

## Empirical Paper

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# Are Eastern Baltic Ports the drivers of Eurasian trade?

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**Abstract:** Since “Belt and Road initiative” (BRI) has been launched, the major volume of academic studies focus on the consideration of Eurasian land and maritime transport routes. Experts on Chinese foreign policy and geopolitical strategy emphasize possible positive and negative aspects of the initiative for the states involved. The business and political circles from Eastern Baltic Sea region are looking for possible ways to attract cargo to its ports. Yet, the possible transformations of Chinese foreign trade flows in the context of BRI are now under academic consideration. We focus on the evaluation of ports’ possibilities to handle Chinese cargo. The key issues of our study include the choice of cargo transportation routes and opportunities to attract Chinese investment to expand port and logistics infrastructure. The methodology of the research is based on statistical data analysis for the further comparison of transport routes. Our empirical results demonstrate that Eastern Baltic Sea ports can attract little part of Chinese trade flows.

**Keywords:** Eastern Baltic Seaports, Eurasian trade, China’s Belt and Road Initiative, cargo transport, regional economic development

**JEL Classification:** F02, F17, R40, R41, R48, R58

## 1 Introduction

According to the official outline, Belt and Road initiative (BRI) aims to “promote the connectivity of Asian, European and African continents and their adjacent seas, establish and strengthen partnerships among the countries along the Belt and Road, set up all-dimensional, multi-tiered and composite connectivity networks, and realize diversified, independent, balanced and sustainable development in these countries.” [Official website of Belt and Road Initiative]. Thus, the initial idea of BRI was to cooperate and build partnership with China in the field of creation, modification, and unification of domestic infrastructure and production base. Initially, China helped developing and underdeveloped countries to overcome poverty by means of structural support of selected sectors.

Currently, the Initiative, faced with a number of problems and increasing systemic opposition from geopolitical competitors, is changing and evolving. BRI’s current goals are to find new markets abroad, export of excess capacity, increased use of the yuan, and promoting the growth of Chinese influence in the world, which once again confirms the thesis on the geopolitical scale of the project.

BRI regions are Eastern, Southeast, Central and West Asia, North Africa, and Eastern Europe (more than 60 countries of the world). That is why this initiative has risen into a global driver toward building a new geopolitical model of the world. Such a geographical scope is understandable. China needs stable

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partners. It also needs stable suppliers of resources and markets. The markets of developed countries are more attractive to China. However, their development is possible only after preliminary preparation. The wider Afro-Eurasia space was chosen as the testing ground. The initial task of the Xi Jinping government was to help developing countries “to become more competitive in respect of international trade, they must first develop an internal development model that allows them to materially maximize the potential of their own national characteristics and national resources.”

For these purposes, hundreds of billions of dollars are allocated to developing countries by Chinese financial institutions in the form of aid package, good will investment, open credit lines, and bespoke loans. And it is much better than cash injections, which are used by the USA in the framework of its neoliberal developmental model. The US model effectively seeks to secure geopolitical loyalty and future trade deals through cash incentives. By contrast, China imperceptibly enters into the composition of infrastructure facilities, first as an investor and partner, then as an owner, thereby ensuring for itself the guarantees of their continued availability. The new term “debt trap” is actively used in business and among policymakers to denote the results of Chinese support for individual transport and logistics facilities.

The Memorandum of Understanding (MoU) with China was signed by many countries of the Eurasian continent, in particular, Russia, Kazakhstan, and Belarus. There is an interesting list of European countries that have already signed a Memorandum of Understanding with China: Croatia (the deep-water port of Koper), the Czech Republic, Hungary, Greece, Malta, Poland, Portugal, and Italy. It should be pointed out that the Baltic countries did not sign the MoU.

For Russia, Poland is the most interesting, first of all in terms of the prospects for eliminating the restrictions of the Polish railway infrastructure on the Europe–China transit route (not only the restrictions of the railway near the Brest-Malashevich border crossing but also the Polish railway infrastructure in whole). Russian experts believe that Polish infrastructure restrictions create “windows of opportunities” not only for the ports of the Baltic countries but also for the St. Petersburg and the Leningrad regions.

In 2018, Malaysia, Myanmar, Pakistan, Bangladesh, and some other countries refused (or reduced their participation in the projects of “One Belt, One Road”). The actual seizure of Sri Lanka’s Hambantota port by China and the fear of “debt pit diplomacy” further weakened the credibility of this project. Consequently, many Asian countries began to doubt Beijing’s mutually beneficial promises win–win cooperation.

In 2019, China’s interest in the economies of the EU member states was increased. The official visit of Xi Jinping to Europe proved to be productive. Political leaders of the European Union assess the situation objectively.

The EU’s leaders emphasize that the balance of challenges and opportunities China presents has shifted. Jyrki Katainen, Vice-President responsible for jobs, growth, investment and competitiveness, believes that [Commission reviews relations with China, 2019]

*“EU and China are strategic economic partners as well as competitors. Our economic relationship can be hugely mutually beneficial if competition is fair and trade and investment relations are reciprocal. With this Communication we make concrete proposals on how the EU can act to strengthen its competitiveness, ensure more reciprocity and level playing field, and protect its market economy from possible distortions.”*

China’s role in the EU economy and policy is ambiguous. On the one hand, China is a cooperation partner. Therefore, the EU needs to find a balance of interests with China. On the other hand, China is an economic competitor in pursuit of technological leadership and a systemic rival promoting alternative models of governance. According to the last Joint Communication of European Commission, the EU pursues three objectives [Commission reviews relations with China, 2019]:

- The EU should deepen its engagement with China to promote common interests at global level.
- The EU should robustly seek more balanced and reciprocal conditions governing the economic relationship.
- Finally, in order to maintain its prosperity, values, and social model over the long term, there are areas where the EU itself needs to adapt to changing economic realities and strengthening its own domestic policies and industrial base.

The EU has to use different policy areas and sectors to exert more leverage for its objectives.

The example of Italy shows that the history of the weak is not an example to be followed by the strong. Italy has become the richest country in the Chinese initiative. Many EU countries, in particular Germany and France, are still skeptical of this Chinese initiative. But economists point to the successful operation of the Greek port of Piraeus, the controlling stake of which belongs to the Chinese state company COSCO.

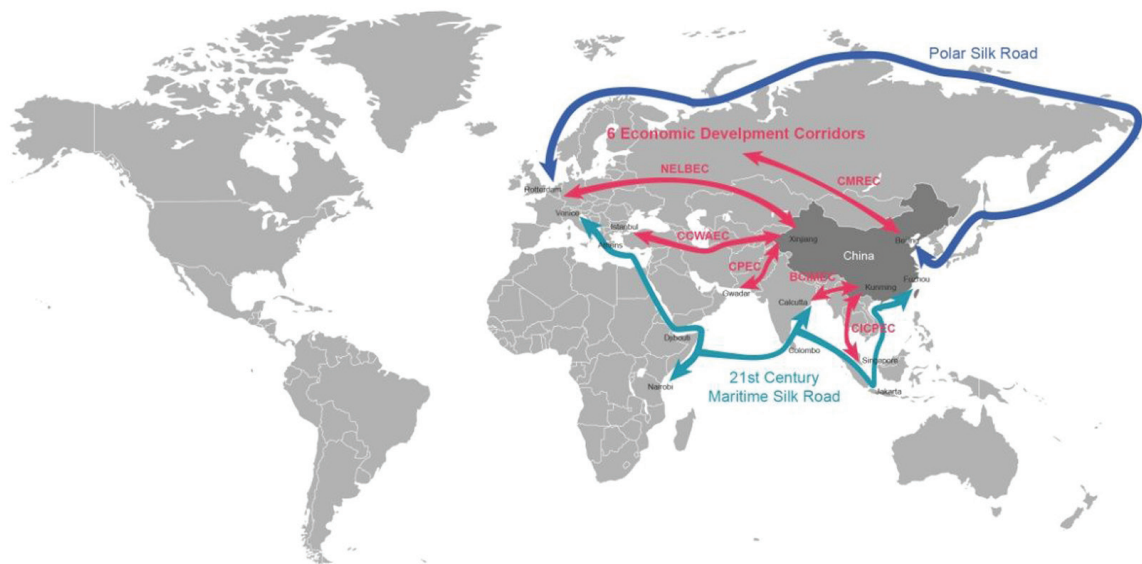
The Italian government hopes that the Italian ports of Trieste and Genoa will become similar points of entry for Chinese goods in Europe. The parties plan to cooperate for the development of roads and railways, bridges, civil aviation, ports, and the energy sector. Italy's cooperation with China is a matter of concern for the USA and the EU, since participation in the One Belt, One Road project gives China access to the infrastructure sectors of the G7 country (telecommunications and ports).

Within the framework of the transport and logical section of the project, the creation of three trans-Eurasian economic corridors is considered: northern (China – Central Asia – Russia – Europe), central (China – Central and Western Asia – Persian Gulf and Mediterranean Sea), and southern (China – Southeast Asia – South Asia – Indian Ocean). As a possible further expansion of the geography of the routes, the Northern Sea Route is also considered (Figure 1). It should be pointed out that the official position of China on the passage of routes is not made public. Therefore, in our study, we rely on expert forecasts and evaluate existing transport corridors.

Under these conditions, countries that are in the BRI zone are trying to use new opportunities regardless of whether their governments have signed the MoU with China. The Baltic States are no exception. The partial loss of Russian transit cargo is forcing them to look for new sustainable goods flows, in particular from China and other Asian countries. On the other hand, the fear of getting into debt trap does not allow them to come closer to China by signing an agreement. The governments of the Baltic countries view ports as national strategic assets. The transfer of control over ports is out of the question. Russia adheres to the same position.

The study investigates whether China's trade flows affect the activities of the ports of the Eastern Baltic and vice versa. The primary goal of the research is to identify major routes of Asian–European cargo traffic in Eastern Baltic region.

The article is structured as follows. Section 2 depicts the theoretical issues of BRI. Section 3 deals with the methodological background of the analysis. Section 4 elaborates on the Eurasian trade performance related to the Eastern Baltic Sea region. Section 5 presents a summary of the key findings and the resulting conclusions.



**Figure 1.** The Belt and Road Initiative's transport routes.  
**Source:** Official website of Belt and Road Initiative.

## 2 Literature review

Started in 2013, the project “Belt and Road Initiative (BRI)” became an actual issue for scientific discussion. The most publications do not focus on transport and logistics issues (Table 1). General and political cases were under the consideration.

**Table 1.** Number of papers on the BRI in China's CSSCI journals

Keywords		Number of papers					
		2012	2013	2014	2015	2016	Sum
Silk Road Economic Belt (SREB)		1	8	73	167	102	351
Maritime Silk Road (MSR)		1	3	22	76	46	148
Belt Road Initiative (BRI)		–	–	11	397	350	758
Sum		2	11	106	640	498	1,257
Transport	SREB	1	–	7	15	11	34
	MSR	–	–	1	2	2	5
	BRI	–	–	–	11	14	25
Sum		1	0	8	28	27	64
Logistics	SREB	–	–	1	4	7	12
	MSR	–	–	–	1	–	1
	BRI	–	–	–	7	2	9
Sum		0	0	1	12	9	22

**Source:** Chinese Social Science Citation Index (CSSI) (2017) [Lee et al., 2018, p. 291].

Despite the worldwide interest in the Initiative, the most of the academic literature on the BRI have been published in Chinese. However, some papers are available in English in special issues of leading international journals (Table 2).

**Table 2.** Number of papers on the BRI in SSCI/SCI/SCIE journals

Keywords		Number of papers						
		2012	2013	2014	2015	2016	2017	Sum
BRI		–	–	–	3	18	4	25
Transport and logistics	BRI	–	–	–	2	4	2	8

**Source:** Taylor and Francis Online; Ingenta; Elsevier; ScienceDirect; Emerald Insight; Wiley Online Library; Web of Science [2017] [Lee et al., 2018, p. 292].

The major economic-related topics for the discussion are as follows:

1. Business components of BRI include industry, investment, international trade, and cross-border network [Chen and Zhang, 2015; Georgiev, 2015; Tan and Zhou, 2015; Fallon, 2015; Blanchard, 2016; Chen and Yang, 2017; Palit, 2017];
2. Infrastructural issues include shipping, port competition, port capacity [Chang and Lee, 2007; Lee et al., 2011; Chen et al, 2013; Zhang and Lam, 2013; Lee and Lam, 2017, 2015; Pardali et al, 2016; Palit, 2017]; intermodal connectivity, routing, maritime, and rail network [Lee and Lee, 2015; Brewster, 2017; Zhang et al, 2019];
3. European-Chinese cooperation and EU's expectations [Dumitrescu, 2015; Kee, 2015].

The failed experience of the ports of Sri Lanka was considered by Ruan et al. [2019]. They demonstrated that major Indian ports have increased cargo turnover and number of vessel calls. The growing BRI-centric land-based economic corridors generate a large volume of cargos from hinterlands up to China. South and East Indian coastal ports use the ports of Sri Lanka for transshipment.

The researchers believe that increased capital flows from China will result in insubstantial development of present maritime and land infrastructure in Sri Lanka. From the perspectives of the Chinese government and business, the transshipment through Sri Lankan ports provides China with more logistics options for reaching European and African markets. However, the modernization of the ports presents not only opportunities but also challenges for Sri Lanka. The challenges caused by the competition from alternative BRI routes and the threat of incorporating by Chinese business as a result of falling into the “debt trap.”

Lee et al. [2018] overview key structural elements of BRI, focusing on transport corridors, city clusters, dry ports, infrastructure, zoning, and area development. They identify the expected impacts of the BRI on trade and implications on structural changes in transportation systems, port networks, and international logistics. The researches analyze the updated BRI's six main corridors with connecting cities and routes. They believe that two routes (China, Mongolia, and Russia Economic Corridor, and Beijing–Moscow Eurasian high-speed transport corridor) will connect China with Russia by land [Lee et al., 2018, p. 286]. China, Mongolia, and Russia Economic Corridor, or “Heilongjiang Silk Road Belt”, is aimed at facilitating international trade in Northeast Asia and providing access to the Pacific Ocean [Greater Tumen Initiative].

Possible BRI alternative, the Northern Sea Route, is the shortest maritime passage between Eastern Asia and Western Europe. Russian Polar regions are rich in natural resources. That is why Arctic traffic attracts the attention of academicians, businessmen, and state institutions. Erokhin and Tianming [2018] focus on the international cooperation on exploration of Arctic sea routes and interests of China. They believe that the Northern Sea Route has certain advantages over other available Arctic shipping corridors. Fanqi and Bennett [2019] investigate bilateral cooperation in transport and energy infrastructure sectors. They evaluate the impacts of the project type, location, and scale of infrastructure diplomacy on the design, construction, and exploitation of different objects, in Arctic zone, in particular. Official policy statements also highlight the importance of cross-country cooperation in infrastructure sectors. Thus, in 2019, Russian President V. Putin proposed to unite the Russian Northern Sea Route and the Chinese MSR.

European researchers take a more cautious position about BRI. Thus, Ghiasy et al. [2018] believe that BRI objectives serve China's core interests mainly, but some of these overlap with the European Maritime Security Strategy. Security cooperation within the BRI framework may be limited for now. This has to do, in particular, with the security consequences of the BRI, and some of them are the result of Chinese approaches and the product of stakeholder receptiveness [Ghiasy et al., 2018, p. 33].

There is a short list of academic studies devoted to the features of the Eastern Baltic ports and their transit capacities. The study of Canfield [1993] employs the “shift-share” technique to evaluate the seaports in Baltic States in terms of their competitiveness. Disruption of long-standing trade dependencies is compounded by Russia's policy decision to reroute foreign trade cargoes away from Baltic State ports to Russian ones. Shifting traditional hinterlands for Baltic State ports will impact on their ability to invest in essential modernization and expansion projects. Back in 1993, Canfield expected that potential strategy for capturing a niche and reclaiming the role of the Eurasian trade is participation in the Trans-Siberian Railway “land-bridge” business model. Klopott [2013] overviews the Polish port industry with the focus on environmental issues.

## 3 Methodology

### 3.1 Data and methods

The main databases used in our study are International Trade Center statistics, official websites of the ports, the Port Administrations and transport sections of the state statistical services of Estonia and Latvia. The poor availability of official data on the cargo turnover of some Eastern Baltic ports leads to decreasing research period.



In view of the short period of existence of the initiative (6 years), we cannot apply the methods of correlation and econometric analysis. Therefore, mining and calculating statistical data for the further observation and comparison are used as the main method of quantitative analysis.

Using the method of statistical analysis, we examine visually a current situation in industrial-trade-transport-transit chains and define 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 not only to identify the factors that shape national transit policy but also to submit its short-term forecasts. To clarify the problem, we use statistical series for characterizing separate sectors of the Baltic States transport markets functioning.

Comparing routes in this study, preference is given to those that have the smallest length and minimum number of transshipments from one mode of transport to another. We proceed from the fact that overcoming the additional distance and changing the transport mode lead to an increase in the transportation time and its rise in price.

### 3.2 Case description

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 (Figure 2) can compete for large-scale traffic flows from Asia.



**Figure 2.** Major ports of Baltic States.

**Source:** Baltic States and neighboring territories.

### 3.3 Port of Klaipeda

The authorities of the Port of Klaipeda provide statistical data about container turnover of the Eastern coast of the Baltic Sea states' ports (Table 3).

**Table 3.** Container turnover in the ports of the Eastern coast of the Baltic Sea, TEU

Port	Container turnover					
	2013	2014	2015	2016	2017	2018
St. Petersburg	2,514,440	2,374,876	1,715,139	1,745,182	1,920,650	2,130,721
Klaipeda	402,747	450,428	392,674	443,312	472,000	750,000
Riga	381,099	387,603	355,241	385,937	445,984	469,342
Tallinn	253,627	260,293	208,784	202,327	230,409	241,001
Kaliningrad	322,624	325,189	179,378	189,180	239,198	276,429
Ust-Luga	64,000	106,757	89,820	83,934	75,262	69,131
Liepaja	4,523	3,615	3,669	2,312	3,829	2,991

**Source:** Federal State Budget Agency "Administration of Seaports of Baltic Sea," Statistics Estonia, Central Statistical Bureau of Latvia, Official site of Free Port of Riga Official site of Port of Klaipeda, Official site of Port of Liepaja.

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 a 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 through the port. JSC "Belaruskali" owns by 30% of 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 website].

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.

### 3.4 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 a 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 logistics and loading and unloading infrastructure on the island of Krievu were built to reduce pollution in the historic center of the city due to the transfer of cargo terminals. 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.

### 3.5 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 4) shows rapid growth and positive prospects.

**Table 4.** Container handling in DCT Gdansk, 2013–2018

	2013	2014	2015	2016	2017	2018
TEU	1,177,623	1,212,054	1,091,202	1,299,373	1,580,508	1,948,974
Tones	9,745,259	10,366,114	10,706,301	13,398,464	16,412,887	19,850,762

**Source:** Official website of Port of Gdansk.

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 alliances<sup>1</sup> and four shipping lines<sup>2</sup> 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.

## 4 Prospects of Eastern Baltic ports in Eurasian trade: empirical studies

The Baltic States, interested in loading their seaports, are forced to build business relations with representatives of the business of large Eurasian countries, primarily Russia and China. It is a mistake to plan the possible volumes of international transit, without taking into account the mutual interest of countries in economic cooperation. It is advisable to create additional transport infrastructure facilities if there are prospects for creating companies for industrial or logistic processing of transit cargo. For the time being, the Baltic countries are attracting transit cargo instead of Russian export and import leaving for domestic ports.

Despite difficult political relations, the volume of foreign trade with Russia substantially exceeds similar figures for China. Now Kazakhstan is considered as a promising partner. This Central Asian country is strengthening its presence in the region, especially in Lithuania. Since 2013, Lithuanian exports to Kazakhstan have exceeded exports to China and imports from Kazakhstan, respectively, since 2017 (Table 5).

The smallest volumes of foreign trade of the Russian Federation with the Baltic countries are in 2016. We attribute this not to the consequences of the imposed sanctions, but to the general deterioration of the economic situation in the world. The foreign trade turnover of Estonia, Latvia, and Lithuania with China and Kazakhstan in the period under review reached a minimum also in 2016, although no EU sanctions were imposed on these countries.

The significance of trade relations with Russia is confirmed by the results of calculating the ratios of exports and imports of the Baltic countries, respectively, with Russia and China (Table 6).

<sup>1</sup> 2M (Maersk Line and MSC) and G6 (APL, Hapag-Lloyd, HMM, MOL, NYK, and OOCL).

<sup>2</sup> UASC, Teamlines, Hamburg Sud, and DAL.



**Table 5.** Exports and imports of Baltic States (mln. US\$)

	2013	2014	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018
<b>Lithuania's imports</b>							<b>Lithuania's exports</b>					
China	751	884	806	784	929	1,010	117	135	113	136	202	223
Russia	9,784	7,621	4,597	3,958	4,059	5,386	6,467	6,755	3,479	3,374	4,449	4,682
Kazakhstan	200	717	318	318	1,010	1,010	586	545	430	317	473	445
<b>Latvia's imports</b>							<b>Latvia's exports</b>					
China	446	468	461	444	498	581	111	140	120	130	157	177
Russia	1,405	1,356	1,192	1,051	1,181	1,496	1,551	1,457	927	871	1,185	1,338
Kazakhstan	52	43	12	7	8	11	80	64	47	43	41	47
<b>Estonia's imports</b>							<b>Estonia's exports</b>					
China	1,466	1,506	1,262	1,262	1,471	814	157	204	171	191	248	219
Russia	1,873	2,161	1,544	1,150	1,348	1,701	3,274	2,473	1,346	1,302	1,579	1,033
Kazakhstan	70	98	61	48	59	3	170	138	47	38	53	41

**Source:** Trade statistics for international business development.

**Table 6.** Foreign trade of Baltic States with Russia and China: comparative analysis, ratio

	2013	2014	2015	2016	2017	2018
Lithuania's imports	13.03	8.62	5.70	5.05	4.37	5.33
Lithuania's exports	55.27	50.04	30.79	24.81	22.02	21.00
Latvia's imports	3.15	2.90	2.59	2.37	2.37	2.57
Latvia's exports	13.97	10.41	7.73	6.70	7.55	7.56
Estonia's imports	1.28	1.43	1.22	0.91	0.92	2.09
Estonia's exports	20.85	12.12	7.87	6.82	6.37	4.72

**Source:** Authors' own calculations based on Table 1.

The strongest positions of Russia in the period under review are noted in Lithuania. The weakest is noted in Estonia. In all the Baltic countries, a relative decline in bilateral trade with Russia compared with China is noticeable.

For Eurasian cargo flows to Poland, Sweden, Finland, and Norway, the Baltic countries can be considered as transit countries. Comparative statistical analysis of export–import flows in Poland and Sweden showed a replacement for the leader. Russia by 2016 has lost its position. China, on the contrary, strengthens its trade presence in the region. It is difficult to identify permanent trends in this short period (Table 7).

**Table 7.** Poland's import and export (mln. US\$)

<b>Poland's imports</b>						
	2013	2014	2015	2016	2017	2018
China	19,301	22,993	22,380	23,448	26,474	21,197
Russia	25,261	23,406	14,359	11,537	14,761	19,215
Kazakhstan	590	1,719	948	538	921	2,135
<b>Poland's exports</b>						
	2013	2014	2015	2016	2017	2018
China	2,120	2,251	2,017	1,911	2,305	2,488
Russia	10,805	9,408	5,707	5,787	6,947	7,971
Kazakhstan	597	571	402	326	478	518

**Source:** Trade statistics for international business development.

Statistics for Sweden and Finland confirms the presence of intra-industry cooperation between enterprises in China and the Nordic countries. Investments here are an alternative to commodity trading. Swedish data show (Table 8) 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 8.** Sweden's imports and exports (mln. US\$)

	Sweden's imports					
	2013	2014	2015	2016	2017	2018
China	6,720	7,292	6,987	6,512	6,972	9,027
Russia	7,051	7,938	4,521	3,660	4,375	5,511
Kazakhstan	17	16	7	15	13	10

	Sweden's exports					
	2013	2014	2015	2016	2017	2018
China	6,004	5,771	5,321	5,336	6,813	7,710
Russia	3,531	3,145	1,702	1,659	2,136	2,195
Kazakhstan	148	92	82	147	103	90

**Source:** Trade statistics for international business development.

In spite of the general decrease of foreign trade volumes, Russia remains the essential trade partner of Finland (Table 9).

**Table 9.** Finland's imports and exports (mln. US\$)

	Finland's imports					
	2013	2014	2015	2016	2017	2018
China	4,856	4,856	4,856	4,856	4,856	4,856
Russia	13,929	13,929	13,929	13,929	13,929	13,929
Kazakhstan	635	635	635	635	635	635

	Finland's exports					
	2013	2014	2015	2016	2017	2018
China	3,495	3,205	2,666	2,850	3,729	4,022
Russia	7,023	6,069	3,444	3,234	3,796	3,780
Kazakhstan	209	227	141	126	103	122

**Source:** Trade statistics for international business development.

Thus, nowadays, Poland and Sweden are much more involved in the Chinese trade flows. Cargo flows to Sweden seem to be perspective from the transit point of view. 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 list (92nd position according to the World Investment Report – 2017 [The world's top 100, 2018]). Thus, growth of China–Finland trade flows can be expected.

China–Nordic trade flows for the last 5 years are shown in Table 10.

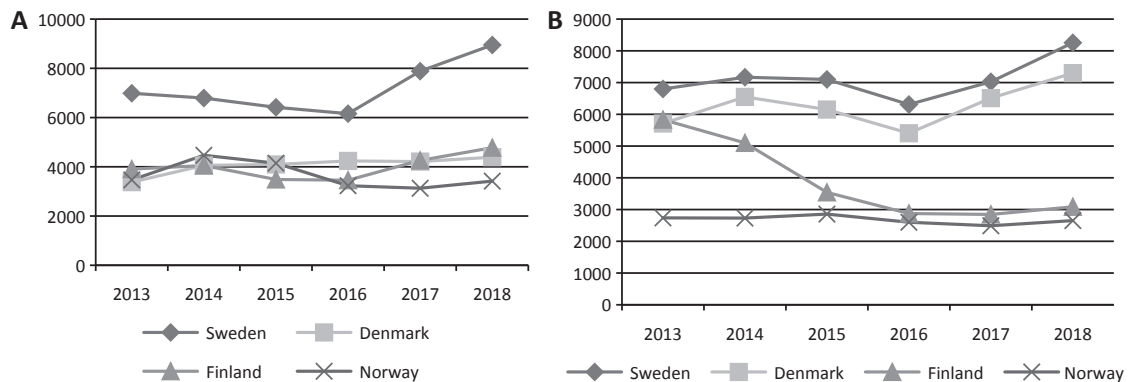
**Table 10.** China–Nordics bilateral trade (mln. US\$)

	China's imports					
	2013	2014	2015	2016	2017	2018
Sweden	6,987	6,792	6,417	6,158	7,884	8,947
Denmark	3,376	4,057	4,095	4,238	4,212	4,389
Finland	3,906	4,051	3,485	3,455	4,259	4,776
Norway	3,468	4,469	4,146	3,231	3,129	3,418

	China's exports					
	2013	2014	2015	2016	2017	2018
Sweden	6,799	7,168	7,099	6,310	7,026	8,254
Denmark	5,711	6,548	6,151	5,404	6,511	7,298
Finland	5,832	5,099	3,541	2,875	2,846	3,086
Norway	2,737	2,731	2,857	2,600	2,489	2,652

**Source:** Trade statistics for international business development.

**Figure 3.** (A) China's imports. (B) China's exports.

The dynamics of China–Nordic trade is illustrated in Figure 3A,B.

The figures show that the economic crisis has had a significant impact on this trade relationship except Chinese export to Denmark and Sweden. Stable commodities flows need an adequate infrastructure. Chinese import from Sweden has been reviving for the past 2 years. Thus, the most promising transit routes for the Asian transit of the Baltic countries are Sweden and Denmark. Stable commodities flows need an adequate infrastructure.

As we noted earlier, the main flow of goods is expected in the ports of Poland and Baltic States, namely Gdansk, Klaipeda, and Riga.

## 5 Key findings

The empirical results demonstrate that the ports can attract little part of Chinese trade flows.

So, the strategic goal of the Baltic States and Poland ports is defined by their niche in international traffic. Port of Gdansk are likely to attract Asian cargo flows by its best technical opportunities. But its geographical location is worse than the port of Klaipeda. The weak position of the Port of Kaliningrad is caused by the double customs procedures and high railway tariffs.

On the basis of the criteria of minimizing transit land route, the port of Klaipeda has the best prospects of handling Chinese goods. Until the completion of the avant-port, transshipment capacity of the port

will be limited. During peak periods, port of Kaliningrad has a chance to handle transit cargo flows in cooperation with port of Klaipeda. The weak position of the Port of Kaliningrad is caused by the double customs procedures and high railway tariffs.

Port of Gdansk are likely to attract Asian cargo flows by its best technical opportunities. But its geographical location is worse than the port of Klaipeda. Ports of Gdansk and Riga are likely to attract cargoes for its further delivering to Western European port, Southern Scandinavia, and Stockholm region, respectively. Further prospects of the port of Gdansk are determined by the capacity of the Polish rail and road transport infrastructure.

Leningrad region, as can be expected, will be used as a transit area for goods delivering to Finland by rail. But in case of political instability, the risks of economic cooperation between giant and small countries increase. So, ports of Saint Petersburg and Leningrad Province become a fallback option for cargo delivery from China to Western Europe.

The administrations of St. Petersburg and the Leningrad Region have no obvious interest in the development of port facilities. Ports are subject to federal ownership. Their activity brings low tax incomes to regional budgets. At the same time, the detrimental consequences of their activities are eliminated at the expense of the funds of St. Petersburg and the Leningrad Region. So, the question about the interest of St. Petersburg Authorities whether or not to handle Chinese goods in the port is still open.

## 6 Concluding remarks

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 constant cargo traffic, Baltic States' officials and business actors implement a strategy for attracting Eurasian transit. Ambitious project "Belt 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.

BRI focuses on the region's larger markets. Ten largest markets of BRI region (India, Russia, Indonesia, Korea, Turkey, Saudi Arabia, Iran, Thailand, Taiwan, and Poland) will account for over half of the region's opportunities. These markets are more open to local and foreign players. Chinese state-owned enterprises have struggled to win large market share in many of these markets. They will need foreign partners, suppliers, or technologies to win on a sustained basis. Rail freight between China and Europe is already growing. Logistics multinationals, such as DHL, and DB Schenker, are major drivers of railway cargo delivering, not least because Germany plays a pivotal role in European in-land hub.

The empirical results demonstrate that the ports can attract little part of Chinese trade flows. The strategic goal of the Baltic States ports is defined by their niches that they occupy in international goods traffic.

Baltic States have small open economies. They cannot expect large commodity flows that China dispatches to giant countries. Moreover, initiative participants of BRI should be aware of the fact that China is seeking benefits primarily for itself. The initiative gives birth to alternative routes that should force different countries to compete with each other for the benefit of China. China is not only a fickle partner, but also a cunning adversary.

The major ports of Baltic States ports have limited capacities to be very attractive for China's cargoes. On the other hand, the ports have capacity to handle a small share of Chinese exports to Europe; specialized in the supplies to Nordic countries primarily. In the current situation, the position of the Port of Gdansk looks more promising.

Our study has a few limitations, which will provide the basis for future research. The article employs simple statistical analysis as a tool in predicting future possible scenarios based on evidence available at present time. On the basis of past trends and current behavior of the port and trading sectors, the intuitive

logic-based outcomes are inferred from nonstatistical evidence and proof. Future research will therefore consider applying more sophisticated statistical techniques to improve the accuracy of scenarios projected for the port network using the trends and patterns.

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