SAINT PETERSBURG AS A GLOBAL COASTAL CITY: POSITIONING IN THE BALTIC REGION

S. Lachininskii<sup>\*</sup>,
I. Semenova<sup>\*</sup>

٩

The Baltic region consists of coastal areas of nine countries — Russia, Estonia, Latvia, Lithuania, Poland, Germany, Denmark, Sweden, and Finland. The region's hubs are the port cities located along the Baltic Sea coast. However, Peter Taylor and Saskia Sassen's classification identifies higher status cities and 'global cities', which are to be considered in the global context.

Seven coastal regions are distinguished within this region, whose organising centers are the global coastal cities of Stockholm, Copenhagen, Helsinki, Riga, Tallinn, St. Petersburg, and Malmö. The concept of a "global city-region" (Sassen) can be used as a methodological framework for analyzing this connection. Within this hierarchy, the dominant alpha group global city is Stockholm.

The authors argue that, as a global coastal city, St. Petersburg forms the St. Petersburg coastal region, which can be defined as a typical "global city region". The index method shows that the position of St. Petersburg in the system of global coastal cities of the Baltic region is relatively favorable in view of its transport, logistics, and demographic potential and the advantageous geo-economic situation.

St. Petersburg has certain competitive advantages in the region brought about by its demographic potential, port freight capacity, and the favorable geo-economic position of the "sea gate" of Russia. However, the level of high-tech services and 'new economy' development is not sufficient for the port to become a match for the top three cities (Stockholm, Helsinki, and Copenhagen). This is increasingly important because transboundary global city networks demonstrate that global cities are functions of global networks. Saint Petersburg is just starting to integrate into these networks through the Pulkovo airline hub and seaports of Ust-Luga, Primorsk, and Saint Petersburg.

*Key words:* global coastal city, St. Petersburg, Baltic region, ports, coastal region, global urban area, marine economy

Submitted on June 15, 2015 doi: 10.5922/2079-8555-2015-3-4 © Lachininskii S., Semenova I., 2015

<sup>\*</sup> Saint Petersburg State University 7—9 Universitetskaya nab., Saint Petersburg, 199034 Russia

# **Problem definition**

The *coastal region* is defined as a special territory, a transition from dry land to the sea (ocean) stretching up to 200 km inland. It is worth stressing that, according to the OECD recommendations, the boundaries of a coastal zone should extend as far inland as necessary for appropriate management [1].

The economies of such zones and their specialisations are strongly affected by marine economic activities, and port and logistics infrastructure. The EU Green paper stresses that 'the maritime regions account for over 40% of GDP and approximately the same proportion of population' [2]. Eurostat identifies coastal regions as statistical areas of NUTS-III level, where more than half of the population resides within 50 km from the coastline. It is worth stressing that most studies use the 150-200 km benchmark. In particular, P.R. Burbridge emphasises, 'Coastal zones occupy less than 15% of the earth's land surface, yet accommodate around 37% of the world population in a band of 100 km, and roughly 50% in a 200 km range'. 'Three quarters of the world population are expected to reside in the coastal zone by 2025' [3]. To a degree, the boundaries of coastal region are arbitrary. The density of coastal population living within 100 km from the coastline is 2.5 times the world average [4].

Researchers and specialists in public administration use a wide range of definitions to describe the complex area of transition from dry land to the marine environment.

The Strategy for the Marine Activities in the Russian Federation until 2030 uses the notion of 'marine-coastal component', which includes coastal territories and contiguous waters comprising a single administrative unit [5].

The *marine-coastal component* creates prerequisites for the development of a regional marine industry and offers opportunities for establishing 'marine production clusters' and zones of advanced and spatial development. The spatial and functional structure of a regional marine industry depends on the prevalent maritime activity. This means that a regional marine industry is managed from a coastal global city — a unit of globalised geoeconomic space.

Saint Petersburg, being a gamma level global city, is the core of an emerging space specialising in marine activities. Our calculations show that the current population of Saint Petersburg coastal region reaches 7.5 million people and its area is 110.5 thousand km<sup>2</sup>.

A. Scott [6] and K. O'Connor [7] call such areas 'global city regions'. The key competitive advantage of such regions is the availability of port infrastructure and a large airport, which can become a critical factor in the positioning of a global city in global logistics. In his study into the role of global cities in global logistics [7], K. O'Connor ranked the Saint Petersburg global logistics region 39<sup>th</sup>, which is well above the city's 126<sup>th</sup> position in the global city ranking. Today, the total tonnage of seaports within the Saint Petersburg coastal region has reached 195 million tons, Saint Petersburg's contribution being 30% [8].

Saint Petersburg boasts a container terminal handling 2.52 million TEU and ranking 50<sup>th</sup> among the world's largest ports. In line with international strategies [9], the value added generated by the Saint Petersburg container

port reached USD 6,400 million (as compared to USD 12,000 million in the gamma level global cities of Jeddah and Osaka).

### Objects and methods

This study assumes that Saint Petersburg, being a global coastal city (GCC), serves as the core of the Saint Petersburg coastal region — a typical 'global city region' as interpreted by A. Scott and K. O'Connor. The borders of the region coincide with the external boundary of 200 km inland area (for more detail, see [10—11]). Therefore, the population of the Saint Petersburg coastal region is 7.5 million people and the area 110.5 is thousand square km<sup>1</sup>.

The Chinese experience in developing industrial port clusters suggests that 'it is most efficient to locate manufacturing within 200 km from a large seaport' [12]. E.B. Valev [13] analyses the case of European coastal regions in a similar way, stressing the region-forming role of coastal production facilities, which activate economic ties thus ensuring a stronger position of the country in the international division of labour, high-level infrastructure, and development focused on industrial port centres.

Indeed, the past 15 years have witnessed the activation of global economic ties not only in Saint Petersburg, but also in the Leningrad region. In 2000-2014, total international trade (commodities) as a 9.77-fold increase in Saint Petersburg and a 7.71-fold increase in the Leningrad region. In 2000-2005, international trade increased 2.92-fold in Saint Petersburg and 3.61-fold in the Leningrad region. In 2005 — 2010, the total increase was 2.42- and 1.57-fold respectively, whereas in 2010 — 2014, the city's and region's performances levelled with a respective 1.38- and 1.36-fold increase (tables 1, 2).

Table 1
onomic performance of Saint Petersburg

Foreign economic performa and the Leningrad		burg
	Reg	gion
Darameter		I eningrad

	Region			
Parameter	Saint Petersburg	Leningrad region		
Total exports of goods, USD billion	20.32	15.51		
Total imports of goods, USD billion	29.92	4.23		
Total international trade, USD billion	50.24	19.74		
GRP, USD billion	64.98*	18.03*		
GRP/IT ratio	1.29	0.92		
GRP per capita, USD	12588	10188		
IT per capita, USD	9733	11154		

<sup>\*</sup> As of 2013. The 2014 average weighted rouble exchange rate is = 38.4217.

<sup>&</sup>lt;sup>1</sup> It is assumed that the administrative district can be included into the studied region under the condition that its centre is located in the extended zone of the coastal region. For the purposes of this study, the Saint Petersburg coastal region will include 15 districts of the Leningrad region, 4 districts of Karelia, 9 districts of the Pskov region, and 8 districts of the Novgorod region.

Table 2

Changes in	kev	economic	narameters	in	2000-	-2014
Changes in	ncy	cconomic	parameters		-000	-01.

Parameter	2000	2005	2010	2014			
	Saint Petersburg						
GRP, USD billion*	6.723	23.800	56.649	65.699			
BT, USD billion	5. 143	15.030	36.350	50.240			
GRP/BT	1.31	1.58	1.56	1.31			
	Leningrad region						
GRP, USD billion*	2.000	7.336	16.343	18.231			
BT, USD billion	2.559	9.255	14.525	19.740			
GRP/BT	0.78	0.79	1.12	0.92			

<sup>\*</sup> The average weighted rouble exchange rate as of the studied year is applied.

Tables 1 and 2 show the expansion of international economic activities in both the region's core (Saint Petersburg) and the adjacent Leningrad region. An important trend is the increasing influence of world economy and international trade on the city and the region. They are becoming Russia's international trade operators accounting for up to 10% of the country's international trade.

These trends are corroborated by an analysis of changes in Saint Petersburg's and the Leningrad region's positions in Russia's Northwestern federal district and Russia in general (table 3). Both regions stand out at not only the NWFD but also the national level. However, the Leningrad region is reducing its dependence on the world market, whereas Saint Petersburg is increasing it.

Table 3

Assessment of the influence of globalisation on the regional economies of Saint Petersburg and the Leningrad region in 2005—2013<sup>2</sup>

Dagian	GRP localisation coefficient		IT localisation		Integration coefficient	
Region	coen	icient	coem	coefficient		cient
	2005	2013	2005	2013	2005	2013
Leningrad region	0.971	1.042	2.313	2.070	2.382	1.986
Saint Petersburg	1.128	1.291	1.343	1.987	1.191	1.539
NWFD	1.041	1.074	1.198	1.402	1.151	1.305
Russia	1.000	1.000	1.000	1.000	1.000	1.000

GRP stands for gross regional product; IT is international trade; the integration coefficient is a degree of integration into the world economy.

<sup>&</sup>lt;sup>2</sup> The GRP localization coefficient is calculated as a ratio of local GRP per capita to national GRP per capita. The coefficient of international trade localisation is the ratio of total international trade per capita in the region to total international trade per capita in the country. The integration coefficient is the ratio of current international trade localisation coefficient to current economic localisation coefficient.

Foreign investment has become an important driver for economic development. In 2013, it increased by 24.7% as compared to 2012 to reach USD 13.4 billion. The manufacturing industry accounts for 90% of foreign investment (USD 12.1 billion). In 2013, FID stock in the economy of Saint Petersburg reached USD 25 billion — 21.9 % above the 2012 level [14].

The Saint Petersburg development strategy [14] identifies the improvement of global competitiveness as the major development objective. Certain aspects are recognised as priorities — business, tourism, IT, and transportation and transit. Adequately identified priorities can ensure the development of Saint Petersburg not only as a leading global city of the Baltic region but also as one of top European cities.

Therefore, the global coastal city of Saint Petersburg is identified as a first-level geoeconomic node serving as the organising centre for the whole Saint Petersburg coastal region. Moreover, the seaport of Saint Petersburg performs the role of a global city's organising centre.

When studying global coastal cities (GCC), five types of coastal positions are identified: within internal seas and bays (A); in the estuaries of large rivers emptying into a sea or an ocean (B); at a distance from the coastline on a riverbank (C); on the ocean coast (D); on the coast of an open sea or a bay (E). There is also a special integrated type — a position at major international marine routes (F).

Calculations show that, out of 182 world cities (according to Peter Taylor's classification [15]), 102 are classified as GCS, including 30 of category E, 24 of category D, 12 of category A, 14 of category C, and only 11 of category B. A total of 66 cities are located at major international marine routes.

Global coastal cities of the Baltic region are classified under category A. It is worth stressing that, despite the geographical similarities and the common positioning region, the ports of the East and West Baltic are rather different. In effect, they occupy different competitive niches and gravitate to different markets. The ports of Poland, Germany, Denmark, South Sweden, and the Kaliningrad region are mostly oriented towards Western and Central Europe. As to the ports of the East Baltic, they are oriented towards the markets of the Baltics, Russia, and Scandinavian countries (table 4).

 ${\it Table~4}$  Global coastal cities and large ports of the Baltic region

GCS	Population in 2012 году, thousand people	Distance from the alpha city, km	Global city cat- egory	tonnage	Seaport tonnage in 2012	Proportion of seaport tonnage on the national segment (national total) in the Baltic region (2012), %	GDP with- in NUTS-1 (2), billion euros
SPB	4953	706 <sup>*</sup>	γ+	59.6	57.8	27.9	60.00
HEL	1060	489***	β	11.9	10.8	10.3	74.97
RIG	650	507***	β-	25.9	32.4	44.5	22.22
TAL	404	819***	γ	36.0	29.5	67.8	17.64
STO	1580	0	α-		5.4	6.2	131.47
COP	559	607***	β+		15.0*	17.2	96.08

*The end of the table 4* 

GCS	Population in 2012 году, thousand people	Distance from the alpha city, km	Global city cat- egory		Seaport tonnage in 2012	Proportion of seaport tonnage on the national segment (national total) in the Baltic region (2012), %	GDP within NUTS-1 (2), billion euros
MAL	303	611***	γ-			_	52.99
PRI	10	868*		74.2	74.8	36.1	16.50
YLG	3	830*		0	46.8	22.6	16.50
VSK	1	860*		0	13.6	6.6	16.50
VBG	81	870*		1.1	1.4	0.7	16.50
KAL	433	378**		15.6	12.7	6.1	8.85
VEN	42	692***		31.0	30.4	41.8	22.22
CLD	160	812***		27.4	35.2	88.5	33.31
GDK	460	419**		19.8	26.9	44.0	22.43
KIL	242	698****		4.9	1.7	3.3	77.80
ROS	203	574****			21.2	41.1	37.56
LUB	210	523*****		31.7	26.1	50.7	77.80
GDN	248	442**		17.0	15.8	25.0	22.43
LIP	73	451***	_	4.0	7.4	10.2	22.22
BUT	•••					_	_
HKT	77	610***	_	10.0	14.5	13.8	38.15
SHC	408	499****	_	_	19.2	31.0	14.54

SPB — Saint Petersburg; HEL — Helsinki; RIG — Riga; TAL — Tallinn; STO — Stockholm; COP — Copenhagen; MAL — Malmö; PRI — Promorsk; YLG — Ust-Luga; VSK — Vysotsk; VBG — Vyborg; KAL — Kaliningrad; VEN — Ventspils; CLD — Klaipeda; GDK — Gdansk; KIL — Kiel; TUR — Turku; GDN — Gdynia; LIP — Liepaja; BUT — Būtingė; ROS — Rostock; LUB — Lübeck; HKT — Hamin-Kotka; SHC — Szczecin

The index method shows that the position of Saint Petersburg in the system of Baltic region's coastal cities is moderately favourable. However, the economic potential does not correspond to the competitive advantages, and the city's demographic and transport/logistics potential (table 5).

Table 5

Positioning of the global coastal city of Saint Petersburg in the Baltic region in 2012, %

		Global city	Seaport	GDP	Air hub	Container
GCS	Population	category	tonnage	within	passenger	port
		category	tomage	NUTS-1	traffic	tonnage
SPB	100	γ+	100	100	100	100
HEL	21	β	19	125	154	16
RIG	13	β-	56	37	50	13
TAL	8	γ	51	29	23	8
STO	32	α-	9	219	253	

<sup>\*</sup>distance form Moscow; \*\*distance from Moscow; \*\*\*distance from Stockholma; \*\*\*\*\*distance from Prague; \*\*\*\*\*\*distance from Amsterdam

*The end of the table 5* 

GCS	Population	Global city category	Seaport tonnage	GDP within NUTS-1	Air hub passenger traffic	Container port tonnage
COP	11	β+	26*	160	243	
MAL	6	γ-	_	88	22	

<sup>\*</sup> Since 2012, the ports of Copenhagena and Malmö are considered together

Today, urbanised territories of global cities serve as platforms for economic prosperity and growth. However, global cities have a special competitive advantage that makes it possible for them to enjoy all the benefits of world economy. According to the World Bank, approximately ½ of total world production is manufactured and localised in urban areas covering only 1.5% of the planet's land surface. Indeed, productive hi-tech marine activities localised on a small territory make it possible to increase the economic potential of a coastal city and the contiguous coastal region. To a great degree, it depends on the concentration of business and managerial efforts on a small territory and using all of its competitive advantages. These advantages include the geoeconomic position (for more detail, see [16; 17]), exterritorial forms of economic development (special economic zones, free port regimes, and transboundary regions [18, 19]), and the concentration of the port capacities of several cities within a common organisational and logistics platform. The Baltic region is taking advantage of these opportunities. The most impressive examples are the MediCon international biotechnological cluster (Copenhagen — Malmö), the Copenhagena — Malmö and Hamina — Kotka (Finland), and Szczecin — Swinoujście (Poland) joint ports, as well as a number of special economic zones in the Baltics (the Freeport of Riga, the Freeport of Ventspils, the ports of Liepaja and Klaipeda, and the special zones of Muuga and Sillamäe) [20].

#### Results and discussion

The calculations show that the global coastal cities and coastal regions of the Baltic regions differ in the economic potential and the ability to develop their coastal region potential (table 6).

Economic development indicators of global coastal regions in the Baltic region

Table 6

	Coastal region's GDP		GDP per capita	GCC's eco-	GCC's
Region		GCC's	in the Baltic	nomic potential	economic
		GDP	macroregion	development	localisation
			= 100	index	index
ockholm					
ockholm	131.47	99.32	248	1.87	1.41

191

1.31

Uusimaa

Helsinki

74.99

51.31

53

1.31

*The end of the table 6* 

Region	Coastal region's GDP	GCC's GDP	GDP per capita in the Baltic macroregion = 100	GCC's eco- nomic potential development index	GCC's economic localisation index
Hovedstaden					
Copenhagen	96.01	31.30	221	0.72	1.24
Saint Petersburg					
Saint					
Petersburg	60.0	60.0	48	0.48	0.96
South Sweden					
Malmö	52.92	11.40	148	0.30	0.84
Estonia					
Tallinn	17.64	5.38	52	0.15	1.00
Latvia					
Riga	22.22	7.06	43	0.13	1.00
Total	455.25	265.77	100		•••

The seven coastal cities account for 24.1% of the population and 26.5% of the GDP of the Baltic region or 38.1 and 45.5% respectively if the contiguous coastal regions are taken into account.

The calculated GCC economic potential development index shows to what degree the coastal region exploits its competitive advantages. Stockholm's index of 1.87 suggests that the city's contribution to the national gross product is higher than the proportion of its coastal region population in national population. Saint Petersburg's index of 0.48 shows that the city's demographic potential is well above the generated gross product.

The GCC economic localisation index shows the position of the global coastal city as compared to the national GDP per capita. Stockholm, Helsinki, and Copenhagen are undisputed regional leaders in their countries. Saint Petersburg, far from being a national economic leader, is outstripped by the three Scandinavian countries in terms of the GDP per capita level.

Saint Petersburg's strengths are the demographic and logistics potential. However, the transport industry is affected by stagnation. The port's tonnage is stable at 55-60 million tons, whereas the airhub's passenger traffic is disproportionate to the capacities of the new infrastructure (a new terminal). However, the airport's passenger traffic is increasing (fig.).

An analysis of market shares in terms of tonnage and market growth rates conducted using the Boston Consulting Group (BCG) matrix shows the absence of successful ports characterised by a high market share and relatively low market growth rates. The analysis does not consider the groups with a low growth rate and market share performance. Saint Petersburg is in the group of leaders, alongside its major competitors — Tallinn and Riga. These ports are promising in all relations. They require additional financing to retain their market share. The 'promising' group consists of ports showing high growth rates and a relatively small market share, namely, those of Copenhagen and Malmö, Helsinki, and Stockholm.

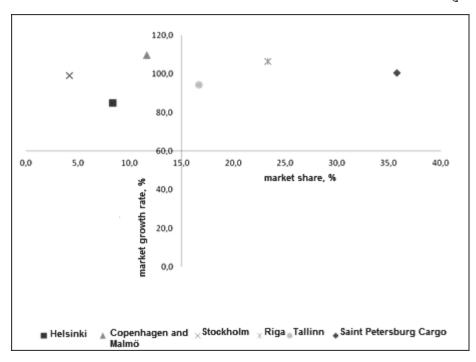


Fig. BCG matrix: Classification of Eastern Baltic ports by tonnage increase (%) and market share, % (2013—2014)

There are seven coastal cities in the Baltic region, whose organising centres are global coastal cities (GCC) — Stockholm, Copenhagen, Helsinki, Riga, Tallinn, Saint Petersburg, and Malmö.

The region's dominant alpha group global city is Stockholm. It is worth noting that the potential of Stockholm as a developed global city is determined not only by the performance of marine industries, but also by those of 'new economy' (biotechnology, IT, environmental studies, tourism, and science).

Saint Petersburg has certain competitive advantages in the region accounted for by its demographic potential, port tonnage, as well as the advantageous geoeconomic position of the 'sea gate' of Russia. However, the level of hi-tech services and 'new economy' development is not sufficient to challenge the three leaders — Stockholm, Helsinki, and Copenhagen.

The research centres of large hi-tech companies (*Microsoft, EMC, Oracle, Intel, Yandex, Google, Hewlett-Packard, Motorola Mobility, EPAM, LGSoftLab, Siemens, T-Systems*) opened in the 1990s create prerequisites for the development of a competitive innovative environment and new forms of research and production organisation in Saint Petersburg. The city has the potential to become a leader in modern high-tech production and to develop new industries relying on the efforts of local research centres. International cooperation and entering global markets make it possible for Saint Petersburg to develop this potential and claim the status of a regional leader.

<sup>\*</sup> Based on the 2007 and 2012 data

Progress will be associated with a dramatic increase in hi-tech production and services, as well as the media promotion of Saint Petersburg and its 'satellites' as a large logistics, manufacturing, research, services, and tourism centre in the studied region.

This article was supported through grants from the Russian Foundation for the Humanities No. 15-02-00002 and the Russian Science Foundation No.15-18-10000.

#### References

- 1. Coastal zone management: integrated policies, 1993, OECD, Paris.
- 2. Green Paper. Towards a Future Maritime Policy for the Union: a European Vision for the Ocean, 2006, *COM*, no. 275 final, 7.6.2006.
- 3. Pak, A., Majd F. 2011, Integrated coastal management plan in free trade zones, a case study, *Ocean & Coastal Management*, no. 54, p.129—136.
- 4. Small, C., Nicholls, R. J. 2003, A global analysis of human settlement in coastal zones, *Journal of Coastal Research*, Vol. 19, no. 3, June 2003, p. 584—599.
- 5. Strategija razvitija morskoj dejatel'nosti Rossijskoj Federacii do 2030 goda, utverzhdennaja rasporjazheniem Pravitel'stva Rossijskoj Federacii ot 8 dekabrja 2010 g. № 2205-r [The development strategy of maritime activities of the Russian Federation to 2030 approved by the Federal Government of December 8, 2010 № 2205-r], 2010, Moscow.
- 6. Scott, A. J., Agnew, J., Soja, E. W., Storper, M., 2001, Global city regions. In: Scott, A. J. (ed.), *Global City Regions. Trends, Theory, Policy*, Oxford University Press, Oxford, p. 11—32.
- 7. O'Connor, K. 2010, Global city regions and the location of logistics activity, *Journal of Transport Geography*, no. 18, p. 354—362.
- 8. Oficial'nyj sajt «Edinaja gosudarstvennaja sistema informacii ob obstanovke v mirovom okeane» (ESIMO) [The official website for "The Unified State System of Information on the World Ocean" (ESIMO)], available at: URL://www.russianports.ru/index.html (accessed 9.06.2015).
- 9. Merk, O. (forthcoming), 2013, Meta-analysis of Port Impact Studies, *OECD Regional Development Working Paper*.
- 10. Lachininskii, S. S., Semenova, I. V. 2015, Sovremennye podhody k issledovaniju transformacii jekonomiki Sankt-Peterburgskogo primorskogo regiona [Modern approaches to the study of the transformation of the economy of the Primorsky district of St. Petersburg], *Vestnik Sankt-Peterburgskogo universiteta. Serija 7: Geologija. Geografija* [Bulletin of St. Petersburg State University. Series 7: Geology. Geography], no. 3.
- 11. Lachininskii, S. S., Lachininsky, A. S., Semenova, I. V. 2015, Vydelenie jelementov geojekonomiki Sankt-Peterburgskogo primorskogo regiona s pomoshh'ju GIS [Selection of elements of geo-economics of the Primorsky district of St. Petersburg through the GIS], *Geografija i prirodnye resursy* [Geography and natural resources], no. 4.
- 12. Mogilevtsev, A. A. 2013, Formirovanie portovo-promyshlennyh klasterov na territorii primorskih provincij KNR [Formation of port and industrial clusters in the coastal provinces of China], *Regional'nye issledovanija* [Regional studies], no. 2 (40), p. 50—76.
- 13. Valev, E. B. 2009, Problemy razvitija i vzaimodejstvija primorskih territorij v Evrope [Problems of development and interaction of the coastal areas in Europe], *Regional'nye issledovanija*, no. 1 (22), p. 11.

- 14. Postanovlenie Pravitel'stva Sankt-Peterburga ot 13 maja 2014 goda N 355 «O Strategii jekonomicheskogo i social'nogo razvitija Sankt-Peterburga na period do 2030 goda» [Resolution of the Government of St. Petersburg of May 13, 2014 N 355 "On the Strategy for Economic and Social Development of St. Petersburg for the period till 2030"], 2014, Saint Petersburg.
- 15. The World According to GaWC 2012, 2012, available at: URL://www.lboro.ac.uk/gawc/world2012t.html (accessed 5.06.2015).
- 16. Kuznetsov S. V., Lachininsky, S. S. 2014, Modern understanding of 'geoeconomic position' and the Saint Petersburg agglomeration, Balt. Reg., no. 1, p. 79—92. DOI: 10.5922/2079-8555-2014-1-7.
- 17. Zhabrev, A. A., Mezhevich, N. M. 2010, Geojekonomicheskoe polozhenie Sankt-Peterburga i Leningradskoj oblasti v konce XX nachale XXI veka: ot periferijnoj bar'ernosti k subcentral'noj kontaktnosti [Geo-economic position of St. Petersburg and Leningrad region at the end of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century: from periphery barriers to subcentral contacts], *Vestnik Rossijskoj akademii estestvennyh nauk* [Bulletin of the Russian Academy of Natural Sciences], Saint Petersburg, no 4, p. 40—42.
- 18. Zverev, Yu. M. 2010, Mirovoj opyt «zon pererabotki importa» i Kaliningradskaja osobaja jekonomicheskaja zona [World experience of "import processing zones" and the Kaliningrad special economic zone], *Region sotrudnichestva* [Region cooperation], no. 1, p.13—32.
- 19. Fedorov, G. M., Korneevets, V. S. 2009, Trans-Border Regions in the System of the Regional Hierarchy: the Systemic Approach, Balt. Reg., no. 2, p. 26—33. DOI: 10.5922/2079-8555-2009-2-3.
- 20. Competitive Position of the Baltic States Ports, 2011, *KPMG Baltics SIA*, November, available at: www.kpmg.com/EE/et/IssuesAndInsights/ArticlesPublications (accessed 07.06.2015).

## About the authors

Dr Stanislav Lachininskii, Associate Professor, the Department of Eco-nomic and Social Geography, Saint Petersburg State University, Russia. E-mail: lachininsky@gmail.com

*Dr Inna Semenova*, Associate Professor, the Department of Economic and Social Geography, Saint Petersburg State University, Russia.

E-mail: inessa.semenova@gmail.com