

## Measurement of Export Competitiveness of the Baltic States by Composite Index

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*Theoretical and practical aspects of the measurement of export competitiveness are analyzed in this article. The relevance and timeliness of analysis of the concept of export competitiveness proves the fact that competition is a very important precondition, which affects the effectiveness of development of national economy under the conditions of globalization. The research of the concept of export competitiveness and the ways of improving competitiveness of national economy are especially relevant for the countries in the period of recovering from the outcomes of economic crisis of 2008 -2009. In the European Union, the worst influence of economics recession was brought on Baltic States – Lithuania, Latvia and Estonia economies. One of the most important factors, which could stimulate the development of national economy, is export. Its development is especially essential for small countries, which are too small to consume all the production made by these countries. Higher export competitiveness could help the country to overcome after-effects of economic recession and stimulate the development of the total national economy.*

*Export is often associated with competitiveness of the country at the international level. While the academic understanding of international competitiveness of the country is still forming, the factors of international competitiveness are still being identified in scientific literature, export competitiveness can be measured in different ways: by analyzing one or several factors of the country's export, creating composite indices, analyzing factors and conditions which stimulate the international trade, etc. As every method has its advantages and disadvantages, the scientists seek to find the most reliable, methodologically justified, understandable, convenient to practical use and objective method, which could be accepted generally and widely used in strategic planning on improving competitiveness of the national export and total national economy.*

*But why the measurement of export competitiveness is so important? The answer to this question is related to the fact, that if competitiveness can not be measured, it can not be improved. As Baltic States and other countries compete directly among each other for the export markets, the identification of the current situations of export competitiveness in comparison with other competitors and its variation in the period of time will provide the information necessary for the government, business and scientist sectors, which are creating, updating, implementing and evaluating efficiency of the export improvement strategy and various means for its stimulation.*

*This article presents the problems related to the increase of export competitiveness in the Baltic States and its measurement. The factors enhancing export development are distinguished, possibilities on application of the basic competitiveness models and methods and their application for measurement of the export competitiveness are analysed. Based on the conducted theoretical analysis, the index of measurement of the Baltic States export competitiveness was established, thus allowing to identify the main factors determining competitiveness of the Baltic States export and quantitative measure the competitiveness of the Baltic States export. The established index is empirically based when assessing competitiveness of the Baltic States export within the period of 2005 – 2010. The article ends by providing strategic proposals regarding increase in export competitiveness of Lithuania.*

*The newly created Baltic States export competitiveness index, presented in the article, is one of the ambitions to promote the methodological background for measurement of export competitiveness and promote establishment of conditions, stimulating national enterprises to export and be competitive within international markets.*

**Keywords:** *export competitiveness, factors, indicators of export competitiveness, export competitiveness index, export of the Baltic States.*

### Introduction

In scientific literature issues on export competitiveness are often analysed by researchers of the countries or according to the samples of those countries which are too small to consume the production that is produced in their country, whose economy has insufficient resources to satisfy the consumption and investment demands existing within the country; for this reason they are forced to export their production, thus receiving the income, necessary for

financing import, other activities within the country, as well as for development of total national economy. For the development of international trade, the country has to establish favourable conditions, while the producers and service providers should have skills and abilities to offer for the external markets the specific products and services which are competitive and demanded; thus, the country's export should be competitive. Based on the sample of such countries, the researchers, politicians and entrepreneurs analyse export-related tendencies and the effect of

globalization on them; identify challenges faced by exporters in practice and suggest ways of their reduction, develop strategies and measures on export promotion and assess their efficiency, as well as the competitiveness of export itself. Theoretical and practical aspects of export issues have been thoroughly analysed in the papers of both national (Meiliene, Snieska, 2010, 2005; Kijonienė et al., 2010; Navickas, Malakauskaite, 2009; Saboniene, 2009; Rojaka, 2009; Jakutis et al., 2007; Jatuliaviciene et al., 2007; Jakutis, 2006; Ramanauskas, 2004; Vilpisauskas, 2004) and foreign authors (Ramanathan, Muyldermans, 2010; Isin, Miran, 2009; Armstrong, Taylor, 2005; Wignaraja, Lezama, Joiner, 2004). However, the research analysis on export competitiveness is impeded by the lack of an unanimous researchers' approach towards the concept of competitiveness itself, unspecified academic approach with regard to the comparison of national competitiveness at the international level and export competitiveness, abundance and diversity of factors, determining export development and the complexity of relationship among these factors and their effect on the export competitiveness.

The research showed that there is the lack of scientific works, which reveal the particularities of the measurement of export competitiveness by a composite index and clear interpretations of the results. The two most famous Competitiveness Index of IMD and Global Competitiveness Index of World Economic Forum have been formed and widely applied in the world, but they are generally intended for the measurement of the competitiveness of the country. The first initiatives to assess export competitiveness by index were done by scientists (Saboniene, 2009; Wignaraja et al., 2004). The authors of this article consider that these initiatives have to be more focused on analysis of the country export specialization (Saboniene, 2009) or only three indicators constituting the index have to be applied (Wignaraja et al., 2004) which impedes the establishment of the cause-effect relationship between factors effecting export competitiveness, as well as identification of more comprehensive and deeper analysis of export. The research showed that there is the lack of the researches about the possibilities of application of composite index in the measurement of export competitiveness. Hence, an export competitiveness index, which would be grounded methodologically and would enable to measure the competitiveness of the export of the country, is still missing. Lack of a means of complex measurement of export competitiveness is becoming one of the obstacles preventing from measuring of competitive potential of the country and forming effective strategies of increase in export competitiveness.

**The objective of the article** is to create and apply practically the Baltic States export competitiveness index and provide strategic aspects for improvement competitiveness of Lithuanian export.

**Methods of the research:** systemic, comparative and logical analysis of scientific literature; empirical research employing systemic analysis of external secondary data.

## **The Baltic States export: the current situation and main problems of exporters**

The choice of the Baltic States - Lithuania, Latvia and Estonia - selected for the research is based on the following factors: the Baltic States are similar by geographic, demographic, social and cultural, historic, climatic criteria. Besides, Lithuania, Latvia and Estonia are attributed to small countries, whose markets are too small for consumption of the produced goods. The demand for export development of the Baltic States is increasing, as export is considered one of the most important catalysts of the countries economy.

While analyzing the issues on the Baltic States export competitiveness, it is purposeful to review general tendencies of changes within the Baltic States export. According to the data of publication „Perspectives of countries of the Baltic region - 2011“ (2010), in the Baltic countries the economic recession of 2008 - 2009 is coming to an end. The recovery of the countries' economies was mainly determined by export development - after a major economic decline, a rapid increase in export volumes was observed within the Baltic States in 2010. The countries export markets as well as groups of goods before and after the economic crisis have not changed significantly from the structural perspective. Though a major part of the Baltic States exports is attached to the European Union countries, the Baltic States themselves remain the main partners within the international trade; however, Estonia is involved in a more intense cooperation with Finland and Sweden, while Latvia and Lithuania - with Russia. The formed export markets and economic relations of these countries allow presuming that external export conditions are favourable for the Baltic States export development.

The research (Meiliene, Snieska, 2010, 2005; Rojaka, 2009; Jakutis et al., 2007; Jatuliaviciene et al., 2007; Jakutis, 2006) revealed that the Baltic States exporters are facing the same or similar problems, which can be divided into three groups:

1) problems occurring within the exporters' internal environment; 2) problems occurring within the economic branch and export markets, and 3) problems occurring within the policy pursued by the Government (see Table 1).

Analysis of scientific literature and statistics data shows that in general, tendencies of the Baltic States export growth allow presuming a recovering competitiveness of exporters; however, problems occurring within the exporters' internal environment, economic branch, export markets and the government policy determine a relatively low competitiveness of the Baltic States export. The Baltic States are characterized by similarities from the geographic, demographic perspective, and from the political, social and psychological perspectives as well; thus, their export competitiveness can be compared or analysed by considering them as a whole region. Export problems, existing at different system levels of the Baltic States, confirm the actuality and timeliness of theoretical and practical analysis on export competitiveness and distinguishing of factors which are affecting the Baltic States export competitiveness.

Table 1

**Problems of the Baltic States exporters**

Export problems	Lithuania	Latvia	Estonia
<b>Problems occurring within exporters' internal environment</b>			
Insufficient readiness of enterprises for export activities under the market conditions	+	+	+
Lack of the enterprises' initiative within international markets	+	+	+
Lack of the enterprises' circulating means	+	+	+
Loss incurred due to insolvent purchasers	+	+	+
<b>Problems occurring within the economy branch and export market</b>			
Export structure by branches characteristic to developing countries	+	+	+/-
Insufficient export supply	+	+	+/-
Decline of demand within the main export markets	+	+	+
<b>Problems occurring within the government policy</b>			
Insufficient, inefficient promotion of direct foreign investment	+	+	+/-
Insufficient orientation of the education and research system towards needs of production	+	+	+
Insufficient promotion of enterprises' investment in technological development	+	+	+/-
<b>Insufficient efficiency of the government's policy on exports promotion</b>	+	+	+

(drawn up following Meiliene, Snieska, 2010, 2005; Rojaka, 2009; Jakutis et al., 2007, 2006; Jatuliaviciene et al., 2007; Ginevicius et al., 2005)

Note: + very characteristic problems; +/- partially characteristic

Establishment of methodological measurement principles on the Baltic States export competitiveness and their practical application enables to assess complexly and systematically export competitiveness of these countries and adopt timely decisions, adequate to the measurement results, likely to effect the increase in the Baltic States export competitiveness or efficiency of strategies on export competitiveness applied by the Baltic States.

**Concept of the country competitiveness and export competitiveness**

The authors of this article consider competitiveness as a major precondition for the development of European Common Market and economic globalization; thus, the analysis of the country competitiveness is meaningful only under the conditions of competitive market. One of the objectives specified in the Treaty on the European Union includes "the system which could ensure undistorted competitiveness within the common market" (The European Union Competition Law, 2005). Two basic approaches towards competitiveness are distinguished in scientific literature. The classical approach considers competitiveness as a dynamic contest process, whereas in the neo-classical approach - as a specific structure of the market (Klimasauskiene, 2007). In Stanikunas' opinion

(2010) competitiveness involves competition between rivals over a bigger economic power, or means which allow employing limited resources in the most efficient way. Maksvytiene (2002) argues that competitiveness is a possibility to win the battle, and this striving is inherent within the living world. Research (Bruneckiene et al., 2010; Snieska, Bruneckiene 2009) revealed that competition for human capital, export markets, tourists, investments, new technologies, national and international projects, etc. involves not only individuals, enterprises, but cities, regions, countries as well; thus, *the country competitiveness* is treated by the authors of this article as ability to take advantage of competitiveness factors for the establishment and maintenance of competitive position among other countries.

In scientific literature the country competitiveness is described differently, depending on the objective of research. A more detailed analysis on the concept of the country competitiveness is provided in other papers of the authors of this article (Snieska, Bruneckiene, 2009; Simanaviciene et. al. (2007)); thus, in this article only the concept of the country competitiveness is presented, and export competitiveness is analysed within this context. *The country competitiveness* is understood as a complex of competitiveness at the international level of individuals, enterprises, economic branches and conditions established in the country for their competitiveness and maintenance of it. Competitiveness of these three economic subjects, as well as the country's economic, social, technological and political position within the global economy, forms the general country competitiveness at the international level. The authors approve of researchers' approach (Meiliene, Snieska, 2010, „Trends of the increase of Lithuania's contribution and competitiveness within the European Union", 2010; Porter, 1990; EC, 1999) that economy of competitive countries must be open and the national competitiveness is a totality of conditions essential for a continuous economic growth. Economic openness towards the European and global competitiveness, integration into international nets of goods, service, capital, people, ideas exchange, quality of public institutions are the most significant parts of this totality. In other words, competitiveness is not a mere totality of economic factors; it is the context of the state's political, social and economic power within international markets.

Although in scientific literature the international competitiveness is often identified with export, however, there are certain academic discussions concerning comparison of these concepts. Krugman (1994) argues that in the international trade, it is imports that are the principle objective of trade; whereas export is useful at such an extent at which it allows earning foreign currency, necessary for acquisition of cheaper and better foreign goods. Without taking into consideration Krugman's (1994) ideas, many other authors (Meiliene, Snieska, 2010; Saboniene, 2009; Задорожная, 2009; Bruneckiene, Cincikaite, 2009; Anisimovaite, Marcisauskiene, 2008; Beniusiene, Svirskiene, 2008; Armstrong, Taylor, 2005) pursue to prove the obvious importance of export for the country competitiveness. They argue that the country, demonstrating the increase in exports (not related with the

increase in imports), expanding part of exports within external markets, increasing revenues and diversity within the exports structure, can be considered as the country with increasing competitiveness. Saboniene (2009) emphasizes the essential importance of export development for the growth of small countries economies, by considering the cash flow, employment indicators, and growth of production basis. The results of foreign trade, their changes are the best indicators of the national enterprises' abilities to compete under the global economy conditions. Meiliene, Snieska (2005) argue that the significance of export does not decrease even with the increase of the country's internal demand, as, when focusing only on internal market, costs of production of majority of goods become too high, then it becomes too difficult to compete with imports within the internal market as well.

For many enterprises the possibility to export their production allows not only to survive in the market but also increase volumes of production and trade, maintain and establish new working positions. At the same time the general country competitiveness is increasing. According to Anisimovaite and Marcisauskiene (2008), the aim of each state is to ensure a rapid economic development, sufficiently high and increasing citizens' living standards. When pursuing this purpose, the most important thing is to maintain a high level of exports competitiveness. The final report of the research "Trends of the increase of Lithuania's contribution and competitiveness within the European Union" (2010) includes the statement that the higher competitiveness helps the country to achieve the established objectives and strengthen its international positions. Beniusiene, Svirskiene (2008) emphasize that in many cases competitiveness determines the subject's economic and social welfare, prestige, whereas low competitiveness can be the cause of big losses, shakings or even collapse. From the competitive perspective, it is beneficial for the country to have more competitive regions, which would have positive effect on the general country competitiveness. Bruneckiene and Cincikaite (2009) put emphasis on the fact that the total country economy is directly dependable on the economic-social livelihood and competitive abilities of its regions. If the implemented regional strategies of competitiveness are ineffective, and factors of competitiveness are not fully employed, the region is likely to lose its competitive position against others and will negatively affect the country competitiveness.

The demand on the increase in export competitiveness is based on the necessity to consider conditions of recent changes which affect its competitiveness. It is essential for the country to consider the context of modern tendencies, so that decisions regarding the increase in competitiveness were adequate to the present situation. Among the most significant reasons for the increasing interest in competitiveness it is purposeful to distinguish globalization, regionalization and economic integration, which transform the country's social, political and economic order, reorganize states and societies. The demand on the increase in export is related to the increase in export volumes within global markets. Empirical analyses show that recently the global export constitutes

over 30 percent of the GDP growth (Jatuliaviciene, Kucinskiene, 2006). Burinskiene (2009), having conducted the regression analysis, revealed that export affects the global GDP growth and there is a close relationship between the global export and GDP volumes. Thus, the level of the country competitiveness is in a strong interdependence with export competitiveness. For this reason, in this article export competitiveness of the country is approached as a specifically significant reflection of international competitiveness.

### **Models and methods of measurement of export competitiveness**

The research revealed the lack of specialized models of measurement of export competitiveness. The best known models of national (regional) competitiveness (Porter, 1990, 2004; Cho, 1994; Rugman et al., 1995; Begg, 1999; Cho, Moon, 1998, 2005; Gardiner, Martin, Tyler, 2004; Rutkauskas, 2008; Snieska, Bruneckiene, 2009; Atkociuniene, 2009) distinguish different measurement parameters, quantities and their derivations; however, they focus on the general country (regional) competitiveness, excluding export competitiveness. The authors of this article recognize the effect of these models on the measurement process related to export competitiveness and on the establishment of basics methodologies of measurement of export competitiveness as well.

Based on Rugman, D'Cruz and Verbeke (1995) „Double diamond“ model principals, Meiliene, Snieska (2010) developed a model on measurement of the country industrial export competitiveness within transitional economies, by distinguishing factors of the country industrial export competitiveness and their characteristic indicators. Considering the fact that major part within export structure is assigned to industrial production, the industrial export competitiveness can be taken as the basis for making conclusions on the country export competitiveness and economic competitive position at the international level. The authors also notice that factors and indicators distinguished within that model include both quantitative and qualitative measurements, which supplement the quantitative measurement of export competitiveness.

During the process of qualitative measurement by applying specified measurement criteria and methods, the value, importance, weight, significance or other parameters were compared to the selected standard (reference). The measurement of competitiveness is distinguished by difficulties in specifying the standard (reference) of competitiveness (Navickas, Malakauskaite, 2010; Mikulis, Ruzevicius, 2009). These difficulties determine that many scientist analyse the export development factors (Jakutis et al., 2007; Purlys, 2007; Rudzkis, Kvedaras, 2003), changes within international trade (Jatuliaviciene et al., 2007; Bernatonyte, 2007), policy on export promotion (Meiliene, Snieska, 2010, 2005; Vilpisauskas, 2004), however they do not fully reveal specific characteristics of export competitiveness. The research (Bruneckiene, 2010; Snieska, Bruneckiene, 2009) revealed that the main

methodological problems with regard to measurement on competitiveness are related to the absence of unified approach to competitiveness, limitations occurring due to measurement methods, lack of essential information or its delay, lack of time and financial resources for conducting comprehensive analysis.

In scientific literature different methods of measurement of competitiveness are observed; however, usually they focus on measurement of the country, regional or enterprise competitiveness. In the authors' opinion, the same methods can be applied for the measurement of export competitiveness, including analysis and comparison of several indications' characteristic to competitiveness or calculation of the competitiveness index; factors determining competitiveness or environment effecting it are analysed from the quantitative and qualitative perspectives; different spheres of competitiveness occurrence - economic, financial, social, political and institutional are united into a totality which is complexly analysed. Issues on competitiveness can be analysed from the static and dynamic perspectives, i. e. by stating the present position and its variation from the time perspective, or by analysing a cyclic sequence of relations among factors and total competitiveness. The authors of this article notice that the majority of methods of measurement of competitiveness are dedicated to analysis of the single factor of national competitiveness, but not the complex of them. This impedes understanding of cause-and-effect relationships among competitiveness factors and their impact to total competitiveness and limits possibilities of practical implementation of research on competitiveness. Besides, the measurement conducted on the basis of present methods mostly is based on the quality-related data. This implies that measurement results mostly reflect interpretation of facts, not the facts themselves. Prevalence of such methods in scientific literature is explained by multi-aspect characteristics of the concept of competitiveness, abundance and rapid change of factors, caused by the change of another factor, which effect competitiveness, and analysis of these problems requests application of sophisticated computer programs.

In scientific literature (Anisimovaite, Marcisauskiene, 2008) authors admit that properly selected system of the international competitiveness measurement indicators allows to reveal the country's competitive advantages, its position within the international space. According to Dubin and Smilga (2005), quantitative measurement of competitiveness depends on justifying of competitive norms which are best represented by different economic indicators, also enabling to assess qualitative aspects of problematic of competitiveness. Particular economic indicators must be selected by taking into consideration specificity of the analysed problem, however, not vary from methodological requirements established for competitiveness norms.

One of the most frequently applied competitiveness measurement methods involves measurement by index. The index is described as an instrument artificially created for analysis of multi-aspect problem, consisting of sub-indicators and based on which the analysed objects can be rated (Snieska, Bruneckiene, 2009). In modern practice the

indices for the measurement of export specialization are applied; however, theoretical and practical interpretations on their applicability have neither been formed nor comprehensively discussed by researchers yet. Although the well-known index established by the World Economy Forum is assigned for the measurement of the general country competitiveness, by conducting a more detailed analysis of the index sections it is possible to assess the countries export and import competitiveness by export and import volumes (percent, against GDP). One of the methods of establishment of export specialization involves the comparative index of competitive advantage RCA suggested by Balassa (1965), which reveals the most significant groups of goods within export. Based on this index, Saboniene (2009) assessed export competitiveness of Lithuania within the period of 2001-2007 and compared it with Latvia and Estonia. Wignaraja et al. (2004) presented the index on industrial export competitiveness of small enterprises. This index is composed of three variables, each specifying different aspects of industrial competitiveness, and enabling to establish an efficient view on the general international economic competitiveness: 1) export of industrial production per one citizen; 2) average annual rate of industrial production export growth; 3) value added, created by industrial export production which creates a high value, expressed by percent against GDP. It is emphasized that this index has been created with the aim of solution of the problem, occurring due to limited possibilities to achieve reliable data on small countries and provide a more realistic view on the small countries industry competitiveness.

The authors of this article notice that, although these scientific initiatives allow to reveal real statistic data on export competitiveness and its dynamics, they are more focused on the country export specialization analysis (Saboniene, 2009), or only several (The World Economic Forum 2010-2011, Wignaraja et al., 2004) are employed, which impedes a more comprehensive, specific and precise establishment of the competitive position with regard to the country export, identification of the cause-and-effect relationship between export competitiveness effecting factors as well as identification of more comprehensive and deeper analysis of export competitiveness. When using a relatively small number of indicators of export competitiveness within the index, there might be problems related to the index indicators inability to reflect the negative effect of factors of competitiveness which can be compensated by positive effect of other factors. Thus, the objectiveness of interpretation of results is likely to be under threat, and the urge for qualitative analyses occurs.

It is possible to conclude that the scientific society lacks unanimous approach with regard to most efficient methods of measurement of competitiveness. There are differences between the scientists' approach not only with regard to methodological aspects of measurement of competitiveness, but also with regard to factors determining export competitiveness. This impedes the measurement process, as factors, determining the national export competitiveness, should be approached from the systemic perspective and complexly - thus increasing the reliability of measurement results. One should agree that

measurement of export competitiveness is rather complicated process, alongside with selection of proper methods and measurement criteria (indicators), requiring additional human, time and financial resources. The conducted analysis of methods of export competitiveness allows presuming that employment of index is the best way to perform the measurement of export competitiveness. It is worth noticing that, aiming to increase export competitiveness, it is important not only to assess the analysed phenomenon, but also to take into account the fact that a significant role within this process should be played by the Government and export development policy.

### The national export competitiveness model and the Baltic States export competitiveness index

The establishment of model of measurement of export competitiveness is based on the following methodological approaches:

- The national export competitiveness is a significant reflection of international competitiveness or the country, which affects the general country competitiveness.

- Complex measurement of the factors of national export competitiveness is becoming a significant precondition of the increase in the national competitiveness. It is important to analyze systematically the inter-related factors, which form an integral system of export competitiveness.

- There is no common scientific approach regarding the most efficient methods of competitiveness measurement, or reliable indicators, able to reflect the country's export competitiveness position at the international level.

- The index allows complex considering of the problem; thus, the measurement of the Baltic States export competitiveness is conducted with the help of the index.

- The Baltic States are characterized by special similarities from the geographic, demographic, political, social and psychological perspectives; thus, there is a possibility to compare export competitiveness of these countries separately or analyse it as the whole region.

- Formation of the model of the measurement of national export competitiveness is based on methodological principles of two models - the "National diamond" model (Porter, 1990) and "The industrial export competitiveness model of the transitional economy country" (Meiliene, Snieska 2010).

The authors of this article present the model of measurement of the national export competitiveness (see Figure 1), by distinguishing inter-related and inter-effective factors which are grouped into four groups – demand for national export, conditions for production, competitiveness of export enterprises, economic cooperation enhancing environment, consisting of political-legal, economic, social-demographic and technological environment.

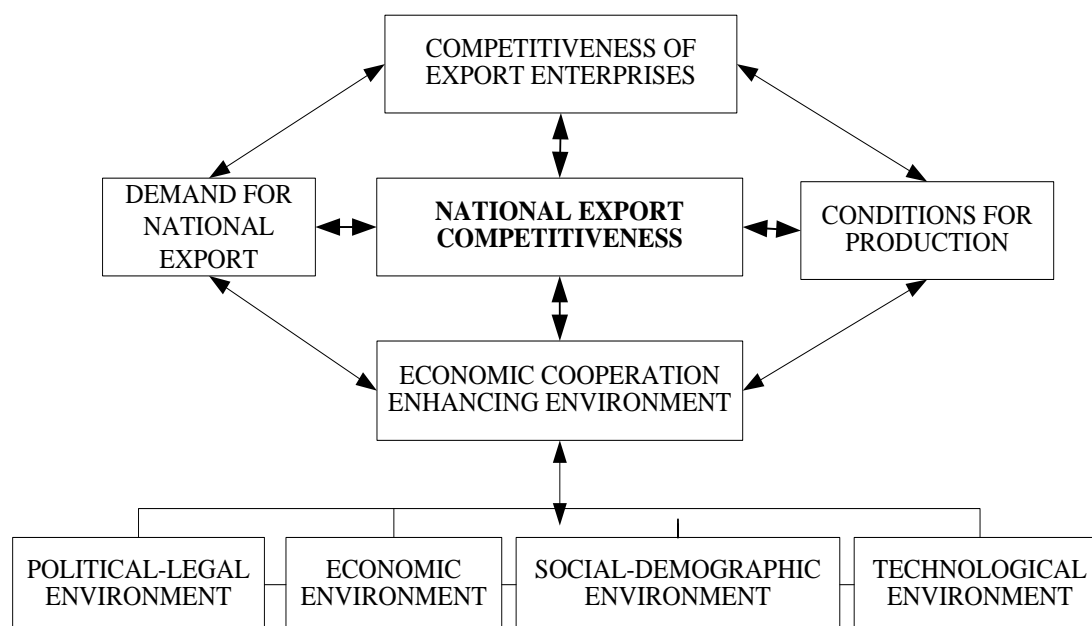


Figure 1. Model of measurement of the national export competitiveness

The authors of this article admit that such a multi-aspect problem as export competitiveness could be more comprehensively considered if quantitative and qualitative analysis methods were combined. Aiming to contribute to the development of basic methodologies of measurement of competitiveness, both quantitative and qualitative methods are included in Table 2. Alongside with the fact that a more comprehensive analysis of each factor of the Baltic States export competitiveness is a significant precondition of better analysis of factors effect, the research

showed that the qualitative measurement data are more essential to formation of export-related political decisions and strategies; whereas for the measurement of export competitiveness and drawing comparisons with other countries, quantitative indicators are sufficient, which reduces measurement-related costs and time consumption. Measurement of the Baltic States competitiveness by qualitative indicators could be the object of further analysis.

Alongside with the fact that measurement of the national export competitiveness could employ different quantitative indicators, it should be emphasized that application of multiple indicators for the measurement of the Baltic States export competitiveness is limited by problems related to availability of essential statistics data (especially, updated and most recent data). According to this, in Table 2 the most essential quantitative indicators, able to reflect and compare export competitiveness of the Baltic States are included.

The analysis of factors of export competitiveness revealed, that many researchers, who highlighted various different factors of export competitiveness, do not determine the relations among them. Vilpisauskas (2004) explained this situation by the fact, that when the concept of export competitiveness is concretized and the indicators of factors are specified, it turns out, that "everything determine everything" and that analysis is too complicated. Martin (2005) determined the relationship between the total competitiveness and the factors of competitiveness by the model of input-output. At the same time, he stressed, that this attitude provokes more confusion. The author asked the question: the region is competitive because of high economic-social indicators or these indicators are high because of competitive region. The authors of the article analyze the competitiveness of the export in the view of self-reinforcing process; i. e. input becomes output (result), which later becomes a new input for another

output of next period. In any given period, the country has a mix of factors of export competitiveness, which is inherited from the previous period and at present period, the national export competitiveness is affected by new internal and external factors of export competitiveness. The interaction of these factors creates the total national export competitiveness of present period. This total competitiveness is used as the background under the affect of new factors, for increase of the total export competitiveness of the next period.

The detailed analysis of export competitiveness requires systematic consideration of inter-related factors, which forms an overall export competitiveness. According to the complicated relationships among factors, in the Table 2 different groups of factors include the indicators, which directly describe not only the factors of export competitiveness, but also the main result of national export.

Taking into consideration the established model of measurement of the national export competitiveness and distinguished basic quantitative indicators of the Baltic States export competitiveness, the Baltic States export competitiveness index (BaltECI) is drawn up as the sum of factors and indicators of demand for national export, conditions for production, competitiveness of exporting enterprises, economic cooperation enhancing environment. BaltECI consists of 17 indicators, grouped into 7 groups.

Table 2

**Methodological principles of quantitative and qualitative measurement of the Baltic States export competitiveness**

<b>Group of factors</b>	<b>Quantitative measurement indices</b> (for comparing different indicators or calculation the index)	<b>Qualitative measurement principles</b> (by applying the questionnaire/expert measurement)
Demand for national export	1. Volume of exports of goods, mln. Eur. 2. Volume of exports of goods, percent from GDP. 3. Change of exports of goods/per year, by prices of that time, percent 4. Balance of export-import of goods, mln. Eur.	1. Ability of export enterprises to ensure the existing demand. 2. Investigations conducted by export enterprises for identification of consumer demands. 3. Consumers' trust in goods, characteristics and quality of goods exported by enterprises.
Conditions for production	5. Direct foreign investment per capita, mln. Eur. 6. Investment in tangible fixed assets per capita, mln. Eur. 7. Number of economic entities in operation per 1000 population.	4. Possibilities of close cooperation between business, science and government sectors. 5. Sufficiency of information essential to enterprises in potential/existing export markets. 6. Ability of enterprises to benefit from economic cooperation relations established by the country government for export development.
Competitiveness of export enterprises	8. Revenue from export of goods produced in the country per capita, in Eur. 9. Growth of revenue from export of goods produced in the country per capita, percent.	7. Adequacy of actions applied by enterprises on increasing exports to the changing environment. 8. Ability of enterprises to benefit from the export promotion measures of the state.
Economic cooperation enhancing environment		
Political-legal environment	10. Size of taxes on profit applied to business, percent. 11. The employers' taxes paid per one established working position, percent. 12. The average price of diesel fuel, in Eur.	9. Citizens and enterprises' trust in the government's political decisions. 10. Enterprises' trust in the government policy of export. 11. Efficiency of policy and measures of export promotion. 12. Level of the government bureaucracy and corruption.
Economic environment	13. Gross domestic product (GDP), mln. Eur. 14. Average annual changes within consumption prices, percent.	13. Macroeconomic stability of the country. 14. Development and efficiency of infrastructure for promotion of economic cooperation. 15. Level of the country economic openness.
Social-demographic environment	15. Employment rate, percent. 16. Unemployment rate, percent.	16. Citizens' priorities attached to the national/exported production. 17. Citizens' satisfaction with the quality of life in the country.
Technological environment	17. Expenditure on R&D against GDP, percent.	18. Consumers' attitude towards innovations and ability of enterprises to implement them. 19. Attitude of exporting enterprises towards development of innovations and research.

The empirical analysis of the BaltECI applicability involves long-term data (6 years) (2005-2010) of Lithuania, Latvia and Estonia. Each indicator in the additive function of BaltECI is assigned by the same weight coefficient.

Statistics data are normalized by applying the distance from the minimal to maximal value method. The results are processed with the help of Microsoft Excel and SPSS programs.

### Results of empirical application of BaltECI for measurement of export competitiveness of the Baltic States

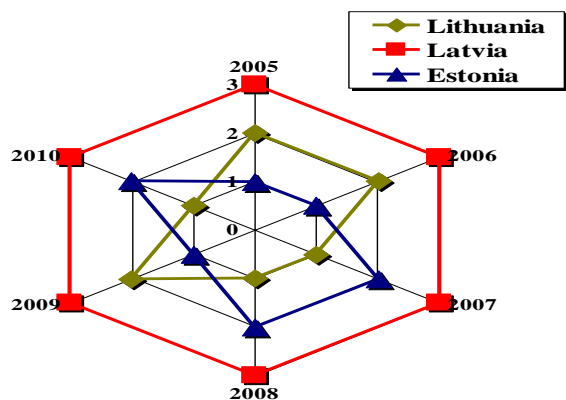
The calculated BaltECI and ranks of Lithuania, Latvia and Estonia within the period of 2005-2010 are provided in Table 3 and Figure 2.

Table 3

**BaltECI of the Baltic States within the period 2005-2010**

	2005	2006	2007	2008	2009	2010
<b>Lithuania</b>	4,076	4,014	4,176	4,675	4,500	4,120
Latvia	3,765	3,020	2,955	3,765	3,950	3,723
Estonia	4,675	4,990	4,025	4,006	4,624	4,075

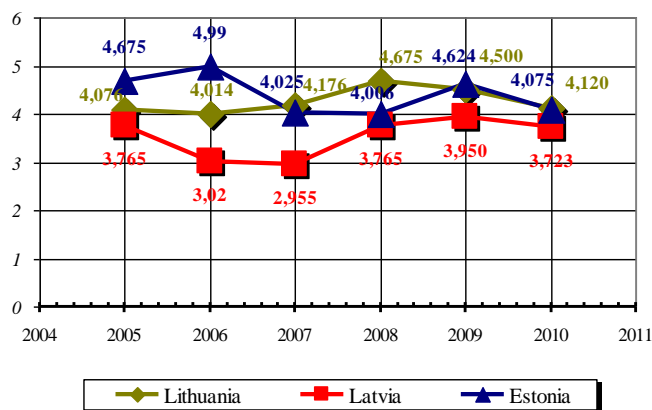
According to BaltECI it is possible to presume that in 2010 Lithuania export was most competitive among the Baltic States. The main Lithuania's export rival is Estonia which was leading this position in 2009, 2006 and 2005. Among the Baltic States the lowest export competitiveness level is characteristic to Latvia. During the whole analyzed period this country occupied the 3<sup>rd</sup> place by rank.



**Figure 2.** Ranks of the Baltic States export competitiveness

Although Lithuania was in the leading position among the Baltic States within 2007-2008 and in 2010, Estonia was the leader during other periods. These facts prove that export competitiveness positions of Lithuania and Estonia by rank are not significantly dominant from the ever changing aspect (exchanging the leading positions). As results of analysis by rank are not precise, because they do not reveal differences of the BaltECI values among the Baltic States, further it is purposeful to compare BaltECI results of Lithuania, Latvia and Estonia (see Figure 3).

It is possible to presume that during the period of Lithuania's leadership (2007-2008, 2010), the difference between its BaltECI and Estonia's was insignificant. This proves that even at that time Lithuania's leadership was not very distinctly ahead of Estonia. This also proves that Lithuania's leadership in export competitiveness was not strong enough. In 2009 export of Estonia was most competitive among the Baltic States. This position was determined by Estonia's better preparedness for economic crisis; although all Baltic States were significantly affected by after-effects of economic crises.



**Figure 3.** The Baltic States BaltECI results in 2005-2010

This is also proved by tendencies in measurement of export competitiveness by separate indicators. In 2009 the total FDI volume as well as FDI per capita exceeded the respective indicators of Lithuania and Latvia. Besides, during this period in Estonia the citizens employment level, in comparison with other Baltic States, was higher, unemployment level - lower, the average annual changes within consumer prices were the smallest - 0.2 percent. Besides, the volume of annual remuneration (gross) and the average retirement pension were biggest; whereas the decrease in the total number of citizens was smallest. In 2009 in Estonia exports of goods declined least (-13,94 percent), whereas in Lithuania such a decline was equal to -17,90 percent, in Latvia - 19,18 percent. Besides, in 2009 Estonia gained the biggest income from exports of goods per capita. All these factors determined Estonia's leading position among the Baltic States in 2009. Recently a positive tendency of Lithuania regaining leadership in exports is observed.

Measurement of national exports competitiveness by BaltECI allowed to distinguish tendencies of Lithuanian exports competitiveness, in comparison with other Baltic States:

- By the size of FDI volume Estonia remained the dominating country among other Baltic States, and this tendency remained unchanged during the whole measurement period (2005-2010). In comparison with Estonia, a smaller attraction of foreign investors limits Lithuania's possibilities with regard to foreign investment in operational activities of exporting enterprises. The size of a smaller FDI volume per capita reflects the tendency of decreasing attraction of Lithuania with regard to foreign investment in the Baltic States region.



- The decreasing level of citizens' employment in all Baltic States shows that the countries are still facing economic challenges which limit employment possibilities of major part of citizens.

- Increasing unemployment within the Baltic States proves that the countries are still experiencing after-effects of the economic crisis. Exporting enterprises are trying to save at the expense of manpower; thus, only their major development could increase the demand on manpower, providing possibilities to reduce unemployment in the country.

- Within the period of 2005-2010 citizens of Lithuania received lower average gross monthly earnings per capita and pensioners - smaller average pensions than citizens of other Baltic States. This shows a smaller purchasing power of citizens of Lithuania, in comparison with Latvia and Estonia.

- The recent tendency of population decline is characteristic to all Baltic countries. The decreasing number of citizens shows shrinkage of local markets, decrease of the total demand, and loss of potential manpower (this manpower could work in exporting enterprises).

- In 2005-2010 the biggest revenues from exports of goods per capita were characteristic to Estonia; which, in its turn, reflects the country's ability to develop exports in more efficient way than other Baltic States (including Lithuania).

### Strategic proposals for increase of competitiveness of Lithuania's exports

Increase in competitiveness of Lithuania's exports, focused on gaining a more significant advantage over Latvia and Estonia, is a complicated process. It requires comprehensive analysis of scientific literature and practically used and performed empirical studies. In this article only those strategic proposals for increase of Lithuania's exports are included, whose demand was established after application of BaltECI and identification the tendencies of competitiveness of Lithuania's exports, in comparison with Latvia and Estonia. Strategic proposals are provided exclusively on the basis of results of empirical analysis, not on analysis of scientific literature. The mentioned analysis could be the object of further investigation. Provision of strategic proposals is based on the approach that this process should be considered from the systematic perspective (see Table 5).

Table 5

Strategic proposals for increase of competitiveness of Lithuania's exports

Strategic proposal	Description of strategic proposals	Measures of implementation of strategic proposals
<b>Continuous measurement of competitiveness of Lithuania's and other main competitive countries' exports</b>	Increase in competitiveness of Lithuania's exports requests <i>strategic purposefulness</i> . Aiming to select <b>the country's export development strategy</b> , adequate to macro-environment conditions, it is essential to conduct continuous survey of manifestations of the global macro-environment conditions, the present export competitiveness of the country and competitors as well as their export competitiveness development strategies. Aiming to comprehensively assess the potential of Lithuanian export competitiveness and possibilities of its increase, it is essential to survey markets of both the Baltic States and other foreign countries (more distant from Lithuania). <b>The adequate country's export development strategy</b> should be formed by considering the measurement results.	<ul style="list-style-type: none"> <li>- Preparation of methods of continuous <b>measurement and surveillance</b> of the export factors, able to assess the potential of Lithuanian export competitiveness. This proposal could be implemented by applying the <i>BaltECI</i>.</li> <li>- <i>Continuous provision of information</i> on the measurement and surveillance results <b>to the subjects concerned</b> (representatives of the government, research and business sectors)</li> <li>- <i>Continuous public dissemination of measurement results at the local and international levels.</i></li> </ul>

When striving for leadership within the Baltic States region, it is essential for Lithuania to maintain competitiveness with regard to exports. Achieving this purpose requests selection and implementation of decisions related to the increase in Lithuania's export competitiveness; they were less meaningful if not based on particular measurement results. The provided strategic proposal for the increase in Lithuania's export competitiveness is just a methodological basis; however, its practical application in forming the country's exports-related policy and increasing its efficiency could allow purposefully and timely considering the present situation and forming export-related policy.

### Conclusions

1. Export competitiveness is related to the country's ability to compete within export markets, maintain economic growth and employment. The demand for the increase in export competitiveness mostly is based on the necessity to consider the globalization challenges, affecting

the competitiveness, and apply adequate decisions regarding to the increase of export competitiveness.

2. The researches proved, that the concepts of export competitiveness and national competitiveness are closely interrelated, especially when considering these concepts from the international perspective. Export competitiveness is identified as the reflection of national competitiveness.

This relationship is particularly characteristic to the countries which are too small to consume the local production, whose economy has insufficient recourses to satisfy the consumer and investment demand within the country, thus are urged to export products and use the income received for financing import and other operational activities as well as develop the country's total economy. The Baltic States (Lithuania, Latvia and Estonia) are assigned to this type of countries.

3. The researches proved that the same tools, methods and viewpoints of analysis of national (regional) competitiveness can be adapted to the analysis of the export competitiveness.

4. Analysis of scientific literature shows that export competitiveness can be described by various factors expressed by quantitative and qualitative indicators. This justifies the impact of the factor selection technique to the results of competitiveness measurement as well as the necessity of explicit and methodologically based background of measurement.

5. When measuring the national export competitiveness it is recommendable to analyze the following groups of factors - demand for national export, conditions for production, competitiveness of exporting enterprises, economic cooperation enhancing environment, which consists of political-legal, economic, social-demographic and technological environment.

6. The researches proved that definition of export competitiveness by one or several single indicators is insufficient for the complex view of national export competitiveness. Researches proved that the measurement by index helps to solve the problem of complex measurement of export competitiveness.

7. The Baltic States export competitiveness index (BaltECI) is considered as the sum of factors and indicators of demand for national export, conditions for production, competitiveness of exporting enterprises, economic cooperation enhancing environment consisting of political-legal, economic, social-demographic and technological environment. BaltECI consists of 17 indicators, grouped into 7 groups.

8. The empirical application of BaltECI proved that within the Baltic States, Lithuania does not occupy a strong leading position related to export competitiveness. Though Estonia is the main rival of Lithuania in exports, its competitive position becomes stronger every year. For Lithuanian politicians, entrepreneurs, economists and scientists it will be useful to analyze the good practices of this country regarding export development enhancing policy and implemented measures and some of them to adapt to Lithuanian case. Among the Baltic States the lowest export competitiveness level is characteristic to Latvia.

9. The Baltic States are similar from the geographic, demographic, political, social and psychological perspectives; thus, there is a possibility to compare export competitiveness of these countries by applying the same method of measurement of export competitiveness. The index of the Baltic States export competitiveness, suggested in this article, can be applied to measurement of export competitiveness of the single country or for analysis of the export competitiveness of the Baltic States as a whole region.

10. The increase in Lithuania's export competitiveness requests strategic purposefulness and timeliness. It is essential to conduct continuous survey on manifestations of the globalization conditions, the present national export competitiveness in compare to the main competitors as well as their export competitiveness development strategies. Aiming to comprehensively measure the potential of Lithuania's export competitiveness and possibilities of its increase, it is essential to survey markets of both the Baltic States and other foreign countries (more distant from Lithuania) and learn from them. The adequate

country's export development strategy should be formed by considering the measurement results.

11. The empirical application of BaltECI proved that it is an appropriate tool of continuous survey of manifestations of the globalization conditions and the identification of the position of the present national export competitiveness in compare with the main competitors and in the period of time. This index could also be applied as the tool of assessment of the efficiency and timeliness of country's export development strategy, also as the tool of the publicity of the openness of national economy and investment-related attraction.

12. The empirical application of BaltECI allows identifying the main advantages and disadvantages of new created index. The main advantages of using BaltECI are connected with:

- BaltECI allows treating the national export competitiveness in a complex way, but in one value.

- BaltECI allows analyzing the competitiveness of national export at different layers: according to total competitiveness, groups of competitive factors or definite factors.

- BaltECI shows the change of export competitiveness (in the complex view) in a period of time and among other competitors.

- BaltECI identifies the variation of the change of export competitiveness and may warn about possible future tendencies. Even if the position among the other competitors (ranks) doesn't change, the calculated index can show the change of export competitiveness and warn about possible future tendencies, if nothing will be done.

- Despite the fact, that BaltECI includes only the factors of competitiveness, which can be expressed in the quantitative indicators, the results of qualitative indicators can be included in the determination of weight coefficients.

The main disadvantages of using BaltECI are connected with the following aspects:

- BaltECI is a static way of measurement of export competitiveness.

- BaltECI does not explain the impact of the change of one or several factors to total competitiveness of national export.

13. The research performed by the authors identified the possible future research developments:

- determination of the level of export competitiveness, i.e., to interlink the value of BaltECI with the competitiveness level; This will allow to cluster the countries, used in the research, by the same competitiveness level and to compare the results among the real competitors (not only with the most and less competitive countries). Also, the identification of the level of export competitiveness will facilitate the analysis and all countries, analyzed in the research, will know its competitiveness level and the nearest competitors.

- analysis of export competitiveness of the countries of European Union. This analysis will extend the scope of export competitiveness of Lithuania under the view of all European Union.

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#### **Baltijos šalių eksporto konkurencingumo vertinimas indeksu**

Santrauka

Mokslinėje literatūroje eksporto konkurencingumo problemos dažniausiai nagrinėjamos mokslininkų arba remiantis šalių pavyzdžiu, kurios yra per mažos suvartoti šalyje sukurtai produkcijai ir kurių ekonomika neturi užtektinai išteklių, kad galėtų patenkinti vartojimo bei investicijų poreikius šalies viduje. Jos turi produktus eksportuoti, nes tik taip gautomis pajamomis gali finansuoti importą ir kitas šalies viduje vykdomas veiklas bei plėtoti visą šalies ekonomiką. Tačiau norint vykdyti tarptautinę prekybą šalyje, tam turi būti sudarytos sąlygos, o gamintojai ir paslaugų tiekėjai turi pasiūlyti išorės rinkoms tokių produktų ir paslaugų, kurie būtų konkurencingi ir paklausūs, t.y. šalies eksportas turi būti konkurencingas. Žinodami šių šalių problemas mokslininkai, politikai ir verslininkai nagrinėja eksporto tendencijas ir globalizacijos įtaką joms, identifikuoja problemas su kuriomis praktiškai susiduria eksportuotojai ir siūlo priemones joms mažinti. Yra kuriamos eksportą skatinančios strategijos ir priemonės, vertinamas jų efektyvumas, taip pat įvairiais būdais siekiama įvertinti patį eksporto konkurencingumą. Šalių eksporto problematikos teoriniai ir praktiniai aspektai yra išsamiai nagrinėti tiek lietuvių, tiek ir užsienio autorių darbuose. Tačiau eksporto konkurencingumo mokslinę analizę sunkina tai, kad stokojama vienodos mokslininkų nuostatos dėl pačios konkurencingumo sampratos, neišklaidos akademinės nuomonės kalbant apie šalies konkurencingumą tarptautiniu lygmeniu ir eksporto sutapatinimą bei eksporto plėtrą lemiančių veiksnių gausos, daromo poveikio eksporto plėtrai sudėtingumo.

Mokslinėje literatūroje pasigendama darbų, kuriuose būtų išsamiai analizuojamas šalių eksporto konkurencingumo vertinimo indeksu išskirtinumas ir pateikiamas aiškus rezultatų interpretavimas. Pasaulyje plačiai žinomas ir taikomas *Pasaulio ekonomikos forumo* konkurencingumo indeksas ir *Tarptautinio vadybos plėtros instituto pasaulio konkurencingumo indeksas*. Šie indeksai daugiausia skirti vertinti bendrą šalių konkurencingumą, o tai riboja jų pritaikymo galimybes vertinant tik eksporto konkurencingumą. Lietuvių autorių darbuose, pritaikant kitų mokslininkų sukurtus metodus, taip pat pateikiamos pirmosios iniciatyvos vertinti eksporto konkurencingumą indeksu. Tačiau tai daugiau nukreipta analizuojant šalies eksporto specializacijas arba yra naudojamas gan mažas skaičius rodiklių, sudarančių indeksą. Tai taip pat sunkina aiškinantis priežastinius-pasekminius ryšius tarp veiksnių, lemiančių eksporto konkurencingumą ir nustatant tikslesnius eksporto konkurencingumo pranašumus. Pasigendama metodologiškai pagrįsto ir praktiškai naudojamo šalies eksporto konkurencingumo indekso, leidžiančio vertinti šalies eksporto konkurencingumą ir palyginti jį su kitomis šalimis. Kompleksinio eksporto konkurencingumo vertinimo priemonės nebuvimas tampa viena iš kliūčių, trukdančių įvertinti šalies eksporto konkurencingumą ir formuoti efektyvias eksporto plėtrą skatinančias strategijas ir įgyvendinimo priemones.

*Mokslinio darbo tikslas* – sukurti ir praktiškai pritaikyti Baltijos šalių eksporto konkurencingumo indeksą ir pateikti strateginius siūlymus Lietuvos eksporto konkurencingumui didinti.

*Tyrimo metodai*: sisteminė, lyginamoji ir loginė mokslinės literatūros analizė; empirinis tyrimas atliktas naudojant išorinių antrinių duomenų sisteminę analizę.

Tyrimai parodė, kad dėl žmogiškojo kapitalo, investicijų, naujų technologijų, eksporto rinkų, turistų, šalies ir tarptautinių projektų konkuruoja ne tik individai, įmonės, bet ir miestai, regionai, šalys.

Šiame straipsnyje šalies konkurencingumas apibrėžiamas kaip šalyje įsikūrusių individų, įmonių, pramonės šakų (ir joms tapti/išlikti konkurencingomis sukuriamų sąlygų) kompleksas. Konkurencingų šalių ekonomika pasižymi atvirumu pasaulinei konkurencijai, integracijai į tarptautinius prekių, paslaugų, kapitalo, žmonių ir idėjų judėjimo tinklus, taip pat viešojo sektoriaus teikiamų paslaugų kokybei.

Mokslinėje literatūroje tarptautinis šalies konkurencingumas dažnai sutapatinamas su eksportu. Eksporto rezultatai, jų pokyčiai geriausiai atskleidžia šalies įmonių gebėjimus konkuruoti atviros pasaulinės ekonomikos sąlygomis ir parodo šalyje sukurtas sąlygas eksporto plėtrai. Šiame straipsnyje šalies eksporto konkurencingumas traktuojamas kaip šalies tarptautinio konkurencingumo atspindys.

Tyrimai parodė, kad mokslinėje literatūroje stokojama specializuotų eksporto konkurencingumo vertinimo modelių. Daugiausia žinomi konkurencingumo vertinimo modeliai pasižymi skirtingais vertinimo parametrais, kiekiais ar jų deriniais. Jie skirti nagrinėti bendrą šalies (regiono), o ne eksporto konkurencingumą. Tačiau šiame straipsnyje pripažįstama šių modelių didelė įtaka šalies eksporto konkurencingumo vertinimo procesui ir eksporto konkurencingumo vertinimo metodologinių pagrindų kūrimui.

Mokslinėje literatūroje pateikiami įvairūs šalies (regiono) konkurencingumo vertinimo metodai, kurie gali būti taikomi vertinant ir eksporto konkurencingumą. Analizuojami ir lyginami keli konkurencingumą apibūdinantys rodikliai, skaičiuojamas konkurencingumo indeksas, kiekybinis ir kokybinis aspektu nagrinėjami ne tik konkurencingumą lemiantys veiksniai, bet ir aplinkos, darančios jiems įtaką. Sujungiamos skirtingos konkurencingumo raiškos sritys – ekonominė, finansinė, socialinė, politinė ir institucinė į visumą, kuri vėliau kompleksiskai analizuojama. Pabrėžtina, kad akademinėje visuomenėje nėra bendros, vienodos nuostatos dėl efektyviausios konkurencingumo vertinimo metodikos. Skiriasi ne tik mokslininkų požiūriai dėl metodologinių konkurencingumo vertinimo aspektų, tačiau ir dėl veiksmų, sąlygojančių eksporto konkurencingumą. Tai tik pagrindžia teiginį, kad eksporto konkurencingumo vertinimas yra gana komplikotas procesas, reikalaujantis ne tik tinkamos metodikos ir vertinimo kriterijų (rodiklių) sistemos parinkimo ir nustatymo, bet ir papildomų žmogiškųjų, materialinių ir laiko išteklių.

Vienas iš dažnai praktikoje taikomų konkurencingumo kiekybinių vertinimo metodų, padedantis išspręsti nagrinėjamus probleminius dalykus yra vertinimas *indeksu*.

Siekiant įvertinti Baltijos šalių eksporto konkurencingumą, straipsnyje pateikiamas šalies eksporto konkurencingumo vertinimo modelis, kuris, kaip metodologinis pagrindas, panaudotas kuriant Baltijos šalių eksporto konkurencingumo indeksą. Baltijos šalių eksporto konkurencingumo indeksas (BaltEKI) apibrėžiamas kaip visuma veiksmų ir rodiklių, kuriuos sudaro eksporto įmonių konkurencingumą, ekonominį bendradarbiavimą skatinančios aplinkos, susidedančios iš politinės-teisinės, ekonominės, socialinės-demografinės ir technologinės aplinkos. BaltEKI susideda iš 17 rodiklių, sugrupuotų į 7 grupes. Empiriniame BaltEKI taikomumo tyrime naudoti Lietuvos, Latvijos ir Estijos ilgalaikio laikotarpio (6 metų) duomenys (2005-2010 m.). Visiems rodikliams tiesinėje lygtyje suteikiamas vienodas svorio koeficientas. Statistiniai duomenys normuoti naudojant atstumo nuo minimalios iki maksimalios reikšmės metodą.

Remiantis BaltEKI duomenimis galima teigti, kad pagrindinis eksporto konkurentas Lietuvai yra Estija. Tuo laikotarpiu, kai Lietuva užėmė pirmąją poziciją (2007-2008, 2010 m.), jos BaltEKI skirtumas nuo Estijos ir atitrūkimas buvo nežymus. Tai rodo, kad Lietuva neturi tvirtų eksporto konkurencingumo lyderės pozicijų. Tarp Baltijos šalių mažiausiu eksporto konkurencingumu pasižymi Latvija. Ši šalis per visą nagrinėjamą laikotarpį (2005-2010 m.) užėmė 3-ąją vietą.

Lietuvos eksporto konkurencingumo didinimas siekiant Lietuvai įgyti didesnę konkurencinį pranašumą Estijos ir Latvijos atžvilgiu yra sudėtingas procesas, reikalaujantis ne tik išsamios mokslinės literatūrinės analizės, tačiau ir įvairių empirinių tyrimų. Rekomenduojamos šios priemonės Lietuvos eksporto konkurencingumui didinti: a) metodikos, galinčios įvertinti Lietuvos eksporto konkurencingumo potencialą, parengimas; b) nuolatinis suinteresuotųjų pusių (vyriausybės, mokslininkų ir verslo sektoriaus atstovų) supažindinimas su vertinimo ir stebėjimo rezultatais; c) nuolatinis vertinimo rezultatų viešinimas šalies ir tarptautiniu mastu.

2005 – 2010 metų Baltijos šalių eksporto konkurencingumo įvertinimas patvirtino BaltEKI kaip tinkamą, nesikeičiantį šalies eksporto konkurencingumo vertinimo ir palyginimo su konkurentais metodą bei eksporto plėtrą skatinančios politikos efektyvumo vertinimo priemonę. Šis indeksas taip pat galėtų būti taikomas kaip šalies ekonomikos atvirumo ir investicinio patrauklumo viešinimo priemonė.

Raktažodžiai: *eksporto konkurencingumas, eksporto konkurencingumo veiksniai ir rodikliai, eksporto konkurencingumo indeksas, Baltijos šalių eksportas.*

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