

OPPORTUNITIES TO IMPROVE COMPETITIVENESS FOR LOGISTICS SERVICE PROVIDERS IN THE BALTIC REGION

Normunds KOZLOVSKIS^{✉*}, Zane DRINĶE, Rosita ZVIRGZDIŅA[✉]

*Department of Commerce, Faculty of Business Administration, Turība University,
Graudu street 68, LV 1058 Riga, Latvia*

Received 22 February 2023; accepted 4 April 2023

Abstract. Purpose. The purpose of this paper is to highlight opportunities for logistic service providers Baltic states accordingly to the recent situation in the region. Transit cargo-flows east-west direction rapidly decreases giving potential to develop logistic industry competitiveness. The purpose of the article should give concise information about the content of the core idea of the paper, and present scientific problem and objectives.

Research methodology – scientific literature and public data review. Empirical synthesis of conclusions, suggestions.

Findings. The Baltic states have historically been used as locations for transit operations in Northern Europe, serving cargo in the east-west direction. As the geopolitical situation deteriorates rapidly, the volume of cargo for transit operations also decreases. In this situation, regionally, logistics service operators has to provide optimal conditions for ensuring transit cargo flows.

Research limitations. In order to be able to look at transit flow as closely as possible, the authors focused on the dynamics of cargo turnover in the largest ports of the Baltic states, assuming that the amount of local consumption in them is an insignificant part.

Practical implications. Research data and conclusions further will be used as part of PhD thesis: “Business logistics process model for increasing competitiveness”.

Novelty/value of research. Transit logistics creates significant value in the GDP of Baltic states, hence all events to improve competitiveness of industry are supportive.

Keywords: competitiveness, logistics, supply chain, information technologies, transit cargo flows.

JEL Classification: D30.

Introduction

Competitiveness is core concept of business operations today. In the situation, when markets are global, technologies appear one better than other and information reachable any time and any place, this concept is crucial to ensure the survival of companies in a dynamic market.

Logistics, such as transport and storage, account for 10–15% of the cost of a finished product for European companies.

The quality of transport services has a major impact on people’s quality of life. On average 13.2% of every household’s budget is spent on transport goods and services. Transport also depends heavily on oil re-sources and represents an important source of CO₂ emissions. The strategy outlined in the Transport 2050 Roadmap to a Single Transport Area aims to introduce profound

structural changes to transform the transport sector (European Commission, 2023).

1. Literature review

When looking at the concept of “Competitiveness”, the authors initially wanted to look at two concepts: competition and competitiveness, in order to find out the common and different features.

1.1. Competition

The origins of competition studies can be traced back to the 17th century, when the concept of “competition” first entered the communication of people using the Latin language in order to gain new knowledge about the free market and the processes taking place in it. Even in the

* Corresponding author. E-mail: normunds.kozlovskis@turiba.lv

mid-16th century, the concept of “competitor” was only used in society, the origin of which is linked to France and the origin of the French language, but other studies claim that competitor is a word of Latin origin (Smith et al., 2005, pp. 309–354).

On the other hand, the origin of the concept of “competitiveness” is unanimously associated with the word “rival”, which appeared in the languages in the beginning of 17th century. Several centuries passed before the concept of “competitiveness” appeared. Its origin is associated with a US economist professor Clyde Prestowitz, who wrote a book in 1988 titled “Trading Places: How We Allowed Japan to Take the Lead”, which examined the rise of Japan’s economic power and the impact it had on the United States (Wziątek-Kubiak, 2007).

Many mistakes that companies make when planning their development strategy are based on a poor understanding of competition and its impact. The concept of competition is often defined too narrowly, as if it is possible only between two rivals.

The first step is to fully appreciate the nature of competition and understand the five main forces that determine the existence and nature of competition. According to Porter’s research, they are:

- Bargaining power of buyers.
- Bargaining power of sellers.
- The threat of newcomers.
- Threat of substitutes.
- Intensity of competition (Porter, 2008, p. 15).

Over the years, many scholars have defined competition, but these attempts have led to the conclusion that the definition of competition depends too much on the industry, market or geographical area where it is applied. So competition, like its definitions, changes significantly depending on the external business environment in which it is created and used.

There is named the latest definitions of competition created.

“Competition is a rivalry between sellers to achieve benefits such as increased profits, market share, and sales by varying the elements of the marketing mix: price, product, promotion, and place” (Kotler & Keller, 2016, p. 19).

“Competition refers to the contest among firms for resources and opportunities, including markets, customers, employees, and suppliers” (Eskandari et al., 2020).

“Competition refers to the situation in which two or more parties compete for a limited resource, such as customers, employees, or funding” (Mondal & Mehta, 2020).

In the economic environment, there are several approaches to describing economic competition based on different aspects of business. Competition today is characterized by several basic features. Competition in business always operates in a market environment, is an essential component and method of business and characterized by the economic interaction of business units, mutual relations and rivalry processes.

Competition includes legal norms that ensure limits in the use of competition tools, can be organized at

both micro, macro and mega levels, is an indicator of economic growth, as it presupposes the introduction of innovative products and development strategies in business units.

Competition often occurs between business units that offer similar or complementary products or services, encourages entrepreneurs to examine and develop their competitive advantages, presupposes some kind of mutual influence on competitors to achieve better results and finally allows several entrepreneurs or companies to simultaneously achieve the desired results and achieve success (Melnyk & Yaskal, 2013, p. 10).

Several approaches to creating awareness of competition can also be observed. In scientific works, we can differentiate the behavioral approach, with the most characteristic representatives of which are Smith and Porter, the structural approach with representatives Edzwart, Kornout and Robinson, as well as the functional approach with the best-known representatives Schumpeter and Hayek.

1.2. Competitiveness

In the context of the European integration process, the challenges faced by the member states are related to the achievement of the goals of the Lisbon Treaty and the transformation of the European Union into the most competitive and dynamic economy based on international knowledge. An economy that should ensure sustainable economic growth, create more jobs and build social stability in the long term. It is very important to understand the concept of competitiveness in all its various forms, both at the micro and macro level. How countries, companies and individuals behave in the economic environment determines the ability of economic subjects to succeed (Eiropas savienība, 2007).

The concept of competitiveness is explained as the degree of conformity of the product to the requirements of the selected market according to technical, economic and other indicators; expertise of the company and its management in creating a good sales market for goods and services, solving issues of technology, production, services, personnel, practical skills and knowledge, strategic and calendar planning, as well as ensuring a correct sales policy, good quality of products and services, high level of services etc. (Grēviņa, 2000).

The beginnings of competitiveness historically are closely related to the emergence of commodity production and the involvement of the most skilled craftsmen in unconscious entrepreneurship, if comparing with the modern sense. In essence, competitiveness is a function of competition. This means that competitiveness is revealed with the appearance of competitors and it disappears in all those cases, when, at the relevant place and time, competitors do not prevent a person or company from realizing their intentions to achieve a certain goal (Driņķe, 2019).

In economic analysis, the word competitiveness is often used, which is one of the conditions for economic

development. The issue of competitiveness is essential in both developed and developing countries. Competitiveness is discussed in the context of countries, regions, economic sectors, companies and consumers. Both domestic and international competitiveness are evaluated. The experience of economic development around the world has shown that competitiveness is influenced by many different factors. For a long time, the main factors were investments in capital, attraction of investments and their further investment in economic development and increasing export volumes. However, over time, an understanding emerged that the investment money raised should be invested in the development of competitive and export-capable companies (Kassalis, 2010, p. 10).

Competitiveness as a new direction of research and discussion emerged at the end of the 70s of the 20th century. M. Porter, the founder of the theory of competitiveness, stated that “competitiveness is still a concept that is not well understood, although it is widely recognized”.

Competitiveness in economics and business theory and practice is the ability of a company, industry or country to sell its products, goods or services in the market. Therefore, competitiveness, considering the concept of competition, is one of the most important categories characterizing the market of goods and services (Porter, 2003, p. 34).

A company or a business unit tends to satisfy the needs of consumers and customers as completely as possible. There can be no doubt about that currently. In order to do this, the company must achieve a certain level of competitiveness, a level that is even slightly above the offer of similar products by similar companies. The competitive advantage is provided by accessible and legal methods by increasing the competitiveness of the goods or services offered by the company in the existing market. This can be done by implementing the latest available production methods, innovative raw materials, new and improved distribution and supply chain management processes or operations.

The ability to create, support and develop competitive advantages is characterized by the concept of “competitiveness”, which acquires its meaning only in competitive rivalry. A universal interpretation of the concept of “competitiveness” cannot be accurately crystallized in the scientific works of economic researchers because each of them realizes their own understanding of this category, which is based on the last deep connection of the scientists themselves with the researched aspects. As in many other sciences, in business, the result always depends on the conditions of the external environment, which significantly affect the processes and whose changes cause a radical difference in the studied processes.

It must be recognized that competitiveness is one of the most effective operational indicators of a company success, which ensures the development of business, as well as adaptation to the conditions of the external environment in the modern economy.

The main goal of competitiveness is raising the level of welfare of the nation and individuals by providing them with competitive goods and services. At the national level, the source of competitiveness is represented by the companies operating in its territory. Geographically and politically, it is where the added value of the economy occurs. The role of the state in this case is to ensure a sustainable flow of economic wealth from companies to its citizens, which means direct revenue for companies and citizens or benefits from the services and infrastructure offered by the state. In general, the level of prosperity of countries is formed from the interaction of three forces: the competitiveness of companies, the competitiveness of individuals and the competitiveness of the nation (Schwabs & Zahidi 2020, p. 16).

Other authors study what differences can be detected in the effect of logistics performance on competitiveness pillars in countries with various incomes. Their new method is the ARAS-G method, used to evaluate the logistics performance of OECD countries in 2010–2018 (Yildirim & Adiguzel Mercangoz, 2020).

In economics, we can talk about competitiveness at the company, industry, country and global level, which is directly related to the growth and development of the specific economy, the level of innovation implementation, the existing living standards, the importance of the country in the global supply chains and the level of economic security.

Historically, the term “competitiveness” comes from the German word “konkurrenz”, or even more anciently from the Latin “Concuro”, “concurrentia”, which described completely different concepts. In their article “Theoretical Aspects of Competition and Competitiveness”, the authors Melnik and Yaskal try to trace the etymology of the concept of “competitiveness”.

Today, the expression “competitiveness” has two ways of translation: “competitive ability” and “competitiveness”. The verb “to compete”, which is at the root of the word “competitiveness”, comes from the Latin “competere” (the prefix “com” means “interaction” and the verb “petere” means “to follow”). In Slavic languages (Ukrainian, Russian, Bulgarian, Belarusian, Polish, Czech, Slovak, Macedonian, Serbian, Croatian), the root of the word “competition” comes from another Latin word “concurrere”, consisting of the prefix “con” (identical) and the verb “currere” (“to run”, “to compete by running”).

Just like the concept of competition, the concept of “competitiveness” also has several translations or explanations. In economics, three approaches to this term are considered, depending on the conditions of interaction between the business entity and the existing market. These approaches can be defined as “habit”, “structural” and “functional” approaches.

Competitiveness is a concept that envisages the rivalry of two or more subjects striving for the same goal (Melnik & Yaskal, 2013, p. 10).

Concepts of competitiveness are diverse, and it is quite impossible to apply a single definition to all of

them. In the broadest sense of this word, competitiveness is the ability to create and increase the wealth of the country and the well-being of the population. Therefore, competitiveness can be defined as the ability of entrepreneurs to:

- mobilize and effectively use the productive resources which should be used to successfully offer their goods and services in the global economic environment.
- create opportunity for valuable employment.
- manage changes and adapt business to changes with stress on innovations.
- strengthening the capabilities of entrepreneurs in all the mentioned areas is largely related to investments.

Therefore, higher competitiveness can be achieved by carrying out structural reforms, which prevent difficulties to business and investment attraction.

Competitiveness is not absolute – it is and will always be relative, therefore it depends not only on whether we have implemented structural reforms to improve various areas, but also on whether we have done it differently, more powerfully, stronger than others. Therefore, it is useful to use the results of international ratings to assess competitiveness (Ekonomikas ministrija, 2018).

In general, there is no universal definition of competitiveness that would briefly and succinctly depict the essence of the concept. In addition, the representative of each industry or type of business introduces a specific explanation of the concept that corresponds only to his point of view. Equally important is the concept of micro, macro or mega level – the level at which the process of competitiveness is analyzed.

At the micro level, understanding the concept of competitiveness refers to a company's ability to compete, grow and be profitable. At this level, competitiveness is formed by the company's ability to profitably produce goods that must meet the requirements of the open market.

At the same time, at the macro level, the concept of competitiveness is more vaguely defined and much more contested. Despite the fact that improving the competitiveness of a country or region is the main goal of any economic policy, the lack of a clear, unanimously accepted definition is a constant source of controversy. Consequently, a problematic situation can be observed, when it is quite dangerous to create economic policy based on an amorphous and interpretable concept.

2. Competitiveness in logistics industry

Baltic states

As we consider to observing map, all three Baltic states lying on the Baltic sea – shore. Historically there has an excellent location for transit cargo serving east-west direction to contact Asian consumers to Europe producers for products with additional value and vice-versa for raw materials and energetical resources cargo flows.

The situation with transit cargo flows remained stable from ending WW2, till beginning of 20th century. Baltic states ports developed and proceeded to supply Russia Federation and Middle East countries, to handle cargoes both directions.

2001 was critical and highest point for these operations, because Russia Federation authorities decide to develop his own ports next to St. Petersburg and relocate all cargoes related. As the sequence on the map appears three additional build new ports named Ust Luga, Vysotsky and Primorsk.

As a consequence, transit cargo flows was transferred to Russia territory and Baltic states ports remain emptier.

In this article not researched dynamics of Russian Federation Baltic Sea ports cargo turnover, only concluded, that great part of transit, which made turnover and profit Baltic states, moved to the newly built ports in Russia.

To clarify situation in the region, Table 1 with percentual cargo turnover in all the region enclosed.

Table 1. Market share of Baltic ports 2022, tones and % (source: Port of Klaipėda, 2022)

Port	%	Tons
Ust Luga	35,1	124,2
Primorsk	16,2	57,3
St. Petersburg	11	38,9
Klaipėda	10,2	36,1
Riga	6,7	23,5
Tallin	5	18
Vysotsky	4,5	15,9
Ventspils	4,2	14,9
Kaliningrad	2,3	8,1
Butinge	2,3	8,1
Liepaja	2,2	7,8
Total		353

Authors can conclude that almost 70% or 244 million tons of all region possible transit handled in the territory of Russian Federation 5 ports. Rest of 30% cargoes or 109 million tones remain on Baltic states 7 ports.

Baltic states and their ports can be a mirror, to research transit cargo volumes in the region and therefore conclude tendencies of transit operations future.

As a main conclusion is situation, when after war in Ukraine, recently interrupted last cargo flows from and to Russian Federation, using Baltic states ports Klaipėda, Liepaja, Ventspils, Riga and Tallin.

Actual situation has been going since year 2014, after sanctions due to first Russian Federation invasion in the east of Ukraine and Crimea. Cargo flows from EU ports were moved to Russia ports Ustj Luga, Primorsk, Saint Petersburg and therefore was observed first transit cargo decreasing in Baltic states ports.

This could be a cause on strong competition in the Baltic states transit cargo handling industry. The situation is really transferred to all the logistics companies because transit cargoes is strong source for all logistics operations, include domestic cargoes competitive advantage related to turnover and profitability of marine shipping.

In the research we cannot consider Russian federation ports as competitors, because of significant support them of federal government as well mutual sanctions established between the European Union and the Russian Federation, due to the invasion in the Ukraine. Therefore five bigger ports of Baltic states can be considered as operating under conditions of undistorted competition in the field of transit cargo.

Lithuanian Port of Klaipėda concluded the year 2022 with a cargo volume of 36.1 million tons and maintained the fourth position among the Eastern Baltic ports, first place in the Baltic state ports the cargo turnover yearly has decreased by 21%, comparing to 45.6 million tons in 2021, caused by loss of nearly all transit cargo due to the war in Ukraine and related sanctions (Port of Klaipėda, 2023).

Second place in the line takes Riga with an annual cargo turnover 23,5 million tones year 2022. Riga, not so far back, was the first port in the Baltic states group measured by cargo turnover, currently lost the position to Klaipėda. The Freeport of Riga is a multifunctional port with a modern, safe and sustainable infrastructure, that is constantly evolving in response to market changes and adapting to new customer requirements. The development of the port is empowered by constant value generation, innovation and responsible long-term policies.

Advantageous location, providing the closest access to the sea from the vast Eurasian hinterland, makes the Freeport of Riga an important trade hub and offers the fastest, safest and cheapest transport connections between the markets in Europe and other parts of the Eurasian continent (Riga Free port, 2022).

Tallinn Sadam owns the largest cargo and passenger harbor complex in Estonia. The harbors are navigable and easily accessible throughout the year and deep enough to receive all vessels passing through the Danish Straits. Estonia's geographical location is favorable for handling both north – south and east – west passenger and cargo flows. Port consists of three cargo harbors – Muuga Harbor, Paldiski South Harbor and Ro-ro cargo at Old City Harbor. Despite of specialization on passengers' sea transporting 18 million tons pf cargo handled in Tallin 2022 (Port of Tallin, 2020).

Next in the line – Ventspils port – was the historically first in the region, connected to Moscow by railroad. First rail connection Baltic territory constructed 1901 by Russian Empire to move cargoes east-west direction. In the beginning of 20th century this port has the greatest cargo turnover regionally because frost – free piers provide competitive advantage above Riga and St. Petersburg.

Currently the ice-free port of Ventspils is one of the leading deep-water ports of the EU on the East coast of

the Baltic Sea. According to the destinations of customer's import and export – mainly the EU and Asian regions – port is creating a multi-modal transport solution infrastructure for fast and high-quality service. Ventspils is a part of the European TEN-T transport core network. Since ancient times port has been a strategic transit connection of export goods in freight of chemicals, potassium salt, coal, grain, general cargo, ro-ro and others. Today port is multi-modal for any freight with attractive port charges. The technical indicators of the ice-free port allows to serve the largest vessels entering the Baltic Sea throughout the whole year. The fourth place in the row ensured by cargo turnover 2022 – 14,9 million tones (Ventspils Free port Administration, 2023).

The last one in the line, but regularly growing in the region is Liepaja port.

In the Soviet Union port was used to military issues only. After independence gaining 1991, Liepaja municipality started renovation of Aquatory, port facilities and civil cargo handling operations.

The port of Liepaja is one of the few non-freezing ports in the region, which allows uninterrupted traffic in all seasons, providing cargo handling and other port services 24 hours a day and 7 days a week. The port of Liepaja is characterized by a well-balanced ratio of local origin and transit cargo, where 45 to 50% of the port's cargo turnover is made up of local agricultural products, construction materials, timber, biofuel, 50–55% cargo are transit from the Russian Federation, Kazakhstan, Belarus and other CIS countries (Liepaja SEZ, 2023).

In order to understand trends in transit cargo turnover, it is necessary to compare cargo turnover in ports recent years. Cargo turnover data for the years 2020, 2021, 2022 were collected according to the ports of the Baltic states: Klaipėda, Riga, Tallinn, Ventspils and Liepaja. Summary in Table 2.

Table 2. Three years cargo turnover biggest Baltic states ports (millions t.) (source: created by authors)

Port/year	2020	2021	2022
Klaipėda	47,8	45,6	36,1
Riga	23,7	21,5	23,5
Tallin	21,3	22,6	18,0
Ventspils	12,9	11,1	14,9
Liepaja	6,6	7,0	7,8
Total	1123,3	107,8	100,3

The schedule shows us unpleasant situation with cargo handling amount, which regularly decrease in the region. The biggest amount year 2020, reduced by 4% year 2021 and 7% year 2022 to year 2021. Total cargo flow reducing in three years is 12 million tons or 11%. Really – region is failing Ventspils port in three years period.

The same time there is a positive tendency noticeable. Liepaja port regularly increase turnover – 2021 by 0,4 million tones, 2022 by 0,8 million tones or 1,2 million

tones in three year period which is growth by more than 15%.

Riga port regains back cargo turnover 2022, which reduced 2021 by 2,2 million tons.

Good growth appears in Ventspils port. After cargo loosing 2021 by 1,8 million tons, significant growth 3,8 million tons appears 2022, ensure overall growth 13% in the three years period.

Most significant cargo reduction observed so far in the largest port of the region in terms of cargo volume – Klaipėda port. Decrease 2021 to compare 2020 is 2,2 million tones, next year – 2022, reduction 9,5 million tones or totally minus 24,5%.

Analyzing the data, we can conclude that cargo turnover is decreasing ambiguously. A regular increase in cargo turnover can be observed in some ports, stability in others, but a significant drop in cargo turnover in the largest port. This means that the competitive situation and competitiveness developed in the region, in the field of transit cargo turnover, is an important indicator that can ensure the viability of transit cargo operator companies. Conclusions causes authors to explore factors, that could affect competitiveness, due to use this information in the future research.

3. Logistics competitiveness factors

Logistics operations are presented in all business sectors. The implementation of a well-organized product- transport- storage chain is necessary for competitiveness in the era of industry 4.0, as well as an appropriate digital equipment and competences (Sieja & Wach, 2019).

Global Competitiveness Index – GCI, which is published annually by the World Economic Forum – WEF, has been created and used globally to assess competitiveness. This is a globally recognized tool for assessing the competitiveness of countries. The index provides valuable information for business strategy and policy makers and allows to determine the areas in which a given country performs better or worse. The country's position in the GCI, as well as in other international rankings, has to influence the decisions of potential investors about investing in its economy. In this sense, it is useful to look for GCI assessment methodology, with the intention to adapt to a certain extent competitiveness assessment tools not only at the national level, but also at the lower – industry level.

The Global Competitiveness Report was published for the first time in 2004 and it also reflected the Global Competitiveness Index – GCI for the first time (Sala-i-Martin & Atradi, 2004).

Since 2018, the calculation of the Global Competitiveness Index (GCI) is based on the new methodology, which researchers have based on fundamental changes in the world economy. According to the new concept, the Global Competitiveness Index assesses the readiness of countries for the fourth industrial revolution (4IR), which is indicated by the designation of the index GCI 4.0.

The new methodology reflects all the factors identified by the literature and experts that are essential for increasing productivity in the 4IR era. WEF experts note that many of the factors that will have the greatest impact on managing competitiveness in the future have never before been taken into account in major policy decisions, such as the idea generation process, entrepreneurial culture, openness and dynamism (the ability to quickly adapt to changing conditions).

The main message of the report – increasing competitiveness requires a comprehensive and broader approach – strong performance in one area cannot compensate for weak performance in another. This is especially true for innovation. Although it is true that growth opportunities for relatively low- and middle-income countries are significantly linked to technology, policy makers must not forget the “old” problems, such as weak institutions, infrastructural gaps, and insufficient levels of skills and education of workers.

Therefore, the economic development stage weighting scheme from the previous GCI methodology is no longer applied. Instead, the same calculation approach is applied for all countries to calculate the total GCI value, where all factors (pillars) have equal weights. The main argument for such an approach is that in the context of the 4th industrial revolution, all factors will have an equal impact on the competitiveness of countries, regardless of their level of development (income). Automation is likely to reduce development opportunities to maintain competitiveness based on low labor costs in production. At the same time, ICTs reduce information barriers and enable the rapid transfer of ideas, technologies and intangible products around the world, creating new opportunities for developing economies.

As before, the Global Competitiveness Index is based on a comparison of the countries of the world according to 12 groups of criteria, or pillars. They are:

1. Quality of institutions,
2. Infrastructure condition,
3. Use of IT and modern communications,
4. Macroeconomic stability,
5. Product market,
6. Labor market,
7. Financial system,
8. The size of the local market,
9. Health,
10. Education and skills,
11. Business dynamism,
12. Innovation capabilities.

All pillars are grouped into four categories: enabling environment, human capital, markets, innovation ecosystem (Schwab, 2018).

Calculation of GCI is based on 98 indicators, of which 34 are retained from the previous methodology, and the remaining 64 are new. It should be noted that unlike previous reports that were mostly based on survey data, GCI 4.0 uses more statistical indicators (54) to assess overall performance, while the number of

survey-based indicators is lower (44). The overall GCI score is the arithmetic average of the 12 pillars, so each pillar has an implied weight of 8.3% (or 1/12).

The GCI indicators of each pillar are expressed on a scale from 0 to 100 and are interpreted as “progress results”, which indicate how close the countries are to the ideal state (or the best country in the specific sphere).

The company, which holds closely to this concept, always gains a significant competitive advantage over others. There is another factor, mentioned in the GCI (Global Competitiveness Index). This is information technology, recently precise called ICT (Information and Communication sector) – the one of important pillars in the index providing. This means, that improvement in the GCI pillars also improves logistics industry performance.

Digitalization plays significant role in modern logistics field as shunter and management tool of transport, distribution, processing and warehousing. Information technologies applied in more and more business areas and plays key role in organization of supply chains, warehousing and transportation (Zhiven et al., 2020).

Not only today, but in future especially, importance of digital awareness will be clear in every area of economy, from management through workplace environment design to logistics.

One more issue is legal environment ensuring. This background is generally provided by organizations, national governments, regional and international organizations such an EU parliament and government in our situation. The importance of logistics has been recognized for many years. Logistics activity is determined by strategic business approach, which means that on top of examining of costs, even in the case of potential costs increasing situation, the primary objectives remain better performance and high customer and consumer satisfaction (Duran & Afonso, 2020).

For nations in pursuit of further development, the effective harmonization of logistics strategy and local regulations will become necessary. That is important indicator of government policy effectiveness – capability to adjust normative acts locally and globally.

Looking on geopolitical situation Eastern Europe one more issue becomes important. This is desire and options to cooperate between countries which has to be based on providing friendly, honest and non – aggressive policy.

The role of logistics performance in the bilateral international commerce processes of European Union member states studied by Puertas et al. They conclude that in balanced two-way commerce, the GDP of the importing country, the distance between the two countries, and the LPI are the three determining factors. Their further significant conclusion is that logistics is a key factor from the perspective of exporting countries. In the trend of the LPI (Logistics Performance Index) value, the role of interstate commerce processes has appreciated because the local market is rather a barrier than a driver of increasing logistics performance, even in countries more developed

economically. The efficiency of a product transport firm or a department store delivery company can follow increasing market demand only to a limited extent, but in small countries these actors probably dominate in supplying the local market. However, only the companies that explicitly specialize in logistics can keep up with the requirements of the market growth.

Consequently, the significant expansion in the range of consumers makes it necessary for manufacturers and distributors to use such companies for transport. These international service providers are in competition with each other, which ensures their constant development including also with regards to the role played by local markets and their effect on logistics performance (Puer-tas et al., 2014).

It is demonstrated that on local markets the role of manufacturers is more significant in delivering products than the role of logistics service providers. On the one hand, this entails a considerable increase of manufacturers’ costs. On the other hand, in companies specialized in production, neither sufficient knowledge nor adequate resources are available to provide professional logistics services. In turn, this causes a considerable performance disadvantage for a country logistics industry (Kiisler, 2008).

Innovation is also of key importance in logistics (Roscoe et al., 2016). Björklund and Forslund (2018) analyze the role played by innovation, in connection with a study of international supply chains. They highlight the characteristics of the innovation process, emphasizing that its cost reducing and performance increasing effect can be maximized if we study the possibilities of development of all the participants of logistics. Among manufacturers, this could be realized by improving the efficiency of production, while on the side of consumers, assessing needs and adapting to them would represent the greatest progress. Among transport companies, what is important is the role of committed managers who can determine the most efficient sequence of activities while viewing the process of product delivery in its entirety. One of these innovative processes is the just-in-time (JIT) system developed by Toyota for its production process, whose logistics application offer significant opportunities even today (Lai & Cheng, 2016).

At the same time, air cargo transport plays a leading role in the delivery of high value, quickly perishing foods, medications, flowers, and similar products, generates important innovative solutions, coupled with the requirement of sustainable development (Kasarda, 2016).

The role of ICT in logistics processes studied among Pakistani retail stores. Based on their results, according to transport companies, emphasis on increasing delivery performance volume per time and simultaneously reducing delivery time improves customer satisfaction, which originates from the customer always receiving the right amount of product at the right time and for the lowest price. Today, the significant growth of online purchases makes fast and convenient solutions increasingly

important from the perspective of clients. Thus, we must keep this in mind when considering the development of firms that perform products delivery (Ghoumrassi & Tigu, 2018).

Analyzing of the effect of e-commerce relationship with logistics indicated that with the increasing popularity of e-shops, the elements of a traditional supply chain also can transform. E-commerce system is characterized by the fact that suppliers and subcontractors are using the same information technology. There is no point which type of system they use but that all participants has the same system, which provides fast connection, precise mutual data transfer (Delfmann et al., 2002).

Similar situation is with modern ICT usage method. In this case special opportunities of IT systems can be used in the area of “last mile” logistics. In this case, the point primarily is not what system company uses, rather for the system to be the latest and most modern possible version. This facilitates delivering the package from the last distribution point to its destination – mostly the customer’s home in the fastest and most environmentally friendly manner. The concept of smart cities plays a great role in this, along with the 5G internet which currently in its initial phase but developing at an increasing speed. The continuous development of information systems plays an important role not only for countries that lag in logistics development as in the absence of adequate technology, there doubtlessly is no realistic chance of increasing performance and catching up to more developed countries (Bates et al., 2018).

Based on research the effect of investments in IT development gains positive performance of competitiveness. Examination of several models demonstrated that investment in IT development has less than 0.1% effect on increasing a company’s profit. Despite this, investments in the business management system directly, has an outstanding role in the company’s time and performance efficiency can be greatly increased. In the longer time, new and efficient Enterprise Control System, certainly increases the logistics performance and competitiveness of businesses (Jhawar & Garg, 2016).

Logistics and competitiveness relationships is studied by multiple authors and following various viewpoints, to make suggestions for increasing logistics performance.

Checking the performance of the logistics sector related primarily with a cost level approach. Usage the classic division of logistics costs as a framework to conclude that the logistics costs of the companies comprise only 0.2% of their sales revenue. However, also discovered significant differences between specific cost categories: half of the logistics costs comprise costs related to warehousing, while fuel costs are in the second place. Thus, reducing both expenses may result in the possibility of spending considerable financial resources on other tasks (Primiana et al., 2016).

Another researchers team employ the hierarchic regression method to study how the LPI, the GCI, and GDP affect each other. Their results show that improvement

achieved in the GCI value directly increases GDP, while a similar effect is observed in an indirect way by improving the LPI values. The group of scientists observes the effect of the GCI on the LPI trends.

They consider the effect of the GCI on the six indices that comprise the LPI, with the hierarchic regression method presuming a correlation separately in the case of every index. According to their conclusion, the GCI has affects logistics competence, product monitoring, international shipments, and timeliness, while a change in competitiveness failed to affect customs administration and infrastructure (Civelek et al., 2015).

Moreover, clustering is also a popular study method, sometimes employed for a grouping of logistical characteristics (Carlan et al., 2018). However, country-based grouping is more frequent due to the large number of countries (Cluster for Logistics, 2017). The income classification of countries was conducted based on the World Bank’s 2016 ranking. Among others, the study connects infrastructure, health condition, higher education and market size more closely to logistics performance.

At the same time, the study shows that a country’s place in an income category is closely related to its chances of competitiveness development. For the logistically most developed countries of Asia, Chung (2016) applies Porter’s Diamond Model by using the GCI and LPI data, along with the model applied in multiple criteria decision-making and the analytic hierarchy process (AHP) for multi-attribute decision-making.

Chung (2016) demonstrates that even though the scrutinized countries all has high positions on the LPI ranking, they comprise two separate groups from the viewpoint of logistics development level. Hwang et al. (2017) study the correlations between the competitive and logistics features of the most dynamically developing countries to find that proper industry policy, infrastructure development, market expansion, and appropriately selected IT background are the most important logistics performance stimulants.

Conclusions

In the paper, all research gaps concluded.

Competition in the logistics industry, taking place, because cargo quantity, turnovers in the region, becomes smaller, in contrast infrastructure and investments to its maintenance remains previous. Research shows that cargo amount in the transit operations decreases due to expansion of Russian Federation operators who compete on cargoes East-West corridor.

Based on World Competitiveness Index, further steps to define competitiveness factors Logistic industry, can be formulated.

In the global market, profit-oriented expansion brings expected results only in case of sufficient efficiency and organization. Logistics is key element of modern business management in the line of digital technologies, IT and finally- artificial intelligence. In the business environment

mutually complex correlations between competitiveness and logistics development are observable. Because of this, competitiveness in logistics industry is as important for logistics development as relevant efficient and competitive ability is logistics operations for company competitiveness in a broader perspective.

This paper mostly intended to raise awareness to factors which has affects on competitiveness in the logistics industry, highlighting that further efficient development can only be realized by appropriately harmonizing the activities of economic policymakers and actors. In the future, it will be possible to offer an outline of regulatory parameters conducted and their realization schedule to reach competitive advance among other logistics service providers locally, globally for companies of various sizes.

Non-foreseeable factor for future is the outcome of the EU's economic climate. Stability and peace in the European east has to be achieved, but price for this and long-term impact on economy, can be unpredictable. One more issue is the scheduled enlargement of the European Union, resulting in the inclusion of new actors.

In the paper concluded, that the transit cargo flows in the Baltic states recently decreased, with possible impact on all logistics environment. Freight from Baltic states bigger ports are migrated to Russia territory, thus reduce all the cargo amount in region and enlarge competition between companies for rest of loads.

Global Competitiveness Index, provided from World Economic Banc is significant basis to provide further research about suitable factors involved to usage in the providing competitiveness logistics industry companies Baltic states. Logistic Performance Index has to be reviewed with the same target.

No doubt that digitalization of industry, information technologies usage, information and communication technologies, artificial intellect usage are vital factors to logistic companies competitiveness and definitely has to be implemented in competitiveness model for logistic services. E-commerce as well is essential business model, which developed rapidly and business are unthinkable without it recently.

Equally important is the opportunity for companies to cooperate regionally and globally, providing countries and governments with a legally correct environment and effective business policy.

Factors like logistics company specialization, warehouse management and company management IT systems, infrastructure quality, air transportation availability must be included in the competitiveness improvement plan.

The cost item should not be underestimated either. A solution must be found, how to calculate and prove the optimum of comparative costs, paying special attention to the so-called last mile deliveries.

By deepening the studies of competitiveness factors, new viewpoints may arise that can be used to further develop our current study.

This research and conclusions of competition in Logistics services area is based on sea transit cargo turnover analysis in the Baltic Sea Baltic states biggest ports, because historically it is precisely these loads that make up the largest volume of loads in the regional market. No ground, railroad, avia and pipeline transport considered due to multimodal and intermodal transportation took place.

Based on the research, further actions can be provided. Overview of logistics industry, recommendations and business logistics process model for increasing competitiveness has to be provided.

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