government control over production</td>
<td>76.9</td>
<td>77</td>
<td>75.7</td>
<td>80</td>
</tr>
<tr>
<td>Public visits to production facilities</td>
<td>69.2</td>
<td>57.1</td>
<td>56.1</td>
<td>62</td>
</tr>
<tr>
<td>Close collaborations with expert ecologists</td>
<td>65.4</td>
<td>64.1</td>
<td>64.5</td>
<td>68</td>
</tr>
<tr>
<td>Raising awareness of production processes</td>
<td>48.1</td>
<td>48.4</td>
<td>42.1</td>
<td>57.3</td>
</tr>
<tr>
<td>Roundtables with broad public participation</td>
<td>42.3</td>
<td>53</td>
<td>43</td>
<td>58.7</td>
</tr>
<tr>
<td>None</td>
<td>7.7</td>
<td>9.7</td>
<td>8.4</td>
<td>6.7</td>
</tr>
<tr>
<td>No answer</td>
<td>7.7</td>
<td>5.5</td>
<td>5.6</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: data obtained by the KMG survey provider at the request of the Immanuel Kant Baltic Federal University.

Tighter government control was most often named as the best measure by communitarians — the type associated with support for government intervention in production and manufacturing. Similarly to egalitarians, they commonly called roundtables with broad public participation an effective measure. This can be explained by high levels of distrust among communitarians and their ensuing desire to receive first-hand information. It does not come as a surprise that many representatives of this cultural type mentioned public visits to production facilities. It is difficult to explain, however, why many communitarians (57.3%), whose level of trust is rather low, selected the ‘raising awareness’ option.

Hierarchical elitists also mentioned public visits to production facilities as an effective measure more often than other respondents.

Egalitarians supported the idea of round tables with broad public participation. This answer is very much in line with the equal rights values shared by representatives of this type.

The answers given by individualists did not show a specific pattern.

The study of protest activities in the village of Nivenskoe revealed that representatives of different cultural types perceived environmental risks differently and preferred different risk communication forms. This conclusion leads one to make the following interpretations.
1. Egalitarians and especially communitarians are more ready to participate in environmental protests than hierarchical elitists and individualists. The two former groups commonly are experienced in such activities. This fact and the low trust of egalitarians and communitarians in sources of information on environmental risks make these two groups the most non-conformist protest activity segment in the village of Nivenskoe as long as environmental problems are concerned.

2. Representatives of the two other types have a more positive outlook and consider themselves familiar with different opinions on the safety of the potash deposit development in the village of Nivenskoe. It can be concluded that these two factors are complementary.

3. To prevent an increase in protest attitudes, egalitarians and communitarians should be considered as participants in roundtables and public hearings. Firstly, this will aid in channelling their energy into constructive pursuits. Secondly, they will receive the information they need. This is all the more important as egalitarians и communitarians are more inclined to see raising awareness as an effective tool to relieve social tensions than hierarchical elitists and individualist are.

4. The study identified features common to all cultural types. Respondents agree that creating conditions for tighter governmental control over production is the most effective measure to stop rumours of environmental risks. Moreover, respondents tend to trust information received from friends and relations, social activists, and ecologists. The authorities, private and public media, and especially business are not considered effective sources of information about environmental risks. Residents of the village of Nivenskoe prefer direct forms of communication. Moreover, they stress that, should an environmental problem arise, they will give priority to information from the MES and ecologists.

Further research on the problem may draw on the findings of this study to explore the perception of environmental risks by each cultural type.

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References


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https://orcid.org/0000-0001-6703-4860
For most of its history, Sweden has been a country dominated by the Lutheran Church, having the status of the official state religion. Starting in the mid-to-late 20th century, mass immigration to Europe had a considerable impact on the confessional structure of Sweden’s population. The growing number of refugees from the Balkan Peninsula, the Middle East, and Africa has turned Sweden into a multi-religious state. Sweden has become one of the leaders among the EU countries as far as the growth rates of adherents of Islam are concerned. Immigrants are exposed to adaptation difficulties causing their social, cultural and geographical isolation and making relatively isolated migrant communities emerge. This study aims at finding correlation between the changes in the confessional structure of Swedish population (as a result of the growing number of non-Christians) and the geographical structure of migrant flows into the country. This novel study addresses the mosaic structure of the Swedish religious landscape taking into account the cyclical dynamics of replacement of Protestantism by Islam. The methods we created make it possible to identify further trends in the Swedish religious landscape. This study adds to results of the complex sociological and demographic studies of the confessional structure of the Swedish population.

Keywords:
Sweden, migration, confessional structure of population, religious landscape, Islam, refugees, parallel communities

Introduction

Globalisation driving economic and demographic polarisation in different regions worldwide intensifies migration processes [1]. Thus, in 1990 there were 153 million international migrants in the world (2.9% of the world’s population) whereas by mid-2019 the number of international migrants went beyond 272 mil-
lion people (3.5 % of the world’s population). Moreover, this number is expected to keep growing¹. Jacques Attali, Alvin Toffler and other globalisation philosophers believe that the mere existence of the global world that, according to Thomas Friedman, has become ‘flat’ [2], is related to forming a nomadic civilisation, a civilisation of new nomads [3; 4].

Most researchers admit that social, demographic, economic, and political factors [5; 6] define the nature and intensity of global migration processes. We would like to add to this list another factor that drives migration worldwide, and that has become particularly relevant due to globalisation. This factor means that in the modern world, different countries and regions tend to become more and more heterogeneous in terms of religions, cultures and ethnicities. As a result of mass migration, numerous parallel communities (diasporas, ethnic and religious minorities) emerge. Considering the low growth rate of ‘indigenous’ population in North America and Europe, the share of migrants in the population keeps growing. The migration crisis of 2014—2016 that caused millions of people from Asia and Africa come to Europe has immensely aggravated the problems of social and cultural adaptation of migrants to the life in the host societies [7]. These problems have become particularly pressing in countries that host more migrants from Islamic countries, especially in Sweden.

Some Russian experts in foreign affairs (like Leonid Fituni and Irina Abramova) note that members of parallel migrant communities tend to escape from the new reality concentrating in enclaves, to refuse to integrate into the European civil society, and to create parallel bodies of power [8]. Members of such parallel communities maintain close relations with their country of origin and their relatives who stayed there, thus increasing the migrant flow from that country and inhibiting the cultural assimilation of the diaspora, as it was noticed by German researcher Thilo Sarrazin [9, p. 259—260]. On the other hand, as it was noticed by Anatoliy Vishnevsky, the eminent Russian demographer, in a globalised environment migration flows may become bridges between different civilisations, countries and nations [10, p. 319—325]. In this connection, we should note that diasporas play a crucial role in establishing economic relations between the country of origin of its members and their new homeland and that different migrant organisations drive integration of their members into the new social and cultural environment by helping them in terms of accommodation, employment or education.

Nevertheless, intensification of migration processes that cause emerging of parallel communities in the developed countries with low birth rates may result in ‘indigenous’ population gradually becoming a minority. This process is known as a ‘third demographic transition’. According to David Coleman, a British demographer, the author of this concept, the benchmark for this transition is ‘a pri-

ori, a decline of former majority (indigenous) populations to below of 50 per cent of the total’ [11, p. 32]. In this connection, Russian demographer Mikhail Klupt emphasises that ‘this transition results in developing world moving westwards’ [12, p. 67].

Materials and methodology

The research is based on national statistical sources detailing the structure of migration traffic to Sweden as well as the location of migrants within the country. The information about affiliation in Sweden and countries generating migrant traffic to it is put to analysis basing on consolidated sources of statistical data, including public opinion polls [13—15] and monographic reference books [16].

We propose to use the Modified Fractionalisation Index (MFI) [17] as the key indicator of changes in components and structure of the religious landscape. We have created this index while studying the religious environment in different countries by eliminating several drawbacks in the Ekkel’s Fractionalisation Index [18], which is often used by Russian researchers:

$$MFI = 1 - \frac{\sum_{i=1}^{m} \pi_i^2}{1 - 1/m},$$

where $\pi_i$ is the impact of the $i^{th}$ actor on the situation structure (or the share of this actor in such a structure) by a certain parameter; $m$ is the number of actors.

In any case, MFI may have values varying in the interval from 0 to 1. Dividing it by segments, we get the following subinterval values for fractionalisation by this or that parameter: 0.000—0.280 means extremely homogeneous; 0.281—0.556 means relatively homogeneous; 0.557—0.820 means relatively heterogeneous; 0.821—1.000 means extremely heterogeneous [19, p. 129].

Our hypothesis implying that religious landscape dynamics has a cyclic nature shaped by competition of religions [19, p. 173—204] is quite in line with the ideas by David Coleman about the third demographic transition. The cycle of supplantation one religion by another may be triggered by the migration of adepts of the religion that will compete with the one that previously prevailed in the religious landscape of the hosting country. Our calculations show that on average, such a cycle lasts for 106 years. It consists of 4 stages (initial supplantation, sustainable supplantation, parity, and final supplantation) each having a certain duration and special impact on the structure of the religious landscape (see Table 1).

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2 Statistiska centralbyråns (SCB). URL: https://www.scb.se (access date: 15.10.2019).
3 Brown D., James P. Religious Characteristics of States Dataset Project: Demographics v. 2.0 (RCS-Dem 2.0), COUNTRIES ONLY. URL: http://www.thearda.com/Archive/Files/Descriptions/RCSDEM2.asp (access date: 18.11.2019).
Table 1

The phase duration and running conditions that comprise the “average” religious competition cycle

<table>
<thead>
<tr>
<th>Phase</th>
<th>Duration, years</th>
<th>Values of MFI</th>
<th>Structure of confessional landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial supplantation</td>
<td>18</td>
<td>MFI ∈ (0,000; 0,280]</td>
<td>Share of the religion under supplantation ≥ 87 %</td>
</tr>
<tr>
<td>Stable supplantation</td>
<td>21</td>
<td>MFI ∈ [0,281; 0,556]</td>
<td>87 % &gt; share of the religion under supplantation ≥ 70 %</td>
</tr>
<tr>
<td>Parity</td>
<td>29</td>
<td>MFI ∈ [0,557; 1,000]</td>
<td>70 % &gt; share of the religion under supplantation ≥ 30 %</td>
</tr>
<tr>
<td>Final supplantation</td>
<td>38</td>
<td>MFI ∈ [0,556; 0,000)</td>
<td>Share of the religion under supplantation &lt; 30 %</td>
</tr>
</tbody>
</table>

Source: [19, p. 225].

Results and Discussion

In Sweden, demographic development has always been influenced mainly by external migration. Since the Middle Ages, Sweden has been receiving migrants from Northern Germany, mainly merchants and artisans. In the 17th century, the discovery of significant iron reserves attracted Walloon Protestants who taught ironworking to their new compatriots4. They flew from the territories that now belong to Belgium in virtue of religious persecution.

Since the 16th century, Lutheranism has become the official religion in Sweden, and the activities of other religious organisations were restricted. A royal edict of 1617 prohibited non-Lutherans to permanently live in Sweden; preachers of other religions had the same status as high traitors and were prosecuted to the fullest extent of the law, including death penalty. That is why it was difficult for non-Protestants to migrate to Sweden.

As time went by, Swedish law became more liberal in terms of religious freedom. Thus, in 1858 the law that prohibited religious assemblies outside the church houses was abolished; since 1870 non-Lutherans were no more prohibited to go in for politics; since 1880 it is permitted to change religion [20]; finally in 2000 Lutheran Church lost its status of the official church of Sweden [21]. Neverthe-

4 Sweden and migration. URL: https://sweden. se/migration (access date: 19.11.2019).
less, for quite a long time religious liberalisation did not entail any considerable increase in the share of the non-Protestant population in Sweden, so Protestantism (in the form of Lutheranism) has prevailed in Sweden’s religious landscape.

Consequently, until the mid-20th century migration inflow had no significant impact on the ethnical or confessional structure of the Swedish population. As a whole, the country remained mono-ethnic and mono-religious, and most of the migrants managed to become naturalised and even to accept the dominating Lutheranism.

After the Second World War, Sweden faced increasing migrant inflow, which was mainly due to the favourable economic situation there. As the Swedish economy proliferated after the war, it was in desperate need of labour force. In 1950, there were 198,000 migrants (which accounted for 2.8 % of the country’s population): half of them originated from the neighbouring Scandinavian countries, and more than one third came from other countries of Europe (see Table 2).

Table 2

Structure of immigration to Sweden by region of origin, 1950—1980

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>thousand pers.</td>
<td>thousand pers.</td>
<td>thousand pers.</td>
<td>thousand pers.</td>
</tr>
<tr>
<td>Nordic countries\ except Sweden</td>
<td>99,1</td>
<td>174,0</td>
<td>320,9</td>
<td>341,2</td>
</tr>
<tr>
<td>Finland</td>
<td>44,8</td>
<td>101,3</td>
<td>234,5</td>
<td>251,3</td>
</tr>
<tr>
<td>EU-28\ except the Nordic countries</td>
<td>76,2</td>
<td>76,0</td>
<td>139,2</td>
<td>151,3</td>
</tr>
<tr>
<td>Poland</td>
<td>7,8</td>
<td>6,3</td>
<td>10,8</td>
<td>20,0</td>
</tr>
<tr>
<td>Germany</td>
<td>21,6</td>
<td>37,6</td>
<td>41,8</td>
<td>39,0</td>
</tr>
<tr>
<td>UK</td>
<td>2,1</td>
<td>2,7</td>
<td>5,4</td>
<td>8,2</td>
</tr>
<tr>
<td>Greece</td>
<td>0,0</td>
<td>0,3</td>
<td>11,8</td>
<td>15,1</td>
</tr>
<tr>
<td>Hungary</td>
<td>2,0</td>
<td>8,5</td>
<td>10,6</td>
<td>12,9</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>9,3</td>
<td>35,1</td>
<td>48,2</td>
<td>61,2</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>0,2</td>
<td>1,5</td>
<td>33,8</td>
<td>38,0</td>
</tr>
<tr>
<td>USSR</td>
<td>8,1</td>
<td>31,9</td>
<td>7,2</td>
<td>6,8</td>
</tr>
<tr>
<td>Turkey</td>
<td>0,1</td>
<td>0,2</td>
<td>3,8</td>
<td>14,4</td>
</tr>
<tr>
<td>Asia</td>
<td>0,9</td>
<td>1,5</td>
<td>5,9</td>
<td>30,3</td>
</tr>
<tr>
<td>North America</td>
<td>11,3</td>
<td>11,7</td>
<td>15,6</td>
<td>14,5</td>
</tr>
<tr>
<td>South America</td>
<td>0,4</td>
<td>0,7</td>
<td>2,5</td>
<td>17,2</td>
</tr>
<tr>
<td>Chile</td>
<td>0,0</td>
<td>0,0</td>
<td>0,2</td>
<td>8,3</td>
</tr>
<tr>
<td>Africa</td>
<td>0,3</td>
<td>0,6</td>
<td>4,1</td>
<td>10,0</td>
</tr>
<tr>
<td>Total</td>
<td>197,8</td>
<td>299,9</td>
<td>537,6</td>
<td>626,9</td>
</tr>
</tbody>
</table>


\[5\] In this article Nordic countries stand for Norway, Sweden, Denmark, Iceland, and Finland.

\[6\] In this article the composition of the EU is considered as on January 1, 2020.
After the migration law was liberalised in the 1950s, Swedish labour market faced a considerable inflow of migrant workers mostly coming from Scandinavian countries, Germany and countries of Eastern Europe (Yugoslavia and Baltic republics of the USSR). The postwar migration inflow to Sweden lasted till the late 1970s when the government stopped supporting labour migration. The postwar migrant inflow was relatively homogeneous, consisting mainly of Western Christians.

In the period from 1950 to 1970, migrant flows to Sweden was predominantly generated by one region — Scandinavia. Thus, in 1970 the share of migrants coming from Scandinavian countries reached its maximum of almost 60% (about 3/4 of them coming from Finland). During the same period, more than 25% of migrants came from the countries that are now members of the EU. Only about 15% of migrants came from elsewhere. If we further calculate the MFI by home countries of migrants, during the period from 1950 to 1970 its value decreased reaching its minimum in Sweden’s recent history, i.e. in 1970 it was recorded as 0.789 for the first time changing from extreme heterogeneity to relative heterogeneity (Table 3).

Table 3

Dynamics of MFI for immigrants and shares of religious communities in Sweden population, 1950—1980

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MFI of the flow of immigrants to Sweden</td>
<td>0,887</td>
<td>0,837</td>
<td>0,789</td>
<td>0,825</td>
</tr>
<tr>
<td>MFI of the religious population of Sweden</td>
<td>0,057</td>
<td>0,055</td>
<td>0,065</td>
<td>0,123</td>
</tr>
<tr>
<td>Proportion of Protestants in the religious population,%</td>
<td>98,354</td>
<td>98,376</td>
<td>96,991</td>
<td>94,171</td>
</tr>
<tr>
<td>Proportion of Catholics in the religious population,%</td>
<td>0,397</td>
<td>0,430</td>
<td>0,973</td>
<td>1,509</td>
</tr>
<tr>
<td>Proportion of Orthodox Christians in the religious popula-</td>
<td>0,079</td>
<td>0,162</td>
<td>0,519</td>
<td>1,022</td>
</tr>
<tr>
<td>tion,%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of Muslims in the religious population,%</td>
<td>0,016</td>
<td>0,028</td>
<td>0,176</td>
<td>1,556</td>
</tr>
<tr>
<td>Proportion of religious population in Sweden,%</td>
<td>90,014</td>
<td>82,609</td>
<td>75,204</td>
<td>73,840</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors based on Brown D., James P. Religious Characteristics of States Dataset Project: Demographics v. 2.0 (RCS-Dem 2.0), COUNTRIES ONLY. URL: http://www.thearda.com/Archive/Files/Descriptions/RCSDEM2.asp (access date: 18.11.2019).

However, after 1970s migrant flows to Sweden became more heterogeneous with more people coming from Asia, Africa, Latin America, and Europe outside the EU. Changes in the geographic structure of migrant flows to Sweden resulted in increased MFI value by migrants’ homeland. In 1980 it reached 0.825, thus returning to extreme heterogeneity.

In average, more than 70—75 % of post-war migrants came to Sweden from countries having much in common in terms of their culture, history and religion. This is why before 1970, the decrease of Lutherans’ share in Sweden’s religious landscape was almost unnoticeable. However, the MFI value of Sweden’s religious population was sustainably growing after World War II, which means that the share of non-Protestants in the country grew due to a more diversified migrant inflow [22].

Most migrants coming from Poland, Hungary and Latin America are Catholics; those who come from Greece or Romania are predominantly Orthodox Christians; those who come from Turkey and Iran are mostly Muslims; whereas natives of Yugoslavia may be Muslims, Catholics or Orthodox Christians, depending on their ethnicity. In such a way, the confessional structure of the Swedish population is mainly shaped by migration and not by religious conversion, which is not at all typical for the Swedes. While analysing the confessional structure of the Swedish population, we consider only the religious people, since active secularisation processes have made many Swedes religiously unaffiliated, just like migrants from Scandinavian countries and Western Europe [23; 24].

In overall, during the period from 1950 to 1980, the number of Catholics in Sweden has increased almost fourfold; Orthodox Christians became 12.5 times more numerous, whereas the number of Muslims has increased almost hundredfold. Postwar migration resulted in appearing of other religious communities, like Buddhists from China and Thailand, Bahais from Iran etc. Thus, as the religious landscape in Sweden is becoming more mosaic, there appear religions that can potentially compete with Lutheranism, i.e. trigger the cycle of religious competition changing the country’s religious landscape.

In the late 1970s, when the economy and the employment rate in the industrial sector took the downward trend, the structure of immigration flows to Sweden started to change due to a decrease in demand for workforce. Labour permits were issued only to migrants coming from Scandinavian countries, and since 1995 to the EU citizens too. This is why refugees and immigrants from develop-
ing countries replace labour migrants from developed countries. It is essential to emphasise that culture and religion in the majority of developing countries differ considerably from the ones prevailing in Sweden [25]. In Sweden, migration policy was rather humanistic, and the country proclaimed itself as a ‘humanitarian superpower’⁸. As the country emphasised protection of human rights, receiving refugees who sought to be rescued from political repressions, wars, poverty, and famine was largely supported by the Swedish society.

We can trace several migration waves in Sweden’s recent history. In the 1970s, Sweden received refugees from Chile who were fleeing from military dictatorship by Augusto Pinochet as well as migrants from Uganda who were seeking refuge from the regime of Idi Amin. Later, in the 1980s, there were refugees of the war between Iran and Iraq [26].

In the 1990s, there started mass migration of refugees to Sweden. Its first peak was due to the flow of migrants (mostly Bosnians) from the former Yugoslavia then facing the civil war. For instance, only in 1992 (the record-setting year in terms of the number of refugees) Sweden granted asylum to 84,000 migrants mostly coming from the former Yugoslavia. Besides, Sweden received refugees from the Middle East and the Horn of Africa who sought safety because of military conflicts and economic insecurity faced by their countries (Table 4).

In the 2000s, the flows of migrants from these regions kept increasing due to many reasons. Firstly, the law of Sweden guarantees the right of families for reunification, so relatives of migrants headed for Sweden. About 50 % of all the migrants coming to Sweden since the 1990s sought the reunification of their families [27]. Secondly, the situation in countries generating migrant traffic to Sweden did not improve. The US invasion of Iraq in 2003 caused the migrant traffic from that country to triple within just a decade. To give an example, in 2007 Södertälje, a small city near Stockholm, received 1,268 immigrants from Iraq, i.e. more refugees than were received by the USA and Canada together during that year.⁹

### Table 4

Structure of immigration to Sweden by region of origin, 1990—2018

<table>
<thead>
<tr>
<th>Region and country of migrants’ birth</th>
<th>Year</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>thousand pers.</td>
<td>thousand pers.</td>
<td>thousand pers.</td>
<td>thousand pers.</td>
</tr>
<tr>
<td>Nordic countries except Sweden</td>
<td>319,1</td>
<td>279,6</td>
<td>263,2</td>
<td>235,6</td>
</tr>
<tr>
<td>Finland</td>
<td>217,6</td>
<td>195,4</td>
<td>169,5</td>
<td>147,9</td>
</tr>
<tr>
<td>EU-28 except the Nordic countries</td>
<td>175,7</td>
<td>193,1</td>
<td>274,2</td>
<td>369,7</td>
</tr>
<tr>
<td>Poland</td>
<td>35,6</td>
<td>40,1</td>
<td>70,2</td>
<td>92,8</td>
</tr>
<tr>
<td>Germany</td>
<td>37,8</td>
<td>38,1</td>
<td>48,2</td>
<td>51,1</td>
</tr>
<tr>
<td>Romania</td>
<td>8,8</td>
<td>11,8</td>
<td>19,7</td>
<td>31,0</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>71,2</td>
<td>169,5</td>
<td>216,0</td>
<td>259,2</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>43,3*</td>
<td>72,0</td>
<td>70,8</td>
<td>65,1</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>...</td>
<td>51,5</td>
<td>62,1</td>
<td>59,4</td>
</tr>
<tr>
<td>Turkey</td>
<td>25,2</td>
<td>31,9</td>
<td>42,5</td>
<td>50,0</td>
</tr>
<tr>
<td>Asia</td>
<td>124,4</td>
<td>220,7</td>
<td>410,1</td>
<td>745,3</td>
</tr>
<tr>
<td>Syria</td>
<td>5,9</td>
<td>14,2</td>
<td>20,8</td>
<td>186,0</td>
</tr>
<tr>
<td>Iraq</td>
<td>9,8</td>
<td>49,4</td>
<td>121,8</td>
<td>144,0</td>
</tr>
<tr>
<td>Iran</td>
<td>40,1</td>
<td>51,1</td>
<td>62,1</td>
<td>77,4</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0,5</td>
<td>4,3</td>
<td>14,4</td>
<td>52,0</td>
</tr>
<tr>
<td>Thailand</td>
<td>5,0</td>
<td>10,4</td>
<td>31,4</td>
<td>42,4</td>
</tr>
<tr>
<td>India</td>
<td>9,1</td>
<td>11,1</td>
<td>17,9</td>
<td>35,2</td>
</tr>
<tr>
<td>North America</td>
<td>19,1</td>
<td>24,3</td>
<td>51,3</td>
<td>40,1</td>
</tr>
<tr>
<td>South America</td>
<td>44,2</td>
<td>50,9</td>
<td>63,7</td>
<td>72,5</td>
</tr>
<tr>
<td>Africa</td>
<td>27,3</td>
<td>55,1</td>
<td>114,9</td>
<td>219,9</td>
</tr>
<tr>
<td>Somalia</td>
<td>1,4</td>
<td>13,1</td>
<td>37,9</td>
<td>68,7</td>
</tr>
<tr>
<td>Eritrea</td>
<td>...</td>
<td>3,1</td>
<td>10,3</td>
<td>42,3</td>
</tr>
<tr>
<td>Total</td>
<td>790,4</td>
<td>1003,8</td>
<td>1384,9</td>
<td>1955,6</td>
</tr>
</tbody>
</table>

The next wave of refugees to Sweden was a result of the Arab Spring in 2011, and the events that followed it in the countries of the Middle East, including the civil wars that broke out in Syria and Iraq. These events generated more massive refugee traffic from the Middle East and Africa to Europe, thus entailing a migration crisis there. Comparing to other European countries, Sweden has received the largest number of refugees per capita. For instance, in 2014 the country hosted 81,000 refugees, and in 2015 (the peak year of the migration crisis) Sweden received more than 162,000 asylum applicants\textsuperscript{10}. In 2014, every fifth immigrant in Sweden was a Syrian native, whereas in 2015 almost every fourth immigrant arrived from Syria. In 2017 Syrians became the most numerous group of migrants to Sweden outnumbering the Finns who had been holding the first position in these terms since the beginning of the 20th century. The Iraqis are holding the third position being slightly inferior to the Finns in number\textsuperscript{11}.

In the 2010s, the most fast-growing groups of migrants to Sweden come from Afghanistan, Eritrea, Somalia, India, and Iran. Today, more than 50 % of all the migrants arriving in Sweden either apply for asylum or seek reunification of their families.

In 1990—2018, the geography of countries generating migrant flows to Sweden has become broader, which is evidenced by higher MFI value for the migration flow structure. This diversification was contributed by more migrants coming from Asia and Africa, which naturally entails changes in the religious landscape of the hosting country. Most of the migrants coming from Syria, Iraq, Iran, Afghanistan, Bosnia and Herzegovina, Somalia, Kosovo and almost half of the migrants coming from Eritrea are Muslims. Our assessment shows that, considering the confessional structure of the population in the countries that generate immigrant traffic to Sweden, Muslims account for more than 80 % of the migrants. This is why the share of Muslims was the most fast-growing segment of Sweden’s religious landscape. The peaks in the number of Muslims in Sweden were recorded in the 1990s and after 2010, which historically matches the two significant waves of refugee flows to Sweden: the one from Yugoslavia and Bosnia, and the one from Syria and Iraq (Table 5).

\textsuperscript{10} Migration Policy Debates N°13 January 2017. OECD. URL: www.oecd.org/migration (access date: 18.11.2019).

\textsuperscript{11} Utrikes födda samt födda i Sverige med en eller två utrikes födda föräldrar efter födelseland/ursprungsland, 31 december 2018, totalt. URL: https://www.scb.se (access date: 20.11.2019).
Dynamics of MFI for immigrants and shares of religious communities in the population of Sweden, 1990—2018

<table>
<thead>
<tr>
<th>Index</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFI of the flow of immigrants to Sweden</td>
<td>0.910</td>
<td>0.946</td>
<td>0.964</td>
<td>0.971</td>
</tr>
<tr>
<td>MFI of the religious population of Sweden</td>
<td>0.183</td>
<td>0.228</td>
<td>0.260</td>
<td>0.311</td>
</tr>
<tr>
<td>Proportion of Protestants in the religious population, %</td>
<td>91.160</td>
<td>88.566</td>
<td>86.856</td>
<td>83.371</td>
</tr>
<tr>
<td>Proportion of Catholics in the religious population, %</td>
<td>1.713</td>
<td>1.934</td>
<td>2.194</td>
<td>2.248</td>
</tr>
<tr>
<td>Proportion of Orthodox Christians in the religious population, %</td>
<td>1.539</td>
<td>2.083</td>
<td>2.036</td>
<td>1.903</td>
</tr>
<tr>
<td>Proportion of Muslims in the religious population, %</td>
<td>2.998</td>
<td>6.265</td>
<td>7.754</td>
<td>13.850</td>
</tr>
<tr>
<td>Proportion of religious population in Sweden, %</td>
<td>72.477</td>
<td>71.113</td>
<td>68.485</td>
<td>67.050</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors based on Brown D., James P. Op. cit.

During the period from 1990 to 2018, the share of Muslims in Sweden’s religious population increased more than 4.6-folds. Today Muslims account for almost 14% of the religious population in the country, and according to our calculations, Sweden is home for 950,000 Muslims. The share of Catholics increased by 1.3 (which is mainly due to more migrants coming from Poland), whereas the share of Orthodox Christians has slightly decreased. During the same period, considerable groups of adherents of other religions appeared in Sweden. Each group is genetically linked to a particular group of migrants. Thus, most of the Hindus come from India and Sri Lanka, most of Buddhists come from China and Thailand, most of the Bahais come from Iran, most of the adherents of Alevis come from Turkey, most of Yazidis and Mandaeans come from Iraq. The fact that migration has turned Sweden into a multi-religious country is supported by higher MFI values for the religious population with their peaks chronologically matching the years when maximum refugees arrived in Sweden (the 1990s and the 2010s).

Today’s Sweden is literally a country of migrants. In 2018, 930,000 of its residents (i.e. 9.1% of the country’s population) were citizens of other countries, and more than 1.2 million of Swedish citizens were born abroad. In overall, Sweden is the home country for 2.5 million people (i.e. almost 25% of the country’s pop-

12 Mandaeans are the adherents of an ancient Gnostic religion that appeared in the Southern Iraq and that survived till our days. As a result of migration, Sweden is home of the largest group of Mandaeans in the world (11 thousand pers.) [28].
ulation) having foreign origins, which means that either they were born abroad or at least one of their parents was born abroad\(^\text{13}\). In terms of their geography, migrants are located in Sweden in a quite uneven manner with more than half of them concentrated in 3 of the country’s 21 läns (counties). These are Stockholm, Västra Götaland, and Skåne where the country’s largest municipalities (Stockholm, Gothenburg, and Malmö) are located. The same three läns host almost 60% of migrants coming to Sweden from Islamic states. Muslims are particularly numerous in the län of Stockholm, home for 27% of the country’s Muslims, i.e. about 260,000 people that accounts for more than 22% of the total län’s believers. About 80% of the population in Rinkeby, northwestern district of Stockholm municipality (sometimes nicknamed Little Mogadishu), adhere to Islam. The situation is almost the same in Rosengård (a district of Malmö) with almost 86% of its inhabitants being of foreign origin, most of them from Iraq, Bosnia and Herzegovina, Lebanon, Somalia Afghanistan and other (predominantly Muslim) countries\(^\text{14}\).

The fact that since the 1990s Sweden predominantly receives immigrants adhering to other cultures and other religions, makes it rather hard to ensure their integration into the Swedish society (and in case of Muslim immigrants this is closing in on impossible)\(^\text{15}\), contributes to their social degradation and criminalisation and results in emerging of parallel migrant communities. Parallel communities are concentrated in the so-called ‘vulnerable areas’, enclaves where the state monopoly on law enforcement is challenged by the institutions of traditional leadership based on the Islamic religious rules that are not quite in line with the West European liberal values. In 2017, the country had 61 vulnerable areas inhabited by 560,000 people (more than 5% of the country’s population)\(^\text{16}\). According to the Swedish police, these vulnerable areas host 5,000 criminals and 200 criminal networks. Government of Sweden has proclaimed 23 of these areas with a total population of 200,000 people to be ‘Especially vulnerable’, almost uncontrolled by the authorities [29, p. 136]. These include Rinkeby in Stockholm and Rosengård in Malmö.

In such a way, it took the external migrants only 50 years to transform Sweden’s religious landscape. Migration flows to the country grew more diversified due to more migrants coming mostly from Islamic countries, which resulted in the

\(^{13}\) Befolkningsstatistik i sammandrag 1960—2018. URL: https://www.scb.se (access date: 20.11.2019).

\(^{14}\) Sweden and migration. URL: https://sweden.se/migration (access date: 19.11.2019).


\(^{16}\) Här är fakta om de 556.000 som lever i utsatta områden // Dagens Nyheter. URL: https://www.dn.se/debatt/har-ar-fakta-om-de-556000-som-lever-i-utsatta-omraden (access date: 19.11.2019).
growing share of Muslims in the country’s population thus triggering the cycle of replacement of Protestantism with Islam in the religious landscape of Sweden. The first stage of this cycle of religious competition (initial supplantation) started in 1994 when Muslim migrant inflow from Yugoslavia, Bosnia and Herzegovina, Iran, and Iraq reached its maximum. The fact that the religious landscape in Sweden had undergone the initial supplantation stage of the religious competition cycle is supported by the MFI value for the religious population that remained below 0.280 in 2010. In contrast, the share of adherents of Islam in the country grew to almost 8%.

The next peak of Muslim migration to Sweden was in 2014—2015 when the country received the record number of refugees from the Middle East and the Horn of Africa, which triggered the second stage of the religious competition cycle. Thereby, in Sweden, the first stage lasted for 20—21 years, a period that approximately matches its average duration of 18 years. By 2018, the MFI value for the confessional structure of population had increased to 0.311, and the share of Muslims increased to 14% thus matching the parameters of the next stage in the religious competition cycle, — the stage of sustainable supplantation. Considering that in an ideal cycle it may last for 21 years, we may suppose that by 2036—2040 sustainable supplantation will give way to parity, i.e. by that time the share of Muslims in the religious population of Sweden may reach the threshold of 50%. It is interesting to note that our forecast is in line with the data of Pew Research Center stating that in case intense immigration to Sweden continues, by 2050 the share of Muslims in the country’s population will have gone beyond 30% [13]. However, parity stage has already become a reality in some districts of Sweden’s largest cities where the majority of the population is Muslim.

**Conclusion**

Today’s Sweden is one of the first countries in the world that in just 50 years has turned from a monoethnic state with a dominating official religion to a multi-ethnic and multi-religious country. External migration became the key transforming factor for the Swedish society changing its cultural traditions and the vector of its civilisational development. Initially, this migration had an economic background as the country’s explosively growing economy had created a demand for human resources. However, later, accepting migrants from the world’s most troublesome regions became a kind of ‘humanitarian imperative’ for Sweden. Growing Muslim community that is gradually becoming, and in some parts of the country has already become the “second majority” after the adherents of Lutheranism, creates serious problems for its adaptation and integration into the Swedish society. It turned out that not only the migrants but also the Swedes themselves adhering to different religions (and often to different values) are not ready to coexist within one country. This is why the grow-
ing cultural, social and geographic isolation of refugees in Sweden makes the sustainable parallel migrant communities emerge. The policymakers in Sweden are yet to develop a new migration strategy. On the one hand, the political parties of the ‘old’ system have reached consensus on the image of Sweden as a ‘multicultural humanitarian superpower’ where discrimination restrictions for Muslim migrants are unacceptable. On the other hand, many politicians in Sweden can not afford to ignore that quite many Swedes are asking to restrict migrant flows to the country. As a result, the new party of Sweden Democrats (that aims at protecting national identity and ensuring wellbeing and safety of Swedish citizens endangered by Muslim migrant inflow) grew very popular and received its record-setting 62 seats in Riksdag with 17.6 % votes [30]. Of course, now we can not imagine that Sweden could become a monoethnic state again or that being non-Protestant may be equalled to high treason. However, we believe that under the electorate pressure Swedish government will have to abolish its ‘generous’ migrant policy changing it to a more practical one, where receiving fewer refugees will slow down the cycle of religious competition in the country.

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18. Ekkel, B.M. 1976, Determination of the mosaic index of the national composition of the republics, territories and regions of the USSR, Sovetskaya ehtnografiya [Soviet ethnography], no. 2, p. 35—42 (in Russ.).


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The relevance of this study of post-Soviet transition lies in the focus on the technically theoretical problems that are nevertheless the key to understanding regional development processes in the East of the Baltic Sea. The research aims to verify the theory of peripheral capitalism as applied to the Baltic States. The first theoretical objective is to draw a distinction between the ideas of modernisation and transformation in a regional context. The second objective is to adjust the theory of peripheral capitalism to smaller states. To study the features of the transformation of economic and political systems in the Baltics, this article conducts comparative analysis. Systemic analysis and the principles of theoretical and empirical analysis are used as well. Building on this work, the study identifies the deficiencies of the theoretical and methodological potential of transition studies. These include claims that the theoretical and methodological potential of transition as applied to post-Socialist and post-Soviet Europe has been completely fulfilled. Geographical differences between Latin America and the Baltic States are so obvious that they eclipse economic similarities between the processes.
and development models characteristic of the two regions of the world. An analysis of current developments in Latin America makes it possible to forecast the economic and, to a degree, political consequences of the trends that are just emerging in the Baltics. This article seeks to prove the above thesis.

Keywords: transit, transformation, modernisation, theory of peripheral Latin American capitalism, Estonia, Latvia, Lithuania

Introduction.

Transition theories as applied to the Baltics

Theoretical explanations of transition have been in demand for 30 years. Why do the problems of evaluating, systematising, and analysing the evolution of national economic models remain the focus of research? Some of the reasons are evident. The world economy constantly goes through changes and post-Socialist economic practices are becoming ever more diverse. Yet, the main problem is the quality of development rather than diversity. This statement can be scaled up: ‘the fundamental theoretical and methodological concept of the ‘transitology paradigm’ that treats current political transformations as a movement from an authoritarian regime to a consolidated democracy needs serious rethinking’ [1, p. 66]. This warning from 2004 has not been heard. The thesis about the end of the transition period continues to be discussed.

It was Francis Fukuyama, who made an enormous contribution to political science: although history did not come to an end, he clearly identified the turning point. The turn, however, took longer than one might have expected in the 1990s.

Elections to the European Parliament followed by voting for the EU leadership reanimated, rather than provoked, the old discussion about the efficiency of transition in Eastern Europe [2; 3].

The need for analysis is on the surface. The Baltics are the only part of the post-Soviet space that has acceded to the EU. Estonia, Latvia, and Lithuania are Russia’s neighbours. The performance of the three states was for a long time regarded as the touchstone. This gave another reason for growing attention from researchers. Socio-economic processes taking place in a neighbouring country are always an important object of studies, particularly, when national security is at play.

Other incentives for research in the area have a heavy theoretical component. The central question of our article is the relation between the concepts of transformation and modernisation [4; 5].
We believe that any modernisation is a transformation, but not vice versa. A transformation may be successful, beneficial to social and economic progress. In that case, it is modernisation. Yet a different outcome is possible: a transformation that leads to the evident or hidden degradation of the economic system and a qualitative decrease in social capital. There are such cases in the post-Soviet space. The Baltics, however, are not one [6, pp. 7—18].

Firstly, the economic systems of the Baltics did not develop merely under the slogan of transformation and modernisation. A fundamental component was westernisation. The understanding that westernisation was superficial came as a major disappointment. Institutions, which resembled their global and European counterparts, functioned differently or not at all. The thesis that there is only one way to handle a modern economy was accepted without reservations [7, p. 118], leading to equivocal results. Thus, even the experts who have a mostly positive view of the Baltic experience are doubtful about the accomplishments of Baltic modernisation: ‘It is difficult to give a clear answer to the question whether Estonian modernisation was a success’ [8, p. 7]. Although we do not support the perception of the Baltic reforms as a success story, we are not ready to label them as a failure.

The practices of institution-building in Estonia, Latvia, and Lithuania after 1991 were based on the principle that ‘the best way to material affluence and prosperity, to standards of living comparable with the French and German average, is Europeanisation with strategic support from the US’ [9, pp. 19—20]. The replicated economic attributes were partly familiar to the architects of the reforms from the textbook Economics: Principles, Problems, and Policies. On the one hand, that seemed absolutely logical: ‘Since the struggle ended in the victory of the capitalist system, the key institutions of defeated socialism had to be dismantled and reconstructed to the design of the victorious system’ [10]. The same happened in Russia and Kazakhstan despite the latter’s remoteness from the nominal West.

On the other hand, a mistake was made. The economic institutions of the West are ever-transforming and ever-evolving. The ratio between economic and political priorities constantly changes. In copying the institutions, it was important to take into account history and geography. ‘[P]ost-communist countries were compelled to adopt 20,000 new laws and regulations — none of which were really debated in their parliaments — to meet the requirements for accession to the EU’. Yet another mistake was to confuse liberalism in

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politics and ideology and liberalism in economic practice. ‘There is a huge difference between a neoliberal policy, particularly an economic policy, and truly liberal demands for independent courts, accountability of public officials, struggle against corruption and electoral fraud, and the rule of law from top to bottom’ [11].

The major problem of the Baltic States was the idealisation of the actual positive effects of liberalisation, including economic openness. ‘[T]he impact of liberalization on inequality is muted when countries are at higher levels of financial development or when no financial crisis ensues after liberalization. This lends further support to the view that the benefit-to-cost ratio of liberalization is higher for countries above a certain level of financial development and where countries have adequately strengthened financial regulations before liberalization’ [12, p. 48]. The thesis once put forward by Milton Friedman has been proven by Poland, which was very cautious when opening its markets, especially the financial market. Although the openness of the national financial system and the virtual elimination of national control over the movement of capital ‘confer many benefits in theory, in practice liberalization has often led to economic volatility and financial crisis’.

David Woodruff, a professor of political science at the Massachusetts Institute of Technology, writes: ‘democracy’s success has been that it aids in the design of locally appropriate policies, policies that take for granted that dynamiting inherited industries is unlikely to be the best course’ [14]. It is difficult, almost impossible to argue with the above statement. It was made, however, not in 1991 but several decades later when all political and economic decisions had already been taken. Or, to put it differently, Woodruff’s words are anything but practical recommendations. The thesis of the esteemed expert is lucid: building a democracy takes its toll, particularly on the quality of governance. What should one do if the toll has been taken, but thirty years later, the quality of democracy continues to raise questions? ‘The established and enduring autocratic tendencies in some countries do express an incomplete and, in many areas, unjust and unequal transformation into a democracy and a market economy.’ The above was written after Estonia had

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formed a government led by the far-right Conservative People’s Party of Estonia and members of the French National Front had visited Tallinn. ‘It is therefore clearly possible to have economic arrangements that are fundamentally capitalist and political arrangements that are not free’ [15, p. 10].

The interim results are as follows. None of the characteristics of the Baltic economic models is unique or entirely new in economic theory. The challenge lies in finding an optimal combination of these characteristics, identifying their mutual influence, measuring their cumulative effect, and verifying their specific properties. ‘There is a serious danger facing a researcher of modern economic growth, namely, becoming engrossed in tracking similar changes undergone by societies that differ so much in their cultural traditions and trying to build a strict development trajectory mandatory for all nations’ [16, p. 23]. That is why the tools of theoretical analysis should be constantly improved; traditional approaches, developed; and new ones, employed.

This study aims to examine the development of the Baltic States from the perspective of the theory of peripheral market or peripheral capitalism.

The theory of peripheral capitalism: key concepts and applicability to the Baltics

All contemporary economic theories apply to a degree to states of different size. We are interested, however, in those that are:

1) applicable to small states;

1) comprehensive; their results can be employed interdisciplinary, i.e. they take into account the history, geography, and local political processes [17, pp. 60—78].

In the 1960—1970s, a new line of research, dependency theory, germinated in international social studies. It has also been called the theory of dependent development, dependent capitalism, peripheral development, and peripheral capitalism. At first, it sought to explain how economically disadvantaged periphery, represented by most Asian, African, and Latin American states, develops.

Naturally, the dichotomy Western Europe — Eastern Europe was far from the focus of theoretical debates. We believe that the failures of classical modernisation, which turned into vulgar westernisation in Eastern Europe, necessitate the search for new applicable theoretical models.

Central to numerous dependency theories is the idea that the economy and politics of a country are shaped by the development of a dominant economy/economic bloc. These theories, including the theory of peripheral capitalism,
hold that the world economy has several hierarchical levels. Grossly generalised, these are the centre, the periphery, and the semi-periphery. This division was inspired by the fact that ‘[p]roximity in geographic, cultural, and institutional terms allows special access, special relationships, better information, powerful incentives, and other advantages in productivity and productivity growth that are difficult to tap from a distance’ [18, p. 245]. This begs the questions: what distances are meant here and, what is more important, is periphery identified in geographic or economic terms?

Cuba, Chile, Argentina, and Mexico are equally the periphery of the American world. Geographical distances are of no consequence here. The same holds true for Europe. Germany’s neighbour, the Czech Republic is a periphery, just as Portugal and Estonia are. The above thesis by Michael Porter, however, does not cater for the post-Socialist transition. If the transition is treated as a category of economic and political science, the Czech Republic and Estonia appear farther that one might expect from the European core. This does not cancel dependencies but makes dependencies more diverse and more difficult to examine.

With some reservations, modernisation theories maintain that, by copying the economic and political institutions of a certain country or region, it is possible to ensure both a higher economic growth rate and a new quality of economic and political development. Contrarily, dependency theories emphasise that states cannot move from being the centre to becoming the periphery and vice versa, just as an Indian cannot change his or her caste. A prominent advocate of the theory writes about this approach: ‘The myth of the worldwide expansion of capitalism has evaporated as has the myth of development of the periphery in the image and likeness of the centres’ [19, p. 21].

The theory of peripheral capitalism was a response not to the liberal economic approaches of the 1990s but to the failures of all theories and practices, including Keynesian ones. The latter claimed that replicated institutions and import substitution are a way to overcoming backwardness. The essence of modernisation is the belief that all countries go through the same stages in their development. Peripheral states, therefore, are found at the stage where developed countries were in the past. Countries that once made an impressive leap forward, viz. Singapore, Taiwan, South Korea, have been cited as examples of successful modernisation [20—22]. We nevertheless believe that these states are the proverbial exception that proves the rule. From the perspective of economic development, their success cannot be viewed as a gradual upward movement. In 1945, none of the three countries existed; in 1975, none regarded
them as the touchstone, unless authoritarian rule could be considered the desired standard. The case of the Baltics is very different.

Adherents of dependency (peripheral development) theory have consistently criticised the concepts of modernisation theory, arguing that lagging countries are not early versions of the modern market economies of the centre. These experts maintain that the characteristics of the periphery and semi-periphery make them a completely different phenomenon. Countries of the (semi-) periphery have unique features and structural distinctions; their position in the global economic system is purely dependent.

The chief advocates of dependency theory, Andre Frank [23, pp. 155—248] and Paul Baran [24, pp. 164—170], write that the historical roots of inequality lie in the relative backwardness of periphery societies, their poor inclusion in the world economy, their informal status of dependent and subordinate partners. States that have been classified as the ‘periphery’ lose their ability to develop independently; they tread the path of dependence and backwardness. Overall, the researchers assume that the centre is interested in keeping the periphery underdeveloped. Similarly, the ‘semi-periphery’ seeks to press home its competitive advantage over the periphery.

This leads to the question as to how the theory of peripheral capitalism works in a setting of the second decade of the 21st century. Obviously, it cannot be employed in full and in its initial guise. What amendments should be made? How do theoretical approaches change when applied to not Uruguay, Ecuador, or Columbia but Estonia, Latvia, and Lithuania? To answer these questions, we put forward fourteen theses.

1. Calibration of the theory is needed because not all peripheral states have the formal status of developing countries. Countries of both the periphery and the centre are market economies. This means the same capitalism and the same laws of the market. Peripheral capitalism does not work according to some different laws, as many proponents of the theory of peripheral capitalism believed. The universally recognised elements of theoretical reflection on the market economy should be augmented with a few necessary components. The most important of them is the path dependence concept proposed by the Nobel Prize winner Douglass North. He defined the term as ‘the consequence of small events and chance circumstances can determine solutions that, once they prevail, lead one to a particular path’ [25, p. 92]. A ‘particular path’ is, for instance, transit and transportation functions of the economy: the may disappear, yet the economic model shaped by them will persist.
2. It is necessary today to take into account not only the economics of industrial and agricultural production but also services, including financial and educational ones. These services, which create high value-added, testify to the superior, non-peripheral status of a country. Naturally, they have nothing to do with the classical ‘beach-castle-restaurant’ tourism industry.

3. Quite a long time ago, Theotonio dos Santos advanced the following thesis: ‘[t]he relation of interdependence between two or more economies, and between these and world trade, assumes the form of dependence when some countries (the dominant ones) can expand and can be self-sustaining, while other countries (the dependent ones) can do this only as a reflection of that expansion’ [26]. Of course, in the 1970s, this approach could not be applied to the then divided Europe.

The situation has changed since then. Today the periphery and semi-periphery have much more opportunities. These opportunities arise when the centre is gradually growing and its political and economic power is increasing. This applies perfectly to the Baltics. Acceding to the European association of 1993 and 2003 was an extremely attractive prospect [27]. The aspirations of the Estonians, the Latvians, and the Lithuanians could have been different if they had had to deal with the European Union of 2019.

4. Evenly spread economic growth is impossible just as it is impossible to attain universal equality among people or states. Dependency theories do not deny this fact. Their point is that the approaches that are dominating the world economy inevitably contribute to disparities between the centre, the semi-periphery, and the periphery. The centre gains a competitive edge by setting the rules for the world economy, migration, diffusion of innovation, and the price scissors [28]. If the rules are not acceptable for the centre any more, it waives them and in doing so exercises its monopoly right. In the 1970s and 1980s, this was not evident. There was an illusion that, albeit not always just, the rules were permanent.

5. Keynesian strategies of import substitution and industrialisation have experienced a revival [29—31].

Protectionism in international trade, billed as a mechanism to expedite structural transformations and keep domestic demand within national borders, turned out to be popular with the centre too [32—34].

6. The case of theories in question suggests, that unlike the 1960s and 1970s, almost all economic concepts have received an interdisciplinary interpretation as well as interdisciplinary critique [35].

7. A major theoretical problem was the distinction between dependency theories, stages theories, and the theory of echelons in world capitalism de-
velopment, for instance, that proposed by Alexander Gerschenkron. His theory holds that the development of countries was pre-programmed long before modern market economies had emerged. Echelon theory is of particular interest when applied to Eastern Europe, particularly, the Baltics [36]. It is easy to see that the countries that simply did not exist during the rise of capitalism could not achieve capitalism independently (as those of the first echelon did). Either they attained it under external influence, which initiated self-development sources (second echelon), or capitalism was transplanted from outside (third echelon) [37]. We believe that the Baltics fall into the second or the third category.

8. A serious problem of the approach in question was that most of its authors were from Latin America, which they considered the periphery. This perspective is questioned today and, naturally, it was questioned 45 years ago. If Latin America is the periphery, how should one classify Africa and most of Asia? The idea of fitting the diversity of national economies into the centre and periphery categories is constrictive but difficult to put into practice [38].

9. The Prebish–Singer hypothesis, without which the theory of peripheral capitalism does not stand up, has attracted much criticism. It was formulated for a perfect market economy and hardly or not at all allowed for political factors. The classical version of the Prebish–Singer hypothesis holds that countries that manufacture the end product benefit most, whereas raw material-exporting economies inevitably worsen their situation. The hypothesis drew on analysis of prices of agricultural and, partly, industrial goods. Expensive raw materials and, with some reservations, fuel were barely taken into account, just as services were. There was much debate about verifying the hypothesis and turning it into a theory. A comprehensive study by the International Monetary Fund (2010) tracked fluctuations of raw materials prices from 1650. The research proved that, in the long term, prices of any type of raw material would decrease as compared to prices of industrial goods [39, p. 12].

Our concept maintains that the Prebish–Singer hypothesis is equally applicable to the services sector. In its case, the centre distributes activities that generate maximum profit. This concerns, foremost, the powerful financial services segment. Other types of services, which are less profitable or even loss-making by design, emerge and function in the periphery.

Below we will consider a case that has become a trademark of Estonia and Latvia. Over the past 30 years, all attempts of the states and businesses to create a national financial system have failed in these countries [40]. Each time, everything was very much in line with the laws of the market, admin-
Istrative pressure was kept to a minimum, and, what is even more important, the Estonian and Latvian governments had no desire whatsoever to protect national banks. Scandinavian banks, reliable agents in the global financial system, however, were in no need of either competitors or assistants in Estonia and Latvia. The result was the oligopoly of Nordea, SEB (Skandinaviska Enskilda Banken), and Swedbank. That situation did not bother the Estonian and Latvian authorities in the least. US-initiated investigations of several European banks, including Latvia’s ABLV, caused the collapse of the very last large bank with state capital. Lithuania’s Ukio Bankas and Latvia’s Trasta Komercbank were liquidated. In the context of this article, however, something different stands out. Once faced with the pressure coming from European regulators and allegations by the US Department of the Treasury, Swedish and Danish banks started to shut down their operations in the Baltics. They were accumulating the profits, whereas local financial institutions were to deal with the losses.

In 2018-2019, the situation in the banking sector of the Baltics deteriorated. The US administration accused local banks and branches of Nordic banks of handling money of dubious origin. On February 9, 2019, the top management of Denmark’s largest commercial bank, Danske Bank, announced that it was pulling out of the Baltics. The stock prices of Swedish banks were falling. The choice was whether to withdraw and sustain moral losses or to stay and suffer material ones.

10. Note that ‘the essence of path dependence theory is that the range of choices here and now is strictly determined by a choice made somewhere else a long time ago’ [41, p. 36]. For the Baltics, this factor is decisive. Economic decisions are pre-patterned by current politics, which, in its turn, draws on historical precedents. Although such a situation is covered by theory, its practical applicability depends on the actual scale [42].

11. Within the dependency theory, interactions between formal and informal economic and political institutions are crucial. Formal institutions can be transplanted with varying success to foreign environments, whereas informal institutions are endemic as a rule. ‘Underdeveloped formal institutions, combined with strong informal institutions (to a greater degree) and some marginal formal norms (to a lesser degree) can produce institutional mutants’. That is

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exactly what is happening in the Baltics. Institutional mutants are difficult to diagnose since they have all the outer attributes of effective institutions of the centre.

12. What other characteristics of a local, or peripheral, market do the Baltics have? Firstly, there is a suite of characteristics typical of smaller states in general. Among them are insufficient capital and knowledge [43]. Instead of investing in Estonia, Apple opted for Denmark and Ireland. The decision was prompted by high power rates and the reluctance of local officials to understand the needs of the investor, Eesti Ekspress (EE) reports. The company also abandoned its plan to build a server park in the Estonian town of Paldiski. The Estonian media wrote earlier about a billion euro investment. Against this background, the performance of Estonia’s Nortal, which works in the same field as the ‘giant success story’, seems modest: in May 2019, the IT ‘giant’ Nortal received 50 million euros in bond proceeds.

Competencies needed for effective development in the times of the third and fourth industrial revolution are key to the social capital of any state [44; 45].

The USSR left behind much of its nuclear power technology and employee competencies in Lithuania; automotive industry and railway machinery competencies in Latvia; and precision engineering and shale chemistry, in Estonia. All of these competencies have been essentially lost. ‘The situation can be easily called depressive. Without strong fundamental science, there is no higher education, there are no high value-added businesses, and, finally, there is no knowledge-intensive Estonia’.

13. In theory, peripheral economies will benefit from the centre relocating some of its production facilities (usually those manufacturing parts, components, and units rather than performing final assembly). In the case of the European periphery, this process is geographically anchored [46; 47]: Sweden is moving production to Estonia; Germany, to Lithuania, etc. Geographical proximity makes it possible to benefit from differences in salaries and taxes. Thus, intra-European economic relations prove the thesis advanced by the

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9 PhD in gene technology: Politicians have to stand by their words (in Russ.). URL: https://www.dv.ee/mnenija/2019/05/28/doktor-nauk-politiki-dolzhny-otvechat-za-svoi-slova (accessed: 15.06.2019).
then director of the Fernand Braudel Center for the Study of Economies, Historical Systems, and Civilizations, Immanuel Wallerstein. He argues that the relocation of production facilities, which has been observed from the 1970s, to semi-peripheral countries seeks to reduce wages, move utilisation costs to the economic periphery, cut raw material renewal costs, and minimise tax payments [48, p. 262]. This is the most important proof that the theory of peripheral capitalism can be applied to the Baltics.

14. The middle-income trap is a situation observed in not only Chile and Brazil [49]. Since the theoretical side of the concept is common knowledge, we will focus on only one aspect discussed by both academics and practitioners: is limiting salaries a way out? In the case of the Baltics, where salaries are below the EU average, this is not a real solution. The reaction of the influential Estonian businessperson Raivo Vare is quite typical: ‘...although salaries are growing faster than anything else is, and our competitiveness in the structure of the economy is declining, this is not enough; psychologically we are within the gravitational reach of Nordic affluent societies. Catering to this psychology, politicians are doomed to do what they are doing now’.¹⁰ In other words, the problem of the Baltics is both financial performance and psychological dependence on geographically proximate but economically remote models [50; 51].

**Conclusion**

We believe that any theoretical concept that places regional development trends into the global economic context can be valid in the case of one location and invalid in the case of another. This approach can yield unexpected results and open up a new angle on the analysis of what seems to be traditional objects of research.

The Baltics are part of the great European integration project [52—54]. Its economic and geographical scale means a complex internal structure, within which all countries are equal but some ‘are more equal than others’. From the theoretical perspective, this situation is the norm and the objective reality of any large economic or political association that has a centre and a periphery. The periphery is ‘dependent, controlling only its own resources at

best, and it is more exposed to fluctuations in long-distance markets’ [55, p. 5]. A vivid example is the effect of livestock epidemics in China on pork prices in Estonia. The periphery, however, can have a high status in its own eyes or even in the eyes of its allies and partners, or even deliver impressive economic performance. Powerful European convergence mechanisms constantly calibrate and gloss over the whole picture. It seems, nevertheless, that the situation in Estonia, Latvia, and Lithuania is perfectly compatible with the concepts of the theory of peripheral capitalism. Any local or global crises will remove the gloss and, once again, raise the question as to what should be done with the conflict- and problem-ridden periphery [56, p. 4]. This question will have different answers at different scales.

Effective development of Europe and mutually beneficial cooperation with the US, China, and Russia could aid in achieving real cohesion between the French-German core and the Eastern (Southern) periphery [57; 58]. In that case, the Baltics would be at the centre of an economic cooperation space that brings together Europe and very different regions of Asia; this could require open recognition of the discussed approach or a silent consensus of the leaders.

This is not a very likely scenario. Thus, Estonia, Latvia, and Lithuania will face gradual simplification of the structures of their economies, particular, in the sectors receiving support from Brussels. The countries will lose competencies in hi- and mid-tech areas, whereas the service sector will overdevelop.

Our point is that being a periphery in geographical, economic, and political terms is a factor that has a very slow effect on economic development. Without a large-scale world crisis, the model that has become traditional for the Baltics will not undergo a qualitative change, as Latin American experience suggests. The pandemic and economic turbulence urge to reconsider the Baltic economic model, its theoretical framework, and practices.

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DEVELOPMENT OF ELECTRIC ROAD TRANSPORT: SIMULATION MODELLING

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Electric transport is rapidly gaining popularity across the world. It is an example of technological advancement that has multiple consequences for regional economies, both in terms of the adaptation of production, transport and energy systems and their spatial optimization. The experience of leading economic regions, including countries of the Baltic Sea region, shows that electric transport can potentially substitute traditional transport technologies. Based on an authentic model of system dynamics, the authors propose a new approach to simulation modelling of the dissemination of electric vehicles in a given region. The proposed model allows the authors to take into account the key systemic feedback loops between the pool of electric vehicles and the charging infrastructure. In the absence of data required for the econometric methods of demand forecasting, the proposed model can be used for the identification of policies stimulating the consumer demand for electric vehicles in regions and facilitating the development of the electric transport infrastructure. The proposed model has been tested using real and simulated data for the Kaliningrad region, which due to its specific geographical location, is a convenient test-bed for developing simulation models of a regional scale. The proposed simulation model was built via the AnyLogic software. The authors explored the capacity of the model, its assumptions, further development and application. The proposed approach to demand forecasting can be further applied for building hybrid models that include elements of agent modelling and spatial optimization.

Keywords:
simulation modelling, system dynamics, electric transport, electric vehicles, charging stations infrastructure, region, demand forecasting, demand stimulation, Bass model, AnyLogic

Introduction


Individual vehicles with electric traction motor are a natural substitute for transport powered by internal combustion engines (ICE). The former are known to have technological advantages (if used) in terms of operating costs, environmental friendliness, and ease of maintenance [2].

Given the current level of technology development, individual electric vehicles (EVs) have some drawbacks. For the most part, these are difficulties associated with the operation of lithium-ion batteries in cold climates.\footnote{Other disadvantages, such as the relatively short mileage per charge, are quickly removed with the development of technology. It is believed that by 2023—2025, there will be parity between EVs and ICE cars.} It is a clear example of the regional factor influencing the spread of electric vehicles.

The literature examines a considerable number of new academic and practical issues around EV adoption dynamics [3—8]. This paper concentrates on the problem of reaching the critical mass for the new technology to spread in a particular region, specifically, it analyses the necessary conditions for the irreversible spread of individual EVs at the regional level. The study aims to track the dynamics of EV adoption in the Kaliningrad region, taking into account the purchasing power of its residents.

The focus is on the regional dimension of the topic since the development of electric transport is critically dependent on regional factors and has a systemic effect on the development of the territory. These factors include regional climatic and socio-demographic characteristics, as well as the associated parameters of energy and transport networks, the structure of utility services, etc. As a result, projections of electric vehicle take-up are regionally specific.

This study is of practical significance as it provides a methodological approach to forecasting the development of electric transport systems when the data are insufficient for econometric modelling. This is achieved using an original system dynamics simulation model with tools based on the numerical solution of systems of first-order differential equations.

The subject of the study is the creation of a model for assessing and scenario-based forecasting of the influence of key factors on electric transport adoption.
in the region. The problems addressed by the modelling framework include the assessment of electric vehicle take-up in a region under various scenarios depending on 1) the development of charging infrastructure, 2) the initial public contract, and 3) the amount of subsidy for an EV purchase. The model is unique as it provides in-depth analysis of regional specifics determining the modelling context and uses special stream model representations, in particular, an original approach to modelling the state of consumer choice and the factors influencing it.

The model is to answer the following questions.

What amount of subsidy can drive the decision to purchase an electric vehicle?

What minimum level of charging infrastructure can encourage the abandonment of ICE cars in favour of electric vehicles?

What is the minimum electric vehicle fleet to foster the development of a network of private charging stations?

The model can be useful for decision-makers on EV incentive policy, experts in market analysis and diffusion of innovations (in this case, EVs), as well as a wide range of people interested in the accurate forecast for the Russian EV market development.

The Kaliningrad region was chosen as a pilot region for the study.

The rest of the paper is structured as follows. First, we consider the trends in EV adoption in the world, including the countries of the Baltic Sea region. This is followed by a more detailed description of the fleet of the Kaliningrad region, accompanied by a parallel discussion of the features and deficiencies of modelling the development of electric vehicles and charging infrastructure with only limited observational data available. Then follows a description of a simulation-based approach that takes into account feedback links between the electric vehicle fleet and the charging infrastructure. The AnyLogic PLE software package is used to implement the system dynamics model [9—11]. The test data come from the Kaliningrad region, whose unique exclave position and compact key subsystems make it ideal for regional simulation models [12]. That is why it can serve as a pilot region for testing policies for the promotion of electric vehicles in Russian regions. Our study relies on estimates based on statistics on individual and commercial vehicles in the Kaliningrad region (according to the Avtostat database), as well as on scenario-based approaches to modelling demand-boosting tools (such as electric vehicle purchase incentives and charging infrastructure development [13; 14]). The final sections of the work are the analysis of the obtained results and the discussion of further research.

Global and BSR electric vehicle trends

Electrical vehicles are growing in popularity. According to leading world experts, by 2030 up to 20-30% of the fleet of developed countries will be electric. In
some states, for example, Norway, which is the leader in terms of private electric car proportion, EVs accounted for as much as 46% of the market at the end of 2018.³

The development of the global electric fleet (BEV and PHEV) is closely linked to the development of public charging infrastructure (Fig. 1).

Fig. 1. The global electric vehicle fleet and public charging infrastructure development in 2010—2018 (left scale — thousand cars, right scale — thousand stations)

Sources: IEA (2019), authors’ calculations.

Electric vehicle adoption in Russia is lagging behind the US, China and the leading EU countries. For instance, at the end of 2019, there were about 4.8 thousand electric vehicles in Russia. According to industry experts, by 2025, the share of electric car sales will not exceed 0.6% or 15,000 units.⁴ To put that into perspective, China, the EU and the US, the world leaders in terms of electric vehicles adoption, accounted for 45%, 24%, and 22% respectively of the global EV market of 5.1 million cars in 2018. In 2013—2019, global EV sales were growing by more than 50% annually. According to IEA forecasts, by 2030 the global EV market will be 130—250 million units. In 10 years, EVs can account for up to 70% of all new vehicle sales in China, up to 50% in the EU, 37% in Japan, and more than 30% in the US and Canada.⁵

³ IEA (2019).
⁵ IEA (2019).
Traditional factors limiting consumer demand for electric cars include long charging time, low mileage on a single charge, high price, and underdeveloped charging infrastructure. Over the past five years, however, rapid technological advances have weakened the constraints if not removed them entirely.

According to observations, there is a fairly stable ratio requirement for the full development of EVs: there should be at least one public charging station for every 10 electric cars.\(^6\) At the same time, charging infrastructure development should be somewhat advanced to reach a critical mass of vehicles. Besides, each electric car should have an individual spot for overnight charging. These technological requirements underpin various strategies for developing charging infrastructure in different regions. As Figure 2 shows, China is the world leader in terms of the number of charging stations; it relies mainly on fast charging (Fig. 2b).\(^7\)

Experts predict a single-charge mileage of 400 miles (~644 km) in five years. This will significantly increase long-distance travel and demand for public charging stations [15].

\(^{6}\) IEA (2019).

\(^{7}\) Note that most public charging stations are considered slow, as they are designed for power output of up to about 20 kW per car. Thus, it takes one hour to charge a car to 20 kWh (while most cars are still oriented to a battery capacity of about 40 kWh). It is believed that fast charging stations can produce 50 or more kW per car, thereby reducing charging time by 2.5 or more. Technologies are developing very quickly: super-fast stations can produce 150 kW or more per vehicle. So far most batteries (and charge management systems) are not fit for such power. In 10 years, the situation can change dramatically, and there can be a sharp increase in the number of electric vehicles.
The world leader in the number of electric cars per capita, Norway, is focusing on slow charging infrastructure. This is probably due to the housing structure, where most households have individual houses (only about \( \frac{1}{4} \) of households live in large apartment buildings).\(^8\) Infrastructure optimisation depends on the cost of electricity in the region, the existing energy networks, and the technological possibilities to connect new charging stations to the grid, as well as on their spatial distribution. Research has shown that, in the US, fast charging public stations become competitive with home charging at the utilisation rate of 20\%, whereas the 2018 average was about 5\% [15].

The following section gives an overview of the Kaliningrad regional automotive market.

**Road transport in the Kaliningrad region: input data**

Several factors appear to favour the launch of the pilot project on promoting EV adoption in the Kaliningrad region:

1) convenient geographical location — the Kaliningrad region borders on two EU countries (Poland, Lithuania) which are actively developing electric transport and networks of charging stations;

2) the relatively small size of the region — its maximum length from west to east is 205 km, from north to south, 108 km; this makes EV travel within the region efficient since a modern electric car can travel up to 250-400 km on a single charge;

3) capabilities to localise the manufacturing of electric vehicles, their components and elements of charging infrastructure, both on a regional and national scale;

4) favourable socio-demographic characteristics — the population of the region is 1.022 million people, of which 622.4 thousand people are of working age and 527.5 thousand people are economically active (statistics indicate an employment rate of 67.1 % in 2017);\(^9\)

5) transparency of the regional energy network.

Our study focuses on the passenger car segment, as the development of commercial and public transport is highly distinctive. Nevertheless, in terms of state support the public transport fleet has an advantage as the charging infrastructure is primarily concentrated around depots and along the main routes.

Table 1 presents vehicle distribution by type in the Kaliningrad region to provide a comprehensive picture.

---


Table 1

Distribution of vehicles by type in the Kaliningrad region, thousand units

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>Number</th>
<th>Share, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private cars (PC)</td>
<td>359</td>
<td>75.3</td>
</tr>
<tr>
<td>Light commercial vehicles (LCV)</td>
<td>54</td>
<td>11.3</td>
</tr>
<tr>
<td>Medium and heavy commercial vehicles (M and HCV)</td>
<td>28</td>
<td>5.9</td>
</tr>
<tr>
<td>Transport vehicles, excluding LCV</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>Others (motor vehicles, trailers, etc.)</td>
<td>33</td>
<td>6.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>477</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sources: Avtostat database, authors’ calculations.

The structure of the car park of the Kaliningrad region is the legacy of the early 1990s and the then active imports of used vehicles from Europe. Consumer behaviour has changed nevertheless. This shows in the country-of-origin shifts (Table 2).

Table 2

The passenger car fleet of the Kaliningrad region by age and country of origin

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>72.065/20.1</td>
<td>46.516/12.9</td>
<td>27.578/7.7</td>
<td>14.372/4.0</td>
<td>160.531/44.7</td>
</tr>
<tr>
<td>Japan</td>
<td>9.817/2.7</td>
<td>16.826/4.7</td>
<td>33.586/9.3</td>
<td>18.345/5.1</td>
<td>78.574/21.9</td>
</tr>
<tr>
<td>France</td>
<td>2.607/0.7</td>
<td>6.159/1.7</td>
<td>13.079/3.6</td>
<td>7.974/2.2</td>
<td>29.819/8.3</td>
</tr>
<tr>
<td>US</td>
<td>7.855/2.2</td>
<td>5.922/1.6</td>
<td>10.424/2.9</td>
<td>3.866/1.1</td>
<td>28.087/7.8</td>
</tr>
<tr>
<td>South Korea</td>
<td>47/0.0</td>
<td>1.170/0.3</td>
<td>9.119/2.5</td>
<td>17.199/4.8</td>
<td>27.555/7.7</td>
</tr>
<tr>
<td>Russia</td>
<td>4.415/1.2</td>
<td>3.132/0.9</td>
<td>4.038/1.1</td>
<td>2.828/0.8</td>
<td>14.413/4.0</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>17/0.0</td>
<td>886/0.2</td>
<td>3.027/0.8</td>
<td>5.586/1.6</td>
<td>9.516/2.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.435/0.4</td>
<td>626/0.2</td>
<td>958/0.3</td>
<td>277/0.1</td>
<td>3.296/0.9</td>
</tr>
<tr>
<td>Italy</td>
<td>1.066/0.5</td>
<td>706/0.2</td>
<td>480/0.1</td>
<td>51/0.0</td>
<td>2.283/0.6</td>
</tr>
<tr>
<td>UK</td>
<td>68/0.0</td>
<td>594/0.2</td>
<td>671/0.2</td>
<td>382/0.1</td>
<td>1.715/0.5</td>
</tr>
<tr>
<td>China</td>
<td>0/0.0</td>
<td>0/0.0</td>
<td>396/0.1</td>
<td>1.271/0.4</td>
<td>1.667/0.5</td>
</tr>
<tr>
<td>Others</td>
<td>498/0.1</td>
<td>724/0.2</td>
<td>446/0.1</td>
<td>110/0.0</td>
<td>1.778/0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>99.890/27.8</td>
<td>85.261/23.2</td>
<td>105.802/28.9</td>
<td>72.261/20.1</td>
<td>35.9214/100.0</td>
</tr>
</tbody>
</table>

Sources: Avtostat database, authors’ calculations.

Note: * — at the end of the 1st quarter of 2019. About 10.2 thousand cars (2.9% of the total) belong to legal entities.

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10 The ‘country of origin’ is often different from the ‘country of manufacture’. This research uses the ‘country of origin of the brand’ parameter, as it has a greater impact on consumer preferences.
The increase in the share of new cars purchased by households is associated with a growth in the share of Korean and Czech cars, which are driving German and Japanese models out of the market (Fig. 3). Petrol cars account for 83.3% of the fleet; 16.4% are diesel cars; the rest are hybrid, 85% of them produced in 2007—2011. On mid-2019, there were about 800 hybrid and 10 all-electric cars registered in the Kaliningrad region. This indicates that even in an underdeveloped EV environment innovators are willing to try novel products.

![Fig. 3. The structure of the fleet of cars produced in 2011—2018 by country of origin in the Kaliningrad region](image)

Sources: Autostat database, authors’ calculations.

Nevertheless, the number of electric vehicles is still insufficient to apply discrete choice methods used in the theory of industrial organisation for demand analysis [16]. Naturally, in countries with the more rapid development of electric transport, there have been attempts to forecast demand by econometric methods [17]. Their use is, however, limited by both data scarcity and the specificity of the simulated situation. This is because the current versions of mixed logit models for discrete choice [18, pp. 955—970], originating from the BLP model [19], are difficult to adapt to the situation when a fundamentally different alternative is added to existing products on the market. In such cases, simulation methods, including agent-based models, system dynamics models, and their combinations, come to the forefront.

Until 2025, small cars will dominate the EV market. After 2025, we can expect the batteries’ development level to be sufficient to ensure their efficiency in larger vehicle segments. This gives importance to the fact that compact cars account for at least 35% of the total fleet (Tab. 3).
**Table 3**

**Consumer preferences by car category and body style**
in the Kaliningrad region, as a percentage of the total fleet

<table>
<thead>
<tr>
<th>Type</th>
<th>Saloon</th>
<th>Estate</th>
<th>Hatchback</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.11</td>
<td>0.03</td>
<td>2.03</td>
<td>0.02</td>
<td>2.19</td>
</tr>
<tr>
<td>B</td>
<td>7.46</td>
<td>0.75</td>
<td>6.14</td>
<td>1.26</td>
<td>15.62</td>
</tr>
<tr>
<td>C</td>
<td>6.55</td>
<td>1.87</td>
<td>9.55</td>
<td>2.01</td>
<td>19.98</td>
</tr>
<tr>
<td>D</td>
<td>15.59</td>
<td>5.02</td>
<td>0.41</td>
<td>2.91</td>
<td>23.93</td>
</tr>
<tr>
<td>E</td>
<td>8.55</td>
<td>1.38</td>
<td>0.63</td>
<td>0.63</td>
<td>10.61</td>
</tr>
<tr>
<td>MPV</td>
<td>0.01</td>
<td>4.04</td>
<td>0.83</td>
<td>0.00</td>
<td>4.88</td>
</tr>
<tr>
<td>SUV</td>
<td>0.01</td>
<td>15.96</td>
<td>0.85</td>
<td>0.16</td>
<td>16.98</td>
</tr>
<tr>
<td>Other</td>
<td>1.82</td>
<td>0.72</td>
<td>0.37</td>
<td>2.90</td>
<td>5.81</td>
</tr>
<tr>
<td>Total</td>
<td>40.10</td>
<td>29.78</td>
<td>20.23</td>
<td>9.89</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Sources: Avtostat database, authors’ calculations.*

*Note:* the broad categories are those used in the Avtostat database. MPV stands for Multi-Purpose Vehicle; SUV for Sport-Utility vehicle.

Our analysis makes it possible to estimate prospective EV demand to construct scenarios of the proposed system dynamics simulation model. The applied system-dynamic approach aids in implementing multivariate modelling of complex socio-economic systems taking into account non-linear feedback links [11; 20—22].

**Model structure**

The system dynamic model is based on a modified diffusion model of innovative products developed by Frank Bass [23; 24]. System dynamics is based on the interaction of stocks and flows (Fig. 4). Stocks represent the state of a particular variable at a given point in time, and flows represent the inflows or outflows of this variable over time. A key feature of system dynamics models is the possibility to model feedback effects (including those with delay function) between variables. The flexibility of the system dynamics approach providing for numerical modelling makes it possible to use arbitrary relations
between variables and remove the requirement for a system to be analytically solvable. The modern trend in system dynamics suggests avoiding overly complex and detailed models reflecting only the most important properties of the simulated system [25; 26].

The classical F. Bass model holds that any market can be represented through at least two variables — the number of potential buyers and actual adopters [23]. The intensity of flows between them depends on a number of factors. We have modified the basic model to reflect the specifics of consumer decision-making when choosing between an ICE car and an EV. As indicated above, there is an active discussion around the simulation modelling of EV adoption in different regions of the world [27—33]. Features distinguishing the proposed model from others are the specifics of modelling the consumer decision-making on EV choice and the corresponding feedback structure. The simulation period is 120 time units (months). Figure 4 provides the general layout of the model.

The model consists of two main blocks:

1) ‘Consumer Choice’, or consumer decision-making block;
2) ‘Charging infrastructure’ block.

The ‘Consumer Choice’ block is a schematic diagram of choosing between ICEs and EVs. The ‘Potential buyers’ stock is further divided into ‘ICE car buyers’ and ‘EV buyers’, corresponding to the same-name stocks in Fig. 4. After a certain period (60 months, which is equivalent to the average length of car ownership), ‘ICE car buyers’ move to ‘Customers making a decision’ category (corresponding stock). Here, they can choose either an ICE car (returning to the ‘ICE car buyers’ stock) or an EV. The rationale for selecting an EV as a more attractive purchase option than a traditional car is based on the *Ratio of the subsidised EV price to the ICE car price*. The lower the subsidised price of the electric car compared to the ICE car, the higher the potential buyers’ interest in electric vehicles.

Figure 5 shows the price-based car preference curve based on our expert estimates. For example, if the average price of a subsidised EV is two-thirds that of an ICE car, 15% of buyers making a decision will choose an EV. If a subsidised EV is half the price of an ICE car, a little over 20% of buyers will opt for an electric car.
Fig. 4. Outline of the system-dynamic model
Statistics show that an average of about 8 thousand cars is sold annually in the Kaliningrad region. About half of them are new cars sold on credit (4,194 cars in 2018). In 2018, the average car loan amount was 883,000 roubles. If the loan is between 30 and 50% of the car cost, the projected value of a new car is 1.2—1.8 million roubles. A potential buyer compares the price of a subsidised EV and an ICE car. The subsidy is 20—50% of the electric car purchase price, which is consistent with international practice [14].

For demonstration purposes, we used a two-factor model for EV purchase decision-making process, taking into account (1) the EV purchase price and (2) the level of charging infrastructure development in the region. Both factors are of paramount importance. They present the minimum set of critically important characteristics for choosing an EV over an ICE car. The study uses a deliberately simplified model, avoiding its complication by secondary factors, thus leaving the area for subsequent research. Modelling even a relatively simple two-factor model for EV purchase decision-making is a non-trivial scientific task.

The development of the charging infrastructure is taken into account using the correction factor adjusting the number of people willing to purchase an electric car (Fig. 6). The factor is based on our expert estimates. It changes dynamically along with the development of the infrastructure in the region as the network of public charging stations grows. We assume that in the charging network the ratio of fast and superfast stations to slow stations is 1:4.

As the charging infrastructure develops, the correction factor increases from 5 to 100%. If there are at least 1,000 public charging stations in the region, the correction factor for the infrastructure is 1, meaning that all consumers opting for an EV purchase it. If the number of charging stations is 600, only 80% of potential buyers of an electric vehicle make a purchase.

Accordingly, the ‘Charging Infrastructure’ block simulates the rate of new charging stations commissioning. We proceed from the assumption that the primary infrastructure of charging stations is set with state financial support, and with the increase in the EV number in the region, private investors gradually join in the development of charging infrastructure. As international researchers point out [33], the creation of the initial infrastructure of charging stations is critical to launching the electric vehicle sales cycle.

The charging infrastructure development is modelled using goal-seeking behaviour. The objective is adjusted in the model settings window (Figure 7). The target value of the number of charging stations is selected from a range of 200—1000 units. For simplicity of analysis, the number of stations under construction is calculated as a fixed proportion of the difference between the stations already built and those planned for construction (5%). The number of stations planned for construction is set by the Number of planned stations parameter.
There is also the *Number of EVs per charging station* parameter representing the ratio of the number of electric vehicles to the number of charging stations. The model uses the ratio of ‘10 EVs per public charging point’, justified in *Global EV Outlook 2019*\(^\text{12}\). Since only a limited number of stations are state-financed, with an increase in EV purchases, the ratio grows. Thus as new charging stations, both state and privately financed, are commissioned, the *Number of EVs per charging station* parameter reaches the target value. Later, when the EV fleet grows and the parameter value falls, the cycle repeats. The model assumes that private investors set on average 15 stations per time unit until the parameter reaches its target value of ‘1 public station per 10 electric vehicles’.

Table 4 provides basic inputs and calculation prerequisites.

### Table 4

#### Basic inputs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Unit</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modelling period</td>
<td>120</td>
<td>Months</td>
<td>—</td>
</tr>
<tr>
<td>Potential buyers</td>
<td>40,000</td>
<td>Buyers</td>
<td>Fixed parameter. Projected number of new car buyers in the Kaliningrad region over 10 years</td>
</tr>
<tr>
<td>Average monthly car purchase rate</td>
<td>1.65%</td>
<td>Share of total</td>
<td>Fixed parameter. Monthly share of car buyers. Includes the number of EVs and ICE cars purchased</td>
</tr>
<tr>
<td></td>
<td></td>
<td>potential buyers</td>
<td></td>
</tr>
<tr>
<td>Average ICE car purchase price</td>
<td>1,200,000</td>
<td>Roubles / car</td>
<td>Fixed parameter</td>
</tr>
<tr>
<td>Average EV purchase price (unsubsidised)</td>
<td>1,700,000</td>
<td>Roubles / car</td>
<td>Fixed parameter</td>
</tr>
<tr>
<td>The number of state-financed charging stations</td>
<td>200 — 1000</td>
<td>Units</td>
<td>Variable parameter (see the ‘Sensitivity analysis’ section)</td>
</tr>
<tr>
<td>EV subsidy amount</td>
<td>30-50%</td>
<td>Percentage of EV</td>
<td>Variable parameter (see the ‘Sensitivity analysis’ section)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>price</td>
<td></td>
</tr>
<tr>
<td>Number of EVs per charging station</td>
<td>10</td>
<td>Units</td>
<td>Fixed parameter. If the ratio of EVs to charging station is higher, the option of privately-financed charging station construction is selected</td>
</tr>
<tr>
<td>(target value)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^\text{12}\) *EIA* (2019).
Figure 7 shows the results of the simulation experiment. If EV subsidy amounts to 50%, and there are at least 400 charging stations in the region, in 10 years the number of EV buyers will be approximately 5.7 thousand people (5,694). At the same time, the number of ICE buyers will be more than 28 thousand people (28,341). At the later model stages (after the first 60 months), there is a monthly average of about 50—60 EV and 500-520 ICE car purchases.

The total number of EV adopters in the entire period is 17%. Over 10 years, under the basic scenario, there are 514 charging stations commissioned, of which 400 are state-financed and 114 are privately financed (the ‘Number of charging stations’ in Figure 7). As the number of EVs per charging station grows exceeding the target value of 10 vehicles per station, the number of charging stations increases.

The simulation results generally correspond to the common European practice with EVs accounting for 5—15% of new car sales in 2019.15

**Sensitivity Analysis**

Simulation modelling has the advantage of running numerous experiments under easily altered scenarios. These scenarios are set by varying the most significant parameters in different combinations [11]. A sensitivity analysis of the model was performed on two key variables:

1) the number of public charging stations;
2) the necessary EV subsidy amount.

Figures 8 and 9 show the results of the sensitivity analysis on the number of charging stations. According to the calculations (Fig. 7), the total number of EV buyers varies significantly in the range of 200—600 stations, from 3,770 (200 stations) to 6,890 (600 stations). At the same time, the difference in the numbers of buyers between the network of 800 and 1000 stations is almost negligible. Thus, according to the calculations, taking into account the geographical and socio-demographic characteristics of the Kaliningrad region, a network of 600 charging stations will be generally sufficient for the successful development of electric transport on its territory.

15 EIA (2019).
Fig. 7. Modelling results. Baseline scenario: a 50% subsidy for the purchase of an EV, state-financed construction of a network of 400 charging stations.
Fig. 8. Sensitivity analysis on the number of state-financed charging stations (range 200—1000 stations, increment — 200 stations): horizontal axis — time (120 months), vertical axis — the number of EV buyers (total) depending on the development of the charging infrastructure.

Figure 9 shows the number of EV buyers per month depending on the subsidy amount. The results of the simulation experiment clearly show that the consumer’s decision on EV purchase also largely depends on the government subsidisation of the EV price. The higher the subsidy (35—40% or more), the greater the number of EV buyers. The latter varies significantly in the 30—50% subsidy range. At a 50% subsidy, the number of buyers (7,490 people) is seven times that at a 30% subsidy (1,030 people). This result is largely based on the preference curve based on our analysis (Figure 5). Further market research validating the preference curve can substantially refine the simulation results.

Conclusion

The proposed system dynamics model made it possible to identify measures required to stimulate EV demand in a region with a low level of electric transport development.
The findings suggest the decisive role of state support in stimulating EV adoption. This support takes different forms across countries, varying from direct subsidies upon purchase to indirect measures, such as free parking. The development of a network of ultrafast charging stations is also of key importance since charging stations are a complementary product for an electric vehicle [34—36]. On the one hand, a developed network of state-financed charging stations helps to overcome the initial inertia and ensure the minimum number of electric vehicles necessary for further sustainable EV diffusion (critical mass). On the other hand, a certain minimum of electric vehicles is required to stimulate the formation of a charging station network. In the environment of actively developing electric transport, private companies (including EV manufacturers, large oil and gas companies, private gas and charging station network operators, and venture capital and private equity funds) participate in creating the charging infrastructure independently and without state support.

The above model allowed us to evaluate various scenarios for the charging infrastructure development in the exclave Kaliningrad region. The novelty of the approach lies in the fact that the model can be adapted to any region with low levels of EV adoption and charging infrastructure development. Based on the modelling results, the following recommendations can be made.
1. Regions interested in a high EV adoption rate should promptly create the core charging infrastructure using their resources. As experiments have shown, this is especially important at the initial stage of launching the positive feedback loop ‘the number of charging stations — the number of electric vehicles’. Creation of the minimum (critical) infrastructure sets market forces in motion, encouraging private participation in building of further EV infrastructure.

2. To launch the incentive program aimed at increase of the charging infrastructure usage, it is recommended to take measures aimed at ensuring the minimum EV fleet size in the region through public contracts or public-private partnerships with large companies.

In an environment with a poorly developed charging infrastructure, the introduction of a set of incentives stimulating the transfer from ICE cars to EVs is of key importance; this is especially true for direct subsidies paying for part of the purchase price for EVs. Our analysis shows that the amount of subsidies largely determines the rate of EV adoption. Regions willing to accelerate the transition to individual electric transport should develop a subsidy mechanism and allocate the appropriate funds for the first two-three years of the programme.

Further development of the model may be associated with the following tasks:

— it is necessary to validate preference curves for the EV price and the infrastructure development level; further research, including sociological surveys, focus groups, accounting for the geodemographic characteristics, etc. can serve to validate the model dependencies;

— the model can be supplemented with simulation tools, including agent-based modelling (i.e., for a more detailed analysis of consumer choice by including more factors affecting the EV choice, for example, non-financial incentives, and individual behavioural effects), and the system of spatial optimisation of the network of charging stations (based on GIS and traffic flow data, as well as on the condition of distribution networks).

The model operates in a demonstration mode and presents a general approach to the problem under study. The advantage of the system dynamics model is that it can be constantly calibrated and adjusted based on empirical observations on system development.

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DEVELOPMENT OF CROSS-BORDER TOURIST AND RECREATIONAL REGIONS ON THE KARELIAN SECTION OF THE RUSSIAN-FINNISH BORDER

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S. V. Kondrateva b
N. K. Terenina a

Despite the fact that cross-border tourism and recreation in the Baltic Sea Region have been extensively studied, there are still areas which require further research. The aim of this article is to identify regions which have active cross-border tourism and recreation in the adjacent territories of Finland and the Republic of Karelia. The authors propose to use an indicator characterizing the volume of incoming tourist flows. The number of tourists is not only indicative of the development of cross-border tourism and recreation; it is also one of the main criteria for determining the degree of the formation of cross-border regions. Using the statistics for Finland, the authors analyzed the geography of tourism in Finland’s border areas and identified the degree of intensity of cross-border tourism exchange between the neighbouring administrative units of the two countries. The article also examines other tendencies indicative of the formation and development of cross-border tourism and recreation regions along the Russian-Finnish border. The authors identified three cross-border tourism and recreation regions of different development levels: South Karelia, Middle Karelia and North Karelia. South Karelia is a mesoregion with the average annual tourist exchange of about 100 thousand people, which is the average level of tourism development. The total volume of cross-border tourist flows from and to other cross-border tourist and recreation regions is about 30 thousand people per year. Middle Karelia microregion ranks second and is followed by the North Karelian microregion. The authors conclude that these two microregions are at the initial stage of their formation and, therefore, can be regarded as parts of one microregion — Russian-Finnish Northern microregion.

Keywords:
cross-border region, tourism, recreation, Republic of Karelia, Finland

Introduction

The areas bordering the Baltic Sea have been the focus of many studies in the theory of tourism and recreation region building. The literature has identified transboundary tourism and recreation mesoregions. Yet, in the Baltic region, only the south-east coast of the Baltic Sea, as well as the Russian-Estonian and Russian-Latvian borderlands, have been explored in detail, and their microlevel regions have been described. In the Russian-Finnish border area, tourism and recreation regions of a microlevel have neither been identified nor described in detail.

Finland welcomes more Russian tourists than any other EU country does. According to the Russian Federal Agency for Tourism, Russians made 2.5 million tourist visits to Finland in 2018.¹ This figure, however, seems overstated as compared to that provided by Finland’s statistical services (377,600 in 2018; tourism from Russia peaked in 2013 at 778,500 visits²). The difference comes from the Russian statistics: in 2014, the country adopted the World Tourism Organisation methodological framework for measuring tourism, which counts business trips as well as visits to friends and relatives. Although Finland uses the same methodology, the country’s statistics covers tourism visits proper. Moreover, there are regional data on inbound tourism, which are not collected in Russia.

This article aims to identify transboundary tourism and recreation regions on the Karelian part of the Russian-Finnish border as well as to assess their development based on tourism exchange between the neighbouring countries’ bordering regions.

The study uses open data on transboundary tourism³ and cross-border traffic between Russia and Finland⁴ available on the official websites of Finland’s statistical services. It also draws on reference materials and other sources concerning tourist attractions in the border areas in Finland and the Republic of Karelia.

**Current state of research.** Most studies into transboundary tourism and recreation region-building focus on the southeastern part of the Baltic region [1—4]. The literature identifies and describes transboundary tourism and recreation regions (TTRR) of different levels, spanning neighbouring areas of the Kaliningrad region, Poland, and Lithuania. Some studies explore border districts of Russia, Estonia, and Latvia [5—7] and their tourism and recreation regions of both meso- and microlevel [8; 9].

Research into the Russian-Finnish borderlands examines transboundary tourist mobility [10—13], cross-border cooperation and projects [14—17], the emergence of a common socio-cultural space [18] and a territorial identity [19; 20], and the development of transboundary tourism ties [21; 22]. The findings of these studies have laid the groundwork for identifying transboundary tourism and recreation regions of various hierarchical levels in the Russian-Finnish borderlands.

**Identifying TTRRs and their hierarchical levels**

Elena Kropinova writes that the Karelian part of the Russian-Finnish borderlands has only one mesolevel TTRR — the North Russian-Finnish mesoregion. It borders on two TTRRs of the same level. The first one, the South Russian-Finnish mesoregion, is situated on the Finland and Leningrad region border. The other is located on the borderline area of Finland, Norway, and Russia’s Murmansk region. The North Russian-Finnish mesoregion and its Russian-Norwegian-Finnish counterpart were classified as emerging [4].

We believe that the discussed Russian-Finnish northern mesoregion comprises at least three TTRRs of different levels. Since these three regions have gaps in between, some reservations must be made to call the parts of a single mesoregion. The formation of transboundary regions takes place around multi-lane International Automobile Border-crossing Points (MAPP). There are eight MAPP at the Russian-Finnish border, three of them on its Karelian part (Figure).
Fig. Transboundary tourism and recreation regions spanning bordering areas of Finland and the Republic of Karelia (prepared by A.G. Manakov)

Borders: 1 — national, 2 — between Russian regions; International Automobile Border-crossing Points: 3 — large, 4 — medium, 5 — small; 6 — simplified procedure checkpoints; 7 — centres of regions in Finland and of administrative districts in Russia; 8 — other cities; 9 — cultural and historic landmarks; 10 — natural landmarks; 11 — national parks and reserves; transboundary tourism routes: 12 — Blue Road, 13 — The Kantele Tour Route; 14 — transboundary tourism and recreation regions: I — South Karelian (mid-Russian-Finnish) mesoregion, II — Mid-Karelian second-order microregion, III — North Karelian third-order microregion
The three MAPP differ in the amount of traffic, i.e. in the annual number of border crossings from either side. The largest MAPP is situated in the southern part of the Republic of Karelia, with over 1 million crossings a year. The traffic handled by the second-largest MAPP, which is found near the town of Kostomuksha, is two-thirds smaller; we classify it as 'medium'. The northernmost Karelian MAPP handles one-seventh of the traffic of the largest checkpoint; it is classified as small. These three MAPP form the biggest part of tourism between the Republic of Karelia and Finland. There are several border-crossing points in the republic (railway and simplified procedure checkpoints). Since they contribute little to the regional transboundary exchange, these MAPP were not included in the analysis.

The locations of the MAPP and the traffic they handle have provided the framework for three tourism and recreation regions of different maturity and hierarchical levels. The southernmost TTRR can be regarded as a mesoregion. It is possible to call it South Karelia or Middle Russian-Finnish mesoregion since there are other Russian-Finnish TTRRs. The two other TTRRs have the status of microregions. Their hierarchical level (order) will be identified below. These mesoregions can be either considered separately or as parts of a higher-level first-order microregion. This area will be referred to as the North Russian-Finnish microregion and its two parts, as the Middle Karelia and North Karelia microregions.

Kropinova proposes to consider a combination of TTRR characteristics when studying the process of transboundary tourism and recreation region-building. Out of ten characteristics, six are major and four are secondary [4]. Earlier we suggested adding another indicator to ensure more objective identification of both the maturity and level of TTRRs. This indicator is a mutual tourism between the foreign constituents of the TTRR [6].

We divide the TTRR characteristics into three groups and consider them with a focus on the geographical component. The first group of characteristics made it possible to identify the external borders of TTRRs and estimate mutual tourism within them. The second group deals with tourist attractions in TTRRs. The third group allowed us to assess international efforts in tourism promotion — another important factor in TTRR development.

**TTRR area, transport connectivity, and mutual tourism**

*The Middle Russian-Finnish (South Karelian) mesoregion* stretches from Petrozavodsk, the capital of the Republic of Karelia, to Kuopio, the centre of North Savonia. The major centre of attraction is the city of Joensuu, the capital of North Karelia. This mesoregion can be dubbed as Petrozavodsk-Joensuu. The
Russian part of the mesoregion includes the Sortavala, Lakhdenpokhya, Suoyavrvi, Pitkyaranta, Pryazha districts and some areas of the Priozersk and Olonets districts. The Finnish part comprises North Karelia, Northern Savonia, and a considerable area of Southern Savonia. Some of the Russians entering the region head for Helsinki, Tampere, and Turku.

The mesoregion is serviced by the large Niirala-Vyartsilya MAPP, which handled 1,147 thousand crossings in 2018. A railway checkpoint of a capacity of 560 thousand crossings per year operates in the region.

In 2018, according to Finnish statistics, the Finnish part of the mesoregion welcomed 34 thousand Russian tourists, which account for only 9% of Russian tourist coming to the country each year. In 2013, mutual tourism between Finland and Russia peaked with 79 thousand Russian tourists arriving in the area (10% of all Russian visits to Finland). In 2018, tourists travelling to Russia accounted for 54.4% of mutual tourism (as compared to 38% in 2013). Thus, mutual tourism within the mesoregion can be estimated at 70—80 thousand people per year (as compared to 120-130 thousand in 2013).

In the central part of the Republic of Karelia, in the village of Lenderskoe of the Muezersky district, there is a simplified procedure border crossing point — Inari. Its traffic, 5 thousand crossings a year, is too small to speak of an emerging TTRR of any level. Further north there are two MAPP that have a potential for creating microlevel TTRRs.

The North Russian-Finnish first-order microregion includes the Russian town of Kostomuksha and the Kalevala district, as well as part of the Loukhi district. The Finnish part of the mesoregion comprises the Kainuu region and the northeast of North Ostrobothnia. The microregion is serviced by to MAPP of a total capacity of 450 thousand crossings per year. In 2018, Russian made 12.5 visits to the area (3.3% of the total number of Russians coming to Finland); in 2013, 21 thousand (2.7%). Mutual transboundary tourism in the microregion is estimated at 25—30 thousand people a year, which marks it as not fully mature.

The Suoperya-Kuusamo MAPP (50 thousand crossings per year) is witnessing the emergence of a North Karelia third-order microregion. The microregion belongs to the third order because it is limited to the border areas of the neighbouring districts of Russia and Finland — the western part of the Loukhi district.
in Karelia and the north-eastern fringe of North Ostrobothnia in Finland (including the city of Kuusamo). Although classified as emerging, the North Karelian microregion has some characteristics of a merely potential TTRR.

Tourist attractions in the TTRRs

Tourism development in a TTRR becomes sustainable when people living on either side of the border have a mutual interest in cross-border visits no matter what the political and economic situation is. One of the important factors is the diversity of tourism activities. Below we will consider key cultural and historic as well as natural landmarks, natural reserves, and other attractions from the perspective of tourism activities development in the TTRRs.

The Russian parts of the TTRRs have considerable potential for cultural, educational, event, and ecological tourism. The Green Belt of Fennoscandia, a unique ecological system spanning an area from the Barents to the Baltic Sea, has a special role. International projects run along the Karelian stretch of the national border made it possible to create a system of protected areas, 80% of which are located in Russia. The ecological system and its valuable recreational objects are unmatched by any other border region in the country.

Alongside natural attractions, the Finnish part of the TTRRs boasts cultural and historic landmarks: the Olavinlinna Fortress, the New Valamo Monastery, the Lintula Holy Trinity Convent, etc. Most Russians, however, cross the border for shopping and recreational purposes.

South Karelia mesoreigon

Cultural and educational attractions: the Olavinlinna fortress (Savonlinna), the Outokumpu mine museum, the New Valamo monastery, the Lintula Holy Trinity convent, and the Kerimäki Church in Finland; the Valaam Monastery of the late 10th/early 11th century, the Vazhiozersky Monastery of Saviour and Transfiguration, the Syandemsky Convent of the Dormition, the Tulmozerye mining park, the historic 17th-century town of Sortavala, the Kronid Gogolev private museum in Sortavala, the Winter War and Great Patriotic War memorials, the Owl Mountain command and communications bunker of the Finnish Army (Lakhdenpokhya), the Kollasjärvi memorial (Suoyarvi district), and the historic villages of Kinerma (16th century), Kindasovo, and Nurmolitsy in Russia.²

Ecotourism and recreational attractions: the Botania botanical garden (Joensuu), the Koli national park in Finland; the Valaam archipelago natural park (established in 1999, 24,000 ha), the Ladoga Skerries national park (2017, 122,000 ha), the Ruskeala mountain park, the White Bridges and Ahinkoski waterfalls, and others in Russia.

Event tourism highlights: international music festivals, White Nights and Jaakkia rallies, the Karelia national classical rally championship, the world’s only snow-and-ice rally, the ‘Russia — Northern Forest’ Baja FIA World Cup round, the Olonets Father Frost Games (Olonets), and the Olonia — the Capital of Geese ecofestival (Olonets district).

Shopping tourism attractions: the towns of Kitee, Tohmajärvi, Joensuu, Savonlinna, Varkaus, and Kuopio and Finland; the village of Vartsilya and the towns of Sortavala and Petrozavodsk in Russia.

Middle Karelia second-order microregion

Cultural and educational attractions: the rune-song villages of Kalevala and Voknavolok (Russia).

Ecotourism attractions: the Friendship transboundary national park, which comprises five Finnish protected areas and the Kostomuksha nature reserve (1983, 49,000 ha) in Russia.

Event tourism highlights: international music festivals (chamber music, the Nordsession rock festival, the Kanteletar folk festival); St Peter’s Day (village of Akonlahti); the Festival of the Ukhta Karelians (village of Kalevala); the Karelian Culture Festival (the village of Khaikolya).

Shopping tourism attractions: the towns of Kajaani (Finland) and Kostomuksha (Russia).

North Karelia third-order microregion

Cultural and educational attractions: the rune-song village of Kestenga (Russia).

Ecotourism and recreational attractions: the Ruka skiing resort, the Oulanka and Paanajärvi (1992, 104,000 ha) national parks (Finland) [24] with a visitor centre in the village of Pyaozersky (Russia).

Event tourism highlights: the Karelian summer festival in the village of Vartiolampi (the Paanajärvi national park).

Shopping tourism attractions: the town of Kuusamo, and the Ruka resort (Finland).

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7 Ibid.
Transboundary tourism coordination and transboundary tourism routes

The South Karelia mesoregion has two major tourist routes. The first one, the Blue Road, is over 2,000 km long (See Figure). The organisation of the same name, which was established in 1962, played a major role in the development and promotion of the route. In 1990, the Karelian Regional Non-profit Organisation was created. In 1992, the works on the Russian part of the route began. The route runs along historic navigable waterways from Norway’s town of Nesna through Sweden, Finland, and the Republic of Karelia (Kolat-selga, Pryazha, Petrozavodsk, Medvezhyegorsk, and Pudozh) to the Arkhan-gelsk district.

The second route is the Mining Road, which was created in 2012—2014. It spans 400km between Petrozavodsk and Outokumpu. The transboundary route was developed within the international project of the same name.Its highlights are about twenty geological features and mining sites: old mines, ironworks, and functioning mines in Eastern Finland; geological landmarks and historic mines in the south of the Republic of Karelia (including the Tulmозерье mining park) [23; 24].

A third, culinary, transboundary route has been developed since 2018. It brings together the traditional cuisine of the Republic of Karelia (Russia) and North Karelia (Finland) within the ‘Kalitka: cross-border gastronomic tourism’ project. Moreover, tourist agencies in both Russian and Finnish Karelia are designing various thematic transboundary tourism routes.

The Kantele Tour Route, which was created in 2007—2013, runs through the Middle Karelia microregion. It links rune-song areas, which cherish the heritage of the Kalevala epic: Kainuu, Sotkamo, and Kuhmo in Finland and Kostomuksha, Kalevala, Khaikolya, and Belomorskaya Karelia in Russia.

Another tourism route crossing the Middle Karelia TTRR (or the North Karelia microregion) is the White Road, which appeared in 2012—2014. The route stretches along an ancient trade route that once connected the White and Baltic Seas and today links the Republic of Karelia and Northern Finland. The route was designed within the ‘White Road’ project.

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Conclusion

The study identified three transboundary tourism and recreation regions along the Karelian part of the Russian-Finnish border: the South Karelia mesoregion (Petrozavodsk — Joensuu), alternatively called the Middle Russian-Finnish mesoregion, the Middle Karelia second-order microregion, and the North Karelia third-order microregion. The two latter TTRRs can be combined into a first-order North Russian-Finnish microregion.

Annual mutual tourism within the Middle Russian-Finnish (South Karelia) mesoregions is estimated at 70—80 thousand people. During several years, it was above 100 thousand people. This TTRR is medium mature. Within the North Russian-Finnish TTRR, which brings together the Middle Karelia and North Karelia microregions, mutual tourism reaches 25—30 thousand people per year. This TTRR is classified as emerging.

The Blue Road and the Mining Road (the Middle Russian-Finnish TTRR), as well as the Kantele Tour Route and the White Road (North Russian-Finnish TTRR), run through the studied regions. The routes were developed within special international projects. Tourist agencies in the two neighbouring countries are designing various new thematic transboundary tourism routes.

The Russian and Finnish parts of the TTRRs have abundant resources for promoting cultural and educational, event, and ecological tourism. Most tourists, however, cross the border for shopping and recreational purposes. The unique potential of the Green Belt of Fennoscandia and its ecotourism routes can make Middle Karelia and North Karelia much more visible in mutual tourism. Moreover, cross-border tourism will benefit from better transport and tourism infrastructure and a wider range of tourist services.

This study is part of the strategic project ‘Russia starts here’ (run at Pskov State University within the ‘Flagship regional university’ programme) and the state-commissioned project ‘A methodology of system research and management development of the economic, social and cultural space of the northern and border areas of Russia in context of natural security (AAAA-A19-119010990088-8 of 19.01.2019).
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TOOLS FOR EVALUATING THE COMPETITIVENESS OF INNOVATIVE CLUSTERS (SILICON SAXONY CASE)

I. N. Akhunzhanova  
Yu. N. Tomashevskaya  
D. V. Osipov

Federal programmes to support regional clusters in Russia were introduced several years ago. Today, they need updating and revision. A promising starting point for effective support for hi-tech and innovative clusters may be evaluation of cluster performance aimed to understand whether further development and financing of cluster projects are required and whether the list of supported clusters should be extended or reduced.

This article analyses the case of the Silicon Saxony innovation cluster (Germany), using the World Bank methodology for cluster competitiveness evaluation. Each analysis tool is provided with concrete data obtained for Germany and Silicon Saxony over the past ten years. Competitive clusters considered in the analysis are Minalogic in Grenoble (France) and Micro- and Nano systems in Catania (Italy). The results of employing the methodology are examined from the perspective of its possible use in evaluating the competitiveness of innovative clusters in the Russian Federation. Early recommendations on adapting the methodology are produced.

Keywords: innovation cluster; regional cluster; evaluation of competitiveness; cluster projects; Silicon Saxony

Introduction

World experience and recent theoretical studies have indicated that progressive structural transformations of national and regional economies are more ef-
Effective if the cluster approach is adopted. Its use in economic policy makes it possible to accumulate private, public, and state interests, diversify risks, and tap the resources of territories to achieve a synergistic effect\(^1\) [1; 2].

Since 2000, most European countries have provided government support for major cluster initiatives. Examination, monitoring, and evaluation of clusters and their support programmes make it possible to calibrate and build strategies for a national cluster policy [3; 4].

Federal programmes to support regional clusters were launched in Russia in 2012.\(^2\) The methodology and implementation of Russia’s cluster policy resemble those of similar European programmes, particularly French and German ones [6]. European support programmes, however, always include cluster monitoring and evaluation [7; 8]. The experience of European countries can serve as the basis for a methodology to evaluate Russian clusters.

The literature has proposed several ways to measure the development and competitiveness of clusters. These approaches include a method based on calculating cluster-generated effects [9; 10]; methods for assessing the economic efficiency of clusters as investment projects [11]; parametric techniques for assessing cluster efficiency [1]; methods based on assessing various aspects of cluster competitiveness (market position, technological leadership, ability to innovate, cluster policy effectiveness) [12-14]. Although the tools described in the above empirical studies are universal, they do not always meet the comprehensive assessment criterion.

The methodology for cluster competitiveness assessment developed by the International Trade Department of the World Bank\(^3\) is more complete because it evaluates the current state of a cluster and makes it possible to put it on a new

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path of development. The approach stimulates interactions among all cluster participants, creates a common vision, facilitates new joint projects that benefit everyone involved, and contributes to the triple helix effect [15—17].

The World Bank methodology is a conceptual study based on a consistent review of cluster activities. It uses standard strategic analysis tools; each one can be supplemented and expanded. The advantages and drawbacks of these tools have been discussed in detail by Oleg Vikhansky, Tatyana Kutayeva [18], Svetlana Orekhova [19], Rais Fathutdinov, Irina Tsulaya [20], Ramziya Shakirova [21], and Anatoly Shamin [22].

This study, which uses the World Bank methodology, consists of four stages and ten steps. Table 1 lists the tools for assessing cluster competitiveness.

### Tools for assessing cluster competitiveness

<table>
<thead>
<tr>
<th>Stage of study</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Cluster definition</td>
<td>Tool 1. Cluster mapping</td>
</tr>
<tr>
<td>II. Cluster analysis</td>
<td>Tool 2. Product and market segmentation</td>
</tr>
<tr>
<td></td>
<td>Tool 3. SWOT</td>
</tr>
<tr>
<td></td>
<td>Tool 4. GAP analysis</td>
</tr>
<tr>
<td></td>
<td>Tool 5. Porter’s five forces analysis</td>
</tr>
<tr>
<td></td>
<td>Tool 6. Value chain analysis</td>
</tr>
<tr>
<td></td>
<td>Tool 7. Market trends analysis</td>
</tr>
<tr>
<td></td>
<td>Tool 8. Competitive positioning analysis</td>
</tr>
<tr>
<td>III. Institutional support assessment</td>
<td>Tool 9. Old and new institutions for collaboration</td>
</tr>
<tr>
<td>IV. Process control</td>
<td>Tool 10. Monitoring and evaluation</td>
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</tbody>
</table>

Source: prepared by the authors based on World Bank materials.

This article presents findings obtained using the World Bank methodology to assess the competitiveness of Silicon Saxony, Germany’s innovation cluster, and to demonstrate its potential and prospects. The study sets out to understand whether this methodology can be adapted to assessing innovation cluster competitiveness in Russia.

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Germany was chosen for cluster analysis for the following reasons:
— in 2018, Germany ranked fifth on the global competitiveness index; it is the first richest country by GDP in the EU and the fourth in the world, beaten only by the US, China, and Japan;
— according to TCI Network, Germany has the greatest number of cluster initiatives in the world, 432; the US ranks second with 103.6 Bavaria, Baden-Württemberg and North Rhine-Westphalia pioneered cluster initiatives in the 1980s, long before the advent of European support programmes;
— German federal cluster programmes, BioRegio and InnoRegio, have set a benchmark for their European counterparts.

Initiative Kompetenznetze Deutschland includes 97 clusters from all major high-tech industries, located in the country’s eight most innovative regions8 [23; 24]. Silicon Saxony was created in 2000 to achieve synergies and develop businesses and companies producing microelectronic components, semiconductors, and microsystems.

Assessing the competitiveness of Silicon Saxony using the World Bank methodology

Before analysing the competitiveness of Silicon Saxony, we will provide a brief description for each tool used in the World Bank methodology.

Stage I. Cluster definition

Tool 1. Cluster mapping

Cluster mapping aims at determining the place a cluster has in the economy as well as at describing its employment and innovation rates, linkages, etc.9

Figure 1 shows cluster mapping results for Silicon Saxony.

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Since 2000, about 20 companies in the Saxon microelectronics industry have joined Silicon Saxony e.V. as full or associate members. Currently, Silicon Saxony is a self-financed association that brings together manufacturers, research institutes, public institutions, consulting companies, and service providers.

The cluster has over 300 member companies (see the official website of Silicon Saxony for the full list) and employs over 20,000 people. Small and medium-sized enterprises account for 76% of the cluster members; research organisations, technology centres, and universities, for 7% (there are 23 of them). The total annual turnover of the cluster is 4.5 billion euros.

The cluster is organised as an association. It is managed by the board of directors and the scientific board. The latter advises the former on strategic issues, keeps it updated on technological trends, and supports regional, national, and international research cooperation as well as technology transfers.\(^{12}\)

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Cluster members pay annual fees of 600—2,000 euros depending on how many employees the company has. They take part in various expert events: fora, symposia, conferences.

The cluster is running four large long-term projects: Smart Systems Hub, a technological platform for the development of intelligent systems; SenSa, a pilot line project for innovative sensors; Cool-RFID, a project seeking to develop passive RFID sensors; ICOOL, which aims to internalise cluster activities for the development of key energy-efficient electronic technologies in Germany and Europe.

Cluster mapping issued to reveal the structure of the cluster. All cluster members have long-term close relationships based on cluster membership. The cluster is a sustainable association driven by a synergistic effect.

**Stage II. Cluster analysis**

*Tool 2. Product and market segmentation*

This tool aims at identifying key products and market segments as well as at detecting opportunities and threats.

Figure 2 shows the structure of the main production areas of the Saxon microelectronics industry, the number of companies and employees, and annual turnover.

Silicon Saxony has a wide specialisation. Along with microelectronics, informatics, sensor technologies, communication and information transmission technology, telecommunications and electrical equipment, the cluster manufactures technological equipment, automotive equipment, biotech and medtech products, pharmaceuticals, and renewable energy equipment. Software development for electronic components and printed circuit boards accounts nevertheless for most companies (61%) and a significant percentage of employees (37%).

Silicon Saxony is dominated by large companies: microchips are produced by GLOBALFOUNDRIES Inc.; microcontrollers, by Infineon; special semiconductor elements, by X-Fab; semiconductors, by ZMD (Dresden Microelectronics Center); silicon wafers, by Siltronic AG and DeutscheSolarAG. The largest enterprises of Silicon Saxony are either foreign companies (mainly those from the US, including AMD and Applied Materials) or firms from Western Germany (Infineon, Siltronic, Siemens).
Cluster members manufacture complementary goods: the products of micro- and nanoelectronics companies (Power Electronics GmbH, 3D Interaction Technologies GmbH, Applied Materials GmbH) facilitates software development by their fellow cluster members; Siltronic AG uses Qimonda chips to manufacture silicone discs; Freiberger Compound Materials AG is a supplier of Siltronic AG; finally, silicone discs are delivered to Microelectronic Packaging Dresden (MPD) GmbH.

The Dresden University of Technology is responsible for a significant proportion of R&D, along with non-university research institutes (Max Planck Society, Leibniz Association and the Fraunhofer Gesellschaft), centres for nanotechnology, the Association of Information Technology, Telecommunications and New Media Saxony (SAX-IT — Verband der Informationswirtschaft, Telekommunikation und Neue Medien Sachsen eV), and the

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Saxon Telecommunications Centre (Sächsisches Telekommunikationszentrum eV — Sächs-Tel). Moreover, they take part in developing and implementing new products of cluster companies.

According to a study commissioned by the Saxon State Ministry for Economic Affairs, Labour, and Transport [19], the system of raw material and product suppliers for microelectronics enterprises is not fully developed in the cluster. The cluster is dominated by large companies with a narrow range of products, whereas external companies are often the source of innovation.

Cluster growth areas can generate new knowledge and technologies in semiconductor manufacturing, organic electronics, photovoltaics, nanoelectronics, and sensor systems through closer cooperation between manufacturing companies and research institutes. Greater involvement of local small and medium enterprises can also benefit the cluster.

**Tool 3. SWOT**

This tool makes it possible to identify the place of the cluster in the domestic and international market, compare the performance of cluster companies with that of their competitors, and devise a market positioning strategy.

Table 2 presents general conclusions based on analysis of various sources of information.

Below we will consider in detail the external and internal factors included in SWOT analysis.

Saxony’s successful education system provides a pool of highly qualified and motivated employees: 45.5% of local graduates are specialists in science and technology.\(^\text{14}\)

Silicon Saxony enjoys significant investment support from the German government and Go-Cluster — a cluster excellence initiative from the Federal Ministry for Economic Affairs and Energy.

Cluster companies have a clear marketing strategy that provides them with globally recognisable brands. They participate in exhibitions in Hanover (the Hanover Fair) and the largest computer exhibition CeBIT to promote themselves in the microelectronics market. Major support comes from Regionalforum Mitteldeutschland.

The SWOT of Silicon Saxony

<table>
<thead>
<tr>
<th>Factor</th>
<th>Strengths</th>
<th>Weaknesses</th>
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<td></td>
<td><strong>A recognisable brand</strong></td>
<td><strong>A low share of venture capital</strong></td>
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<td><strong>‘Best minds’, including international experts</strong></td>
<td><strong>Vertical integration of companies within the cluster</strong></td>
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<td><strong>Availability of AMD research centres</strong></td>
<td><strong>High tax rates</strong></td>
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<td><strong>Availability of direct buyers</strong></td>
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<td><strong>Access to raw materials</strong></td>
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<td><strong>Active work of associations and alliances</strong></td>
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<td><strong>Efficient logistics system</strong></td>
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<td><strong>The engineering-oriented regional education system</strong></td>
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<td><strong>High level of R&amp;D</strong></td>
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<th>Opportunities</th>
<th>Opportunities / Strengths</th>
<th>Opportunities / Weaknesses</th>
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<td><strong>A growing market</strong></td>
<td><strong>Horizontal integration of production can be achieved by attracting public funds.</strong></td>
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<td><strong>Centricity of the region</strong></td>
<td>Silicon Saxony Management GmbH can ensure development by interacting with the government and external stakeholders</td>
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<td><strong>Developed infrastructure in the region</strong></td>
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<td><strong>Efficient local administration</strong></td>
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<tr>
<td></td>
<td><strong>National support and promotion programmes (GA program)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>High standards of living in the region</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Active government investment in R&amp;D</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>A simplified bureaucratic system</strong></td>
<td></td>
</tr>
<tr>
<td>Threats</td>
<td>Threats / Strengths</td>
<td>Threats / Weaknesses</td>
</tr>
<tr>
<td></td>
<td><strong>High competition, including that from Asian countries</strong></td>
<td><strong>A low share of venture capital usage combined with high tax rates may cause the cluster to lose its competitive edge in the European market and beyond.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>A decreasing share in the semiconductor market</strong></td>
<td></td>
</tr>
</tbody>
</table>

Silicon Saxony works with a group of direct local consumers: Niles-Simmons-Hegenscheidt and StarragHeckert (metalworking), UNION Werkzeugmaschinen GmbH Chemnitz (machine tools), BMW, Volkswagen, Siemens Mikroelectronics Center GmbH (SIMEC), and Solarworld AG and Siltronic-Werk (Saxon solar industry companies). An increase in global demand for semiconductors is expected to sustain the growth of the cluster.\(^{15}\)

\(^{15}\) According to Gartner, the global sales of microelectronic components in 2017 increased by 21.6% and will increase to $ 482 billion by 2022.
Weaknesses include the vertical integration of companies within the cluster. This type of integration may upset the capacity balance in each link of the value chain and reduce the production flexibility of cluster companies. Another weakness is the complexity of the German tax system: corporate income is double-taxed, the tax totalling about 50-32% or even 40% if the corporation has only one owner.\(^\text{16}\) Moreover, the proportion of venture capital in Silicon Saxony is rather low. The last venture investment in the development of the cluster was made in 2016: the Federal Ministry of Economic Cooperation and Development and the European Investment Fund invested 1 billion euros.

The most significant external threat is competition from Asian chip producers, which thrive on cheap labour and government support measures. Besides, these countries have a more favourable tax system, particularly as concerns exports. Companies can, therefore, lower the prices of their products. In South Korea, income tax on exports was halved. In China, corporate income tax was abolished on May 1, 2016; Chinese companies pay VAT instead. Faced with competition from Taiwan, the European share in the semiconductor market has fallen from 23% to 15% (see the report of the European Semiconductor Industry Association\(^\text{17}\) (EIA)).

SWOT analysis demonstrates how strategic planning can be implemented to the benefit of Silicon Saxony given existing opportunities and potential threats. The intersections of SWOT factors (Opportunities/Strengths, Opportunities/Weaknesses, Threats/Strengths, Threats/Weaknesses) show what external factors can create new development options and what strengths can be used to mitigate threats (Table. 2).

**Tool 4. Gap analysis**

This tool examines gaps between actual performance and desired performance; its focus is always beyond the study object. Table 3 shows the results of the gap analysis for Silicon Saxony. Based on data from a study performed by Swedish scientists Göran Lindqvist and Örjan Sölvell [5], our analysis employs the expert survey method.


<table>
<thead>
<tr>
<th>Factor</th>
<th>Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster to Research</td>
</tr>
<tr>
<td>Knowledge / awareness</td>
<td>Low</td>
</tr>
<tr>
<td>Interaction channels</td>
<td>Rare</td>
</tr>
<tr>
<td>The ‘language’ of interaction</td>
<td>Various</td>
</tr>
<tr>
<td>Norms and Relationships</td>
<td>Various</td>
</tr>
<tr>
<td>Vision</td>
<td>Different</td>
</tr>
<tr>
<td>Trust level</td>
<td>Low</td>
</tr>
</tbody>
</table>

| Result                             | Strong obstacles/ gap    | Some obstacles/ Gap | Weak obstacles/ interaction | Some obstacles/ gap | Weak obstacles/ interaction |

Gap analysis revealed gaps in cooperation between cluster companies, on the one hand, and research, educational and financial organisations, on the other. The open innovation strategy of Silicon Saxony can help streamline cooperation between the cluster and the scientific community. The strategy will enhance research cooperation through sharing technologies and patents and submitting joint grant applications for additional financing.\(^{18}\) Measures to bridge the gap between the cluster and universities include the introduction of educational programmes meeting the demands of Silicon Saxony companies. Information exchange and

bilateral interactions with investment companies and local banks can contribute to strong partnerships between cluster companies and financial organisations, including venture companies.

**Tool 5. Porter’s five forces analysis**

Porter’s five forces analysis [25] helps determine the intensity of competitive forces. It is used to assess the strategic effectiveness of a cluster and identify the long- and short-term effects of competition in certain market segments.

The five forces analysis [26] for Silicon Saxony uses matrices reflecting a low, medium or high degree of threat. Table 4 shows the summarised results.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Degree</th>
<th>Description</th>
<th>Focus area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat of substitute products or services</td>
<td>Medium</td>
<td>Cluster companies have various but not unique offers in the microelectronics market</td>
<td>Making the product unique. Focusing on a unique value proposition</td>
</tr>
<tr>
<td>Rivalry among existing competitors</td>
<td>Medium</td>
<td>This promising market is highly competitive, yet there are price growth constraints</td>
<td>Constant monitoring of offers from competitors; mitigating the effect of price competition on sales by increasing customer value</td>
</tr>
<tr>
<td>Threats of new entrants</td>
<td>Medium</td>
<td>This threat exists; there are, however, barriers to new entrants, including the high level of initial investment</td>
<td>Constant monitoring of new entrants; increasing end-user product awareness</td>
</tr>
<tr>
<td>Bargaining power of buyers</td>
<td>Medium</td>
<td>The customer portfolio has risks; sales will drop if the cluster loses key customers</td>
<td>Diversifying customer portfolio; loyalty programmes</td>
</tr>
<tr>
<td>Bargaining power of suppliers</td>
<td>Low</td>
<td>Stability in relations with suppliers</td>
<td>Adopting a policy of price reduction by negotiations</td>
</tr>
</tbody>
</table>

Five forces analysis shows how Silicon Saxony can level threats and identifies strategic alternatives that can boost cluster development.
**Tool 6. Value chain analysis**

Value chain analysis involves two stages:
- a snapshot of the current value chain is prepared, showing all key productivity issues;
- a value-chain proposal is developed so that greater value can be added during production.

The value chain of Silicon Saxony is typical for companies in the industry (Fig. 3).

![Value Chain Diagram](image)

**Fig. 3. Silicon Saxony value chain**

*Source: prepared by the authors*.  

The value chain of the cluster contains all necessary elements: from design and prototyping companies, assemblers and suppliers (*Infineon, X-Fab*) to a well-developed network of companies promoting products and services in international markets (*Silicon Saxony Management GmbH*). The value chain of Silicon Saxony has a more complex structure than those of the semiconductor industry do because it includes companies from related industries (*3D Interaction Technologies GmbH, Applied Materials GmbH, Freiberger Compound Materials AG*).

In this science-driven industry, networks of research centres have an important role in the chain. In the case of Silicon Saxony, this network includes the Dresden University of Technology and non-university research institutes: Max Planck Society, Leibniz Association, and Fraunhofer Gesellschaft. New technology is developed both by cluster companies (private laboratories) and through collaborations with research centres and universities in Saxony.

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The value chain of the cluster is dominated by infrastructure-intensive companies—materials, tools, and equipment suppliers as well as services providers (over 100 companies). Raw materials come from both German and international suppliers. In 2017, the Dutch company RoodMicrotec became the microchip supplier of the Rohde & Schwarz group, which is part of the Silicon Saxony cluster. Such decisions increase transaction costs associated with low cluster agglomeration.

Silicon Saxony Management GmbH has a pivotal role in technology marketing and transfer along the value chain of the cluster. The company looks for concessional financing opportunities for startups, provides marketing support, and encourages the participation of cluster companies in international trade fairs.

Cluster support services are provided by more than 20 consulting companies: Ostsächsische Sparkasse Dresden, advertising companies, service companies (for example, catering firms), and logistics and planning businesses (for example, those working in environmental protection).

According to McKinsey research, chain strength is determined by three factors: right product, right time, and right location. In the case of Silicon Saxony, key cluster production facilities are located at a considerable distance from principal consumers. The cluster can significantly reduce the cost and complexity of trading by employing blockchain technology, which ensures transparency of operations. Semiconductor production is an international business that requires efficient logistics schemes, continuous improvement of processes, and product recognition. International shipping needs faster, safer, and more efficient paperwork. Blockchain technology can shorten shipping and delivery times (operational time) as well as improve inventory management.

**Tool 7. Market trend analysis**

This tool is necessary to pin down the product and market segments that a cluster might be missing.

At the time of analysis, the products of Silicon Saxony companies were mainly used in the automotive industry, robotics, communication systems, and energy. Industrial lasers, bioelectronics, and biosensors may become new segments of the Saxon microelectronics market. These potential areas have an impressive performance on key indicators, and experts expect them to grow in the future.

According to Strategies Unlimited, a world leader in market research in photonic devices, industrial laser production grew by 26% in 2017, and the market volume reached USD 4.3 billion that year. In 2019, a 7% growth was expected in the market.

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Germany is a major centre for bioelectronics. Experts believe that the country will retain its share of the market over the next ten years.

The global bioelectronics and biosensors market was estimated at USD 17.5 billion in 2016. According to forecasts, the total annual growth rate will average 9.2%. Thus, the level of USD 41.9 billion will be attained by 2026.

The technology, logistics opportunities and human resources of Silicon Saxony are sufficient to ensure development in these segments of the microelectronics market.

**Tool 8. Competitive position analysis**

This tool outlines strategic paths to ensure cluster development. To this end, the volume and market share of the clusters as well as its products are compared to those of other players in the market.

The micro- and nanoelectronics industry is concentrated in Europe around regional design and manufacturing centres. We will consider two of them as competitors of Silicon Saxony: Minalogic, a global innovation cluster in Grenoble (France), and Sicilian Technology District of Micro and Nano Systems in Catania (Italy).

Both clusters have adopted a strategic model that has at its core anchor companies — leaders in the global microelectronics market. For Minalogic, these are ST, Soitec, and Schneider. All three are world leaders in the production of non-volatile memory chips. The anchor company of the Catania cluster is ST-Microelectronics (ST), which excels at making semiconductor technologies, devices, and solutions. Silicon Saxony stands out among other clusters because it emerged with public help from the state.

A comparison of the product portfolios of the three clusters shows that the Sicilian cluster manufactures robotic products using micro- and nanotechnologies, whereas Minalogic focuses on sales to the healthcare industry.

Figure 4 shows the results of a competitiveness analysis the three clusters, which was based on three parameters: product complexity (Y-axis), product range (X-axis), and annual cluster turnover (indicated by the circle size).


Minalogic has the most members — over 400 (as compared to approximately 300 at Silicon Saxony and about 200 at Micro and Nano Systems). Micro and Nano Systems employs 43,200 people; Silicon Saxony, over 20,000; Minalogic, about 25,000. Micro and Nano Systems has the highest annual turnover, 7 billion euros; that of Silicon Saxony is 4 billion euros; of Minalogic, 3.6 billion euros.

The development strategy of Silicon Saxony can benefit from the best practices developed in Catania and Grenoble. In particular, it can increase its product range and complexity, reach out to new niches, encourage cross-company employee mobility within the cluster, and launch open innovation projects.

At policy level, the EU is encouraging transnational cooperation between regional clusters. It is not, therefore, completely accurate to consider the three clusters as competing.

Stage III. Institutional support assessment

Tool 9. Old and new institutions for collaboration

This tool is used to identify whether a cluster has institutional and/or social capital to sustain collective action.
Germany ranks 24th out of 190 countries on the World Bank’s Ease of Doing Business; this means that its regulatory environment is favourable for creating and developing local companies. Table 5 shows Germany’s rankings for each topic.

Table 5

Germany’s performance on Ease of Doing Business

<table>
<thead>
<tr>
<th>Topics</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>24</td>
</tr>
<tr>
<td>Starting a business</td>
<td>114</td>
</tr>
<tr>
<td>Dealing with construction permits</td>
<td>24</td>
</tr>
<tr>
<td>Getting electricity</td>
<td>5</td>
</tr>
<tr>
<td>Registering property</td>
<td>78</td>
</tr>
<tr>
<td>Getting credit</td>
<td>44</td>
</tr>
<tr>
<td>Protecting minority investors</td>
<td>72</td>
</tr>
<tr>
<td>Paying taxes</td>
<td>43</td>
</tr>
<tr>
<td>Trading across borders</td>
<td>40</td>
</tr>
<tr>
<td>Enforcing contracts</td>
<td>26</td>
</tr>
<tr>
<td>Resolving insolvency</td>
<td>4</td>
</tr>
</tbody>
</table>

Silicon Saxony enjoys significant investment support from the German government, with public investment reaching 5 billion euros in 2014. The German government plans to invest another 400 million euros in microelectronics until 2020. There are several cluster support programmes: the GA programme gives loans to startups; the German accelerator program, an initiative of the Federal Ministry for Economic Cooperation and Development, annually selects German startups for collaborations with leading US companies based in New York and California. Silicon Saxony is a member of the Go-cluster excellence initiative. Launched by the Federal Ministry for Economic Affairs and Energy, it covers more than 100 innovative clusters in Germany.24 The program provides financial support for innovative services.

The main institution that supports and promotes clusters in the country is Germany Trade & Invest, the country’s economic development agency.25

Silicon Saxony has support from external public and private institutions. These include European cluster support programmes (FP7, H2020, CIP / COSME, INTERREG) and national projects (EEAS - Energy Efficient Aviation Solutions, Network Management for Cool Silicon). Support for clusters focuses on new technologies, access to new markets, and new partnerships and projects.

Stage IV. Process control

Tool 10. Monitoring and evaluation

This tool evaluates the progress of cluster initiatives, particularly, the performance of cluster members, investment, finances, ownership, and sustainability.

Cluster management quality monitoring is carried out in Europe by experts of the European Cluster Efficiency Initiative (ECEI) (www.cluster-excellence.eu), who give independent voluntary confirmation of cluster management effectiveness, recognised in Europe and around the world. Assessment is carried out based on 51 indicators. The ECEI gold label ‘Excel in Cluster Excellence’ is awarded to a cluster if it scores at least 80% of the maximum points on each measure.\(^{26}\)

In 2012, Silicon Saxony received the gold label, which proves the efficiency of its management methods and systems.\(^{27}\) In 2015, the cluster received the award once again.

Over the past twenty years, many semiconductor manufacturers (Global-Foundries Dresden, Infineon Technologies, X-FAB) have invested heavily in Silicon Saxony. The cluster, in its turn, has used the money to finance its growth; for its members, this means a 10-15% increase in annual turnover.

Conclusion

To sum up, Silicon Saxony successfully adapts its internal structure to market scientific and production requirements. The cluster has forged network partnerships both in Germany and internationally. As the coordinator of the Silicon Europe Alliance, it has an important role in advancing Europe’s semiconductor industry and creating the value chain.

To grow, the cluster can look for new niches. One of the options is participation in the Cool Chip international Symposium held annually since 1998. Silicon Saxony can strengthen its inter-cluster ties in Europe. For instance, its collaborations with the Russian cluster in Dubna may well develop into a new network of hi-tech coating manufacturers. Other growth opportunities lie with raising funds, including venture capital, and reducing costs to outperform Asian competitors.

Using the World Bank methodology to assess the competitiveness of Silicon Saxony made it possible to establish what advantages the cluster has over its competitors as well as to identify the elements of its success and understand how the business environment may impede quality development.


\(^{27}\) In order to qualify for the ECEI GOLD Label “Excel in Cluster Excellence”, the cluster management organizations must meet certain criteria characterizing the quality of cluster management as a whole, the financing system, the strategies and methods used to promote services, and the level of public recognition.
The assessment could be more informative if there were tools to analyse the initial condition of the cluster (human, physical, and infrastructure factors), its competitive niches, and its life cycle stage. It seems appropriate to employ the Porter Diamond as an additional tool. It is also possible to use tools for measuring the effectiveness of government support in assessing cluster competitiveness: in some countries, including Russia, clusters are as a rule top-down initiatives[27; 28].

The World Bank methodology made it possible to gain a deeper understanding of the role of microelectronic clusters in the German economy as well as on a global scale. The findings can be used in analysing the performance of leading innovation clusters in Russia.

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BOOK REVIEW

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A BEGUILING HISTORY:

All nations try to get their young inspired by the great deeds of the past. This holds especially for a state that has recently gained independence, and that needs to assert its self-identity. As a rule, that is the very task the government of such a country gives to its professional historians. The book under review, which appeared in Lithuania in 2014, illustrates this thesis.

The inspiration for the volume was an influential reference book of military history (Sarkees, M. R, Wayman, F. W. Resort to War: a Data Guide to Inter-state, Extra-state, and Non-state Wars, 1816—2007. CQ Press, 2010), which was published in the US. According to Gediminas Vitkus, the editor of Wars of Lithuania, the American work either ignores or misinterprets the role and place of Lithuania in world history. Thus, a team of Lithuanian historians set out to remedy that situation, and the book under review appeared as a result. In the past of their nation, the authors identified four armed conflicts that met, in their opinion, the criteria of a major war. These criteria were listed by the initiators of the Correlates of War project launched at the University of Michigan in 1963. The four conflicts are the Lithuanian participation in the uprisings of 1830—1831 and 1863, the Lithuanian war of independence of 1918—1920, and the guerrilla warfare of 1944—1953. Accordingly, the book consists of four chapters, an introduction, and a conclusion. The chapters are written by leading experts in the history of Lithuania: Dr Virgilijus Pugačiauskas, Dr Ieva Šenavičienė, Dr Gintautas Surgailis, the researcher of the Genocide and Resistance Research Centre of Lithuania, Edita Jankauskienė. The decision to publish the book was made by the Research Council of the Military Science Institute at the General Jonas Žemaitis Military Academy of Lithuania. Each chapter includes the following sections: the characteristics of the belligerents; the goals and objectives of the war; the initiator of the war; the course of the war and warfare stages; participants in the war, their leaders and allies; casu-
alties and losses; the result and consequences of the war; terminology specific to the war and used by the belligerents. The book seeks to prove that the four conflicts were interstate wars and should be treated by the international community as such. The volume contains statistical data, a bibliography, and reference materials.

The book has all the formal attributes of proper research. The chapters draw on an impressive array of sources: Lithuanian, Polish, and Russian archive materials, documents, journals, letters, memoirs, etc. Wars of Lithuania takes a broad sweep of the literature. Its interpretation of the materials cannot be called objective, nonetheless.

The first thing that draws the attention of the reader is that the authors see Russia in all its incarnations: the empire or the Soviet republic, the principal and perpetual enemy of the Latvian nation and state. Apparently, Lithuania has never had any other enemy. The only exception may be a small interwar conflict with Poland, in which, the authors admit, Lithuania was defeated. Germany, neither as the German Empire or the Third Reich, is considered an enemy by the Lithuanian historians. Secondly, the country always relied on foreign aid, either in the 19th or 20th century. It seems that, for the Lithuanians, independence means independence from Russia. This treatment of independence goes hand in hand with the readiness to be subjected to any other country. Thirdly, the authors of the chapters are, to put it mildly, disingenuous in their descriptions of events. Right from the start, they avoid certain topics. Still, first things first. For the sake of research integrity, the review uses nothing else but texts from the book.

The first chapter focuses on the events of 1830—1831, to which Russian historiography refers to as the Uprising in the Polish lands of the Russian Empire. The revolt sought to restore the Polish-Lithuanian Commonwealth within the borders of 1772. The American reference book calls these events the First Polish War. The author of the chapter rejects both approaches. He argues that it was a war fought by Poland and Lithuania against Russia. The chapter gives a rather detailed description of hostilities, drawing an epic picture: a many-thousand-strong militia, numerous battles, victories over Russian troops. When read carefully, this interpretation raises questions. Firstly, was the uprising a revolt of the Lithuanian people struggling for freedom? The chapter does not attempt to determine the national composition of the rebel forces. There are no Lithuanian names among the leaders of militia units. All of them were members of the szlachta. Despite living in Lithuania, they had a Polish mindset and Polish ambitions. It is not a secret that most of the nobility of the former Grand Duchy of Lithuania underwent Polonisation. As to the Lithuanian population of the state, it consisted primarily of peasants who were reluctant to take part in the struggle against tsarism. The author of the chapter writes that local landowners tried to
incite rebellion among peasants, but the latter would just run home, once mobilised. The estimate of 40,000 is many times the real number of combatants. The uprising in the territory of Lithuania continued from March 25 through October 25, 1831. From May, the author stresses, the Polish expeditionary force, which came to aid of the rebels, had a significant role in the revolt. The author calls all armed encounters between the rebels and the Russian army battles. However, judging by the number of casualties quoted in the book (pp. 66—74), most of them were mere skirmishes. Classifying this event as a war between Russian and Lithuania would be a gross exaggeration.

The second chapter is concerned with the uprising of 1863 in the Western provinces of the Russian Empire. Once again, Poland was the heart of the rebellion. The American publication refers to the event as the Second Polish War and comes under criticism from the author of the chapter. He treats the conflict as a war between Russia and the Polish-Lithuanian coalition. Just as in the case of the first chapter, this seems to be an exaggeration. The author describes the creation of something resembling a central governing body in Lithuania and the participation of peasants in combat. It turns out that the uprising of peasants in the Kovno province was encouraged by disinformation spread by local Catholic priests who accused the tsarist government of harbouring plans to eradicate Catholic faith. After Catholic hierarchs addressed believers and dismissed the rumours as lies, peasants started to return to their villages. In many places, the author of the chapter concedes, the authorities were setting up peasant militia units to keep order locally, which weakened the position of the rebels. The absolute majority of the leaders of the uprising had Polish names, Poles had the leading role in the struggle, and active hostilities lasted only from April to July 1863 — all this speaks against calling the events a war between Russia and Lithuania.

The third chapter is devoted to the so-called war of independence, which, according to the author of the contribution, was fought in 1918—1920, on three fronts at once. Lithuania was at war with Soviet Russia, a white army led by Pavel Bermondt-Avalov, and Poland; it was defeated only by the Poles. It is important to remember that Lithuania gained its ‘independence’ in a very peculiar manner, i.e. under the wing of the German Empire. The German government permitted Latvian patriots to establish a ‘self-government’ body — the Council of Lithuania (Taryba), which signed the Act of Independence of Lithuania on February 16, 1918 (while under German occupation!). The Germans did not recognise the act and pursued the idea of a Lithuania kingdom ruled by a German prince turned Lithuanian king. Lithuanian ‘patriots’ did not put up opposition to the plan. They mobilised only in October 1918 when the German Empire, already on the brink of defeat, allowed the occupied territories to create states and governments of their own. On November 1, 1918, recruitment to the
Lithuanian army began (once again, with the permission of the German authorities). On November 11 of the same year, the government of the new Lithuanian state was formed. It officially announced the creation of the Lithuanian armed forces with approximately 100 officers and 50 soldiers. At first, the army was built up on the voluntary principle. In March 1919, despite the call from the government saying that homeland was in danger, the army, the author of the chapter admits, numbered around 3,000 people. The country had to announce mobilisation, which proceeded rather slowly. The population of the new state was unwilling to go to war.

What is of interest is how the forces of the belligerents are estimated in the chapter. When speaking about the Soviet Russia of 1918, the author uses, for some unknown reason, statistics from 1913, completely ignoring the fact that Russia was in a civil war by the end of 1918. The Soviet government had many concerns, and the western front played a secondary role until 1920. Little attention was paid to the western theatre of operations. The enemies of the Bolsheviks on the Lithuanian front were not non-existent Lithuanian troops. For example, the Kovno offensive of the Russian army was stopped by the Germans, whom the Entente Powers charged with fighting the Bolsheviks in the Baltics. Later the Poles joined in, helping to expel the Bolshevik from Lithuania. But what of the Lithuanian army? It was still being built up and thus had a nominal role in the conflict. According to the author of the text, back then, Lithuania acted as a barrier to the spread of Bolshevism across Europe, and it continues to act as a barrier today. The author forgot to mention that the Red Army took Vilno twice and handed it over to the Lithuanians. Both times, when the Red Army departed, the Lithuanian forces abandoned the city, unable to hold it. The troops of Bermondt-Avalov, the author admits, fought primarily with the Latvian forces supported by the British. It seems that the activity of the Lithuanian government was confined to appeals to the leaders of the Entente Powers to influence the Germans. The Lithuanian forces mobilised, the text suggests, when the Germans were leaving. The Lithuanians followed the retreating troops, retaking the abandoned territories. Fighting the Poles was beyond the army’s capacity. During the Soviet-Polish war, the Republic of Lithuania entered into something of a treaty of alliance with Soviet Russia. Lithuania never provided any real aid — whether because it could not or because it did not want to. For the Poles, the Soviet-Lithuanian treaty was proof of Lithuania’s collaboration with the Soviets. The Polish government became extremely hostile to Lithuania and dealt with the country accordingly. Lithuania lost about a third of its territory to the Polish forces. Lithuanian complaints to the leaders of the Entente Powers did not help. Finally, according to the data contained in the *Wars of Lithuania*, in the two-front war fought from February 1, 1919, to November 30, 1920 (these dates are given in the book), Lithuania suffered 1444 casualties. Of them, 530 soldiers
and officers died fighting the Bolsheviks and the Bermondt-Avalov forces. Of course, any death is a tragedy, yet the number of casualties is a reliable indicator of the warfare intensity and the involvement of an army in it. In this case, Lithuania has little to be proud of, and its ‘victories’ over the red and the white are mostly fictitious.

The fourth chapter describes the operations of the Lithuanian resistance in 1946—1953. The author of the contribution takes great pride in the resistance: the Lithuanians fought the powerful Soviet Union longer than anyone else in the Baltic did; they proved their commitment to freedom and democracy, and so on. It seems that there is a good reason to be proud of. However, the uneasy questions arise once again. Why did some people in the Lithuanian Republic warmly welcome the German forces, take part in exterminating the Jewish population, shoot Red Army soldiers in the back, hand over families of red officers to the Germans, and collaborate with the Nazi authorities in any way possible? Does this agree with the celebrated desire for independence? The chapter mentions the anti-Nazi resistance but does not recount any of its actual deeds. Of course, there were underground organisations and a partisan movement in Lithuania; a Lithuanian division fought in the Red Army. However, all of them were Lithuanian communists and their allies. Where were the warriors of independence fiercely opposing communist dictatorship? It seems that they had little against German rule. As the chapter suggests, they tried to act nonetheless. In summer 1941, they were developing a plan to restore the Lithuanian army. The Germans, however, did not permit that. Only in spring 1944, the Nazis allowed the Lithuanians to create the so-called Lithuanian Territorial Defence Force, which numbered about 20,000 people. Later, part of these troops retreated with the Germans to East Prussia; others fled to the woods where they fought the Red Army. The only question is what the Nazis were to these fighters for freedom. Apparently, they were allies. The author of the chapter considers in detail the reasons why Lithuanian opponents of Soviet rule retreated en masse to the woods. These reasons include Soviet terror, the memory of the ‘first Soviet occupation’, and patriotism. The book tells about the mythic armed resistance to the Nazis, which turned to fighting the communists. An important motif is hope for intervention from the West. The author mentions attempts to avoid mobilisation by the Soviet authorities. Only one reason, which seems important nonetheless, is omitted here — the fear of having to pay for everything those people had done while collaborating with the Germans. Many Lithuanian citizens got involved too deeply, and the Soviets would have held them accountable for too many crimes.

The fourth chapter details the activities of the armed underground, glorifies the heroes of the resistance, who, the book stresses, supported the honour and dignity of the country and asserted its commitment to freedom and democ-
racy. Yet the chapter says nothing about the views of the Forest Brothers on democracy and what methods they used against their political opponents and anyone else whom they could suspect of collaborating with the Soviets. There are grand words about Soviet terror and none about the terror unleashed by the ‘resistance’. The numbers of the anti-Soviet resistance speak for themselves. According to the data contained in the chapter, in spring 1945, there were about 30,000 people in the woods. Most of them were simply escaping mobilisation. By the end of 1946, they numbered 4,000—5,000 people; in 1948, fewer than 2000; in 1951, fewer than 1,000; in 1954, 139. According to the author, in 1944—1953, approximately 50,000 people joined the armed units. Many of them died, many were arrested. However, most of them were amnestied and remained at large. Probably, it is worth quoting other figures from the book. As mentioned above, one of the reasons to flee to the woods was Red Army mobilisation. Almost half of those eligible for conscription tried to stay out of the service. Still, 82,000 Lithuanians joined the army. Thus, not everyone opposed the new authorities. When fighting the armed underground, Soviets relied on the local population. The author of the chapter mentions destruction battalions (istrebki), which had a major part in subduing the Forest Brothers. He writes that, in 1944—1954, over 20,000 people fought in destruction battalions, which accounted for 20% of the losses of the anti-Soviet resistance. Another 18,000-20,000 fought for defence units. Without the support of these people, without their substantial help, the Soviet troops would not have won. One can hardly agree with the author of the chapter, who denies that a civil war was raging in Lithuania in the first post-war years and maintains that the struggle was nothing less than the Lithuanian guerrilla war against the Soviet Union. The US, the UK, Switzerland, Vatican, Uruguay, and some other Latin American states (sic) did not recognise the incorporation of Lithuania into the Soviet Union. Therefore, the author believes, the government of the Lithuanian SSR was illegal. In contrast, the legitimate government of Lithuania was the Council of the Movement of the Struggle for Freedom of Lithuania, which was established in 1949 by a group that apparently did not represent anyone but itself. At the time, the armed units numbered fewer than 2,000 people, which is very much in line with Parkinson’s law: the fewer ships there are, the more admirals.

The following conclusions can be drawn from the above: the attempt to glorify the acts of fighters for Lithuanian independence and thus to take the prestige of the country to the next level does not seem to be successful. Of course, there were people in Lithuania who did not accept the subordinate position of their people and tried to become independent from the Russian state, people who gave their lives fighting for that goal. However, there were those who valued peace and quiet, those who easily fit in the new community of nations, and who viewed the Russians as friends and allies rather than enemies.
History had shown, only when part of the Russian state (the USSR), Lithuania was a respectable and prosperous member of the world community. The desire to sever ties with Russia and thus to ensure affluence and true independence has never done the country any good. Its resources are too scarce. As it often happens to smaller states, having escaped one suzerain, it has to seek the protection of another. As the history of Lithuania suggests, this change is not always for the better.

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SUBMISSION GUIDELINES

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