

CHINESE TRANSPORT INITIATIVES AND EASTERN BALTIC PORTS EXPECTATIONS

Efimova Elena

St. Petersburg State University, 7/9 Universitetskaya nab., St. Petersburg, 199034 Russia

Kuznetsova Natalia

St. Petersburg State University, 7/9 Universitetskaya nab., St. Petersburg, 199034 Russia

Stasys Rimantas

Klaipeda University, Herkaus Manto str. 84, Klaipėda, 92294 Lithuania

Abstract

World economic crises, anti-Russian sanctions and counter sanctions destabilized handled cargo volumes in the Eastern Baltic ports. Seeking new cargo resources became an important problem for the port authorities. Asian direction, Chinese in particular, attract an attention of official institutes and business entities that are involved in transportation activities. Chinese-European traffic can be implemented differently: via railway, marine, avia infrastructure. Commodities owners - primary beneficiaries of transport networks - choose routes and logistical technologies to provide shortest, cheapest and fastest delivery of goods. Spatial development and logistics theories demonstrate simple and easy mechanisms of cargo routing traffic. The statistical data analysis permits us to issue the main hypothesis concerning the idea that in spite of the fact that Russia still occupies essential role in East-West transport traffic, one could observe the following phenomena: Baltic states substitute the former Soviet into Chinese traffic and trade flows. The goal of this paper is to identify major motives and triggers of Asian-European cargo traffic planning. To reach the goal we observe the following objectives: compare and analyze international trade flows between different countries (Baltic, Nordic, Russia, Kazakhstan) under consideration, summarize Eastern Baltic Port Authorities (Gdansk, Klaipeda, Riga) features, evaluate the political factor influence on trade and transport sector activities.

Keywords: Asian-European cargo traffic, transport, One Belt One Road Initiative, Eastern Baltic ports.

JEL code: F14, F23, L9

Introduction

The reasonability of establishing strategic transport links is primarily determined by the steady and expanding commodities flows. The basis for the transnational transport network development can be formed either by the bilateral trade of neighboring countries, or, more politically and economically perilously, by the international transit.

Modern Baltic States - Russia trade relations are based on the historical and territorial business contacts. Taking into account similar level of national technology development, inter industry commercial transfers can be explained by Heckscher-Ohlin-Samuelson two-factor theoretical model. E. Heckscher and B. Ohlin had shown that inter-regional trade in different countries is caused by different resource abundance and intensity of resources use. The international goods exchange is considered as the result of differences in the endowment of factors (Ohlin 1967). The next step of international trade theory development considers the New Trade Model by P. Krugman who took into account intra-industry commercial relationships between

countries. P. Krugman (1994) observed that countries export those commodities that are redundant in the domestic markets.

S. Brakman et al. (2003), who specializes in the economic geography, substantiates the location of the largest economic and transportation centers of Western Europe. He argued that the mainlines of the commodities road network are located along the optimal (shortest) routes.

Historically the formation of traffic routes was determined by natural way: natural transport routes (land and water roads - rivers, lakes, marine opportunities), cultural and political relationship with national states and inhabitants. Originally inter-firm trade flows were involved into international trade only. Subsequently nowadays, the foreign transactions of transnational corporations (TNC) have become to define the occupancy rates of the linear and nodal elements of transport infrastructure. Under the circumstances priorities of delivery ways criteria selection have changed. Participants of the interregional trade became increasingly interested in reducing the overall transport and logistics costs and minimizing business risks associated with contractual terms compliance. The new goals can be achieved, in particular, by means of institutional cooperation between commercial entities and national governmental institutions providing transportation process and hence explained in the framework of industrial organization theory namely in the specific model of different countries transport system regulation and governance.

Regional integration processes in the transport sphere result transit traffic. Recent experience in trans-border relations shows that efficient cooperation ties bring mutual benefits to all collaborating parties. The experts identify several levels of trans-boundary cooperation, including local contacts on specific issues, the interaction between local and governmental bodies as well as complex network contacts that involve interaction at various levels and in different fields (Shinkovski 2004). Transport and logistics cooperation, in transit issues especially, is an example of cross-border network contacts, where the interests of many political and business actors are intersected.

Many factors influence the transportation and transit system effectiveness due to the institutional, socio-political, ecological, natural and spatial infrastructure involved into the sustainable economic development and a new type of informational-innovation economic growth. The list of the main factors impact includes the internationalization of national economic systems, the willingness of governments and population to participate in internal processes, the coincidence of their political and economic agendas, and the region's territorial location. The climate aspects should be considered in selecting the appropriate mode of cargo transportation. When the key forces and goals are defined, one should observe the region's ability to provide transit traffic (internal factors): the level of transport infrastructure development, ability to provide fast and safe transportation, professional knowledge and skills of local inhabitants in international business and technical supporting, a fair distribution of revenues from transport and transit activities, etc. (Tsvetkov et al., 2014).

Cargo owners and transport companies take into account different circumstances. However, we will focus on numerical indicators.

Methodology

Basic method in quantitative analysis of foreign trade is statistical data mining and calculation. This method represents visually a current situation in industrial-trade-transport-transit chains and defines the further prospects of these chains formation and functioning. The results and comparison of primary data allow to find strengths and weaknesses of Russia – Baltic States transport and transiting cooperation as well as advantages and priorities of East-West (China-

Russia-Kazakhstan - Baltic and Nordic states) transport traffic adequately reflected in trade flows (Vorontsovskiy and Efimova, 2016).

Dynamics in transport and logistics relations and business contacts allows us to identify the factors that shape national transit policy but also to submit its short-term forecasts. To clarify the problem, we use statistical ten-year series for characterizing separate sectors of the Baltic States transport markets functioning.

Empirical studies

The current legislation of the Russian Federation motivates ship owners and cargo- owners to use the service capacities of Russian ports. Some Russian companies have found their handle niche in domestic ports. Other business entities, focusing on their assets in Baltic States ports, do not change its time-tested freight routes. To support national ports and guarantee solid cargo traffic Baltic States' officials and business actors implement a strategy for attracting Asian transit. Ambitious project "One Belt, One Road Initiative" is considered as the most promising for the survival, further sustainable development and functioning of Baltic States' port infrastructure. The task of empirical research is to assess the potential opportunities and infrastructure of the Baltic States ports to find their highly competitive regional segment of international traffic.

From the objective economic interest's point of view, Russia could be considered as the most ambitious trade partner for the Baltic States compared to China. Foreign trade statistics revealed the fact (table 1).

Table 1. Foreign trade of Baltic States with Russia and China, 2016, %

	national import from Russia/ national import from China	national export to Russia / national export to China
Latvia	456%	260%
Lithuania	194%	250%
Estonia	212%	288%

Source: authors' calculations from "Trade statistics for international business development"
http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|643|||TOTAL||2|1|1|2|2|1|2|1|1
 (Accessed: 02.10.2017)

Nowadays Kazakhstan is becoming in focus of Baltic States business entities interests. Hence we included this country in our research to understand its role in Baltic Sea region states' foreign trade in comparison with Russia. The countries' dynamics of international trade flows in the study region are presented below (see Table 2).

Table 2. Export and import of Baltic States (mln. US\$)

	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
	Lithuania's import					Lithuania's export				
China	682	751	884	806	784	86	117	135	113	136
Russia	10401	9784	7621	4597	3958	5598	6467	6755	3479	3374
Kazakhstan	164	200	717	318	371	444	586	545	430	317
	Latvia's import					Latvia's export				
China	447	446	468	461	444	60	111	140	120	130
Russia	1513	1405	1356	1192	1051	1446	1551	1457	927	871
Kazakhstan	84	52	43	128	8	60	80	64	47	43
	Estonia's import					Estonia's export				
China	1413	1466	1506	1262	1262	138	157	204	171	191
Russia	2330	1873	2161	1544	1150	3180	3274	2473	1346	1302
Kazakhstan	143	70	98	61	48	170	170	138	47	38

Source: Trade statistics for international business development

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|440|||TOTAL||2|1|1|2|1|2|1|1

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|428|||TOTAL||2|1|1|2|2|1|2|1|1

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|233|||TOTAL||2|1|1|2|2|1|2|1|1

(Accessed: 02.10.2017)

Comparative statistical analysis of Poland, Sweden and Finland export-import flows clarifies the shift of leading trade partner. Polands' statistical data proves leading import trade partner from Russia to China (Table 3).

Table 3. Poland's import and export (mln. US\$)

	Poland's import					Poland's export				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
China	17258	19301	22993	22380	23448	1749	2120	2251	2017	1911
Russia	27956	25261	23406	14359	11537	9898	10805	9408	5707	5787
Kazakhstan	393	590	1719	948	538	568	597	571	402	326

Source: Trade statistics for international business development

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|616|||TOTAL||2|1|1|1|2|1|2|1|1

(Accessed: 02.10.2017)

Swedish data shows (Table 4) the same as Poland's shift leading import trade partner from Russia to China. In case of Swedish export China was and still is the important trade partner.

Table 4. Sweden's import and export (mln. US\$)

	Sweden's import					Sweden's export				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
China	6621	6720	7292	6987	6512	5498	6004	5771	5321	5336
Russia	8904	7051	7938	4521	3660	3365	3531	3145	1702	1659
Kazakhstan	16	17	16	7	15	175	148	92	82	147

Source: Trade statistics for international business development

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|752|||TOTAL||2|1|1|2|2|1|2|1|1

(Accessed: 02.10.2017)

In spite of the general decrease of foreign trade volumes Russia remains the essential trade partner of Finland (Table 5).

Table 5. Finland’s import and export (mln. US\$)

	Finland’s import					Finland’s export				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
China	3384	2329	2458	2157	2123	3186	3495	3205	2666	2850
Russia	11737	12324	10016	5740	6083	7057	6871	5930	3350	3152
Kazakhstan	421	633	689	221	146	209	196	215	129	117

Source: Trade statistics for international business development

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|246|||TOTAL||2|1|1|2|2|1|2|1|1

Thus, nowadays Poland and Sweden are much more involved into the Chinese trade flows. Cargo flows to Sweden seems to be perspective from the point of view of transit. Depending on the location of Scandinavian business entities the ports of Gdansk, Klaipeda, and Riga provide the shortest route for Asian commodities. Finland-China foreign trade demonstrated stable volumes in 2012-2016. Main lines of the Russian Rail Network can be used for the optimal delivery schemes.

Sweden is the most attractive Chinese trade partner in Nordic region. Decreasing Finland’s import from China is explained by the reorganization of Nokia OYJ in particular. Nowadays the largest Finnish company is in UNCTAD TNC prestige rating (78th position according to the World Investment Report-2017). Thus, growth of China-Finland trade flows can be expected.

Chinese-Nordic trade flows for the last five years are shown in Table 6.

Table 6. China – Nordics bilateral trade (mln. US\$)

	China’s import					China’s export				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Sweden	6923	6987	6792	6417	6158	6416	6799	7168	7099	6310
Denmark	2904	3376	4057	4095	4238	6541	5711	6548	6151	5404
Finland	3833	3906	4051	3485	3455	7441	5832	5099	3541	2875
Norway	3068	3468	4469	4146	3231	3020	2737	2731	2857	2600

Source: Trade statistics for international business development

http://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1|156|||TOTAL||2|1|1|1|2|1|2|1|1
(Accessed: 02.10.2017)

The dynamics of Chinese-Nordic trade is illustrated by Figures 1a-1b

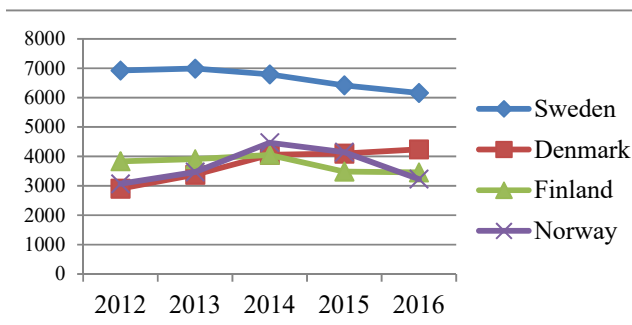


Figure 1a China’s import

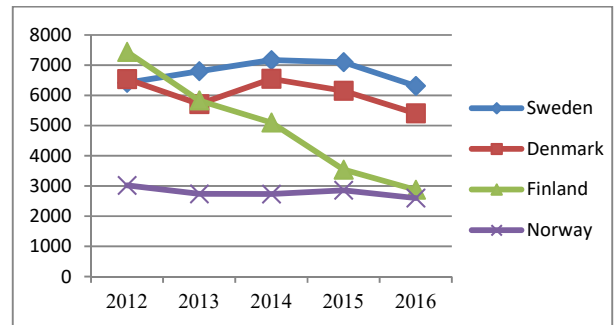


Figure 1b China’s export

The charts show that the economic crisis has had a significant impact on this trade relationship, except Chinese export to Finland. Stable commodities flows need an adequate infrastructure. As we noted above, the main flow of goods is expected in the ports of Baltic states,

namely Gdansk, Klaipeda and Riga. Let's consider the basic capacities of these ports and its future possibilities.

Facts data analysis

Ports' facilities to attract Asian cargoes are considered from two points of view: its geographical location and logistical capacities. According to these criteria three Baltic Sea ports can compete for large-scale traffic flows from Asia.

Port of Gdansk

The technical possibilities of direct sea links with Asian ports lead to the development of DCT. The statistics of container handling (table 7) demonstrates rapid growth and positive prospects.

Table 7. Container handling in DCT Gdansk, 2006-2017

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TEU	78364	96873	185661	240623	511876	685643	928905	1177623	1212054	1091202	1299373
tonnes	753685	840202	1361693	2321910	4947223	6100512	7629909	9745259	10366114	10706301	13398464

Source: Port of Gdansk official web-site <http://www.portgdansk.pl/about-port/cargo-statistics> (Accessed: 18.11.2017)

The Port Authorities make smart business policy and increase cooperation with the city government. As a result E class and Triple-E class container ships started to call at the Port of Gdansk in 2011 and 2013 respectively. Two shipping alliances¹, and four shipping lines² replenished the list of shipping companies in DCT Gdansk in 2015. Construction of a new terminal aimed at doubling the annual cargo handling capacity of the DCT to 3 million TEU was began in January 2015. As a result, container "buffer" was estimated to be 1,700,627 TEU in 2016. In October 2016, Deepwater Container Terminal (DCT) Gdansk became the largest container terminal in the Baltic.

Port of Klaipeda

Authorities of the Port of Klaipeda give statistical data about container turnover of the Eastern coast of the Baltic sea states' ports (table 8).

Table 8. Container turnover in the ports of the Eastern coast of the Baltic sea, TEU

Port	Container turnover			
	2013	2014	2015	2016
St. Petersburg	2,514,440	2,374,876	1,715,139	1,745,182
Klaipeda	402,747	450,428	392,674	443,312
Riga	381,099	387,603	355,241	385,937
Tallinn	253,627	260,293	208,784	202,327
Kaliningrad	322,624	325,189	179,378	189,180
Ust' Luga	64,000	106,757	89,820	83,934
Liepaja	4,523	3,615	3,669	2,312

Source: Review of Cargo Handling in Klaipeda Seaport, at Butingės Terminal and Other Eastern Coast Baltic Seaports Port of Klaipeda official web-site www.portofklaipeda (Accessed: 18.11.2017)

¹ 2M (Maersk Line and MSC) and G6 (APL, Hapag-Lloyd, HMM, MOL, NYK and OOCL)

² UASC, Teamlines, Hamburg Sud and DAL

Geographical location of Klaipeda ensures the shortest way of cargo delivery from China to Sweden, southern Norway and Denmark. It is the primary advantage of the port that attracts cargo owners to handle commodities in Klaipeda.

The possibilities of the Port of Klaipeda spatial expanding are limited. New avant-port is under construction. The relocation of freight terminals from old harbor to the alluvial territories is planned. But the Council of Klaipeda has not finally approved the General plan of the city development. Thus, application to the EU for funding is now pointless.

In case of excess demand over supply in transshipment facilities, a part of the cargo can be transferred to nearby ports. Leading shipping companies calling at the port of Klaipeda go to the port of Gdansk as well. Thus, selection of the shipping company is not decisive factor in routing procedure of consignors. The main criteria are supposed to be the own assets in the port. We could observe at least two positive cases of the foreign direct investment (FDI) in the port. Port operator "China Merchants" proposed to build a specialized container port in Klaipeda. It would be a guarantee of Chinese goods transshipment via the port. JSC "Belaruskali" owns by 30% terminal bulk cargo assets. Belarusian company is the main shareholder of the Lithuanian JSC "Fertimara" that is engaged in cargo transportation by sea, ship brokerage and chartering, and provides freight forwarding services. The company also offers customs brokerage and warehouse services as well as cargo handling (Fertimara official web-site).

Port of Klaipeda development 'pro' argument is international cargo liner trains. Railway routes connect the port of Klaipeda with Lithuanian regions, post-Soviet countries and China. We note that "Merkurijus" shuttle links two neighbor ports: Klaipeda and Kaliningrad.

Free Port of Riga

Free Port of Riga may be useful for traffic to Northern Scandinavian territories. Riga is the nearest transshipment port for cargo delivery to Stockholm, Oslo, Northern Sweden and Norway.

The administration of Free Port is interested in joining the project "One Belt, One Road". Chinese consignors consider the port Authorities as a serious player. Latvia borders Russia, and it has reliable transport infrastructure developed in the Soviet period. That is why the freight train linking Riga and Yiwu (Eastern China) is already running.

The positive argument 'pro' transit attraction is implementation of environmental requirements. Modern logistic and handling infrastructure on Krievu Island will result the pollution reduction in the city historic centre because of the cargo terminals transfer. The project includes construction of four water berths with depth of 15.5 m with the opportunity of further deepening to 17 m. Thus, the port of Riga in future can become deeper port in comparison with Klaipeda and Gdansk harbors.

Discussion

The research is based on official statistical data and facts. Nevertheless the main issues lie in a political dimension. Policy makers generate different scenarios of Asian cargo flows route depending on official and business actors' behavior. But it is difficult to predict the balance of powers in the long-run perspective.

The basic determinant of cargo flows' distribution is competition. It includes not only geographical location and technical facilities of the ports and territories but other factors: endowment, motivation of powerful external actors. In the framework of "One Belt, One Route" initiative competition is realized in different forms, links and directions. In the first turn, one could observe severe competition between ports of Baltic States and Poland. It is least probable that Russian Baltic ports, except Kaliningrad, will participate in the distribution of Asian cargo flows.

From one hand, rivalry for FDI can result in selling port assets to transnational corporations and strengthening foreign actors' influence on the transit and logistics business. On the other hand, the presence of direct investment in port assets is a guarantee of loading port facilities with goods of the shareholders owners.

National governments' and port authorities' position is important as well. Estonian officials did not participate in large-scale forum of "One Belt, One Road Initiative" held in Beijing in May 2017 due to a small proportion of Estonia in Chinese transit traffic. Moreover, the most part of investment projects in the country are frozen. However, even under the circumstances economic and commercial factors will play a leading role.

Conclusion

The strategic goal of the Baltic States and Poland ports is defined by their niche in international traffic. Port of Gdansk has the best technical opportunities in Asian cargo flows attracting. But its geographical location is worse than the port of Klaipeda. The weak position of the port of Kaliningrad is determined by the necessity of double customs procedures and special railway tariffs policy.

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