National Business Cultures as a System-forming Factor of the “Lublin Triangle”

Beata Glinkowska-Krauze
Ph.D., Associate Professor at the University of Lodz, Faculty of Management, University of Lodz, Lodz, Poland, e-mail: beata.glinkowska@uni.lodz.pl

Viacheslav Chebotarov
Sc.D., Professor, Head of the Department of Economics, Marketing and Entrepreneurship of the Luhansk Taras Shevchenko National University Starobilsk, Ukraine, e-mail: vena.lnu@gmail.com

Iegor Chebotarov
Ph.D., Associate Professor, the Department of Economics, Marketing and Entrepreneurship of the Luhansk Taras Shevchenko National University Starobilsk, Ukraine, e-mail: iegor.chebotarov@gmail.com

Abstract

Considering the evolution of the scientific knowledge on the topic the authors define "national business cultures" as a complex interdisciplinary basic phenomenon of modern comparative studies and international entrepreneurship. Using the accepted in the world comparative studies methodology – indicative parameters of national business cultures and considering the authors' corresponding empirical developments a systematic comparative analysis of the national business cultures of the founding countries of the new cooperation platform in Central and Eastern Europe – the “Lublin Triangle” (Poland, Lithuania, Ukraine) – is carried out. The close similarity and wide complementarity of the national business cultures of these countries are revealed. This is largely predetermined not only by their common, centuries-old history, but also

1 The article was prepared as a part of a joint Polish-Ukrainian project "National business cultures of Poland and Ukraine: improving the scientific and practical foundations of cooperation in European and world markets" with grant support from the National Agency for Scientific Exchanges of Poland (NAWA – Narodowa Agencja Wymiany Akademickiej) and the Ministry of Education and Science of Ukraine.
by a number of other institutional and economic factors, as well as natural conditions. The priority sectors and spheres of integration of the three countries are determined both at the interstate level and at the level of the interaction of their business structures. Implementing this approach will ensure an increase in the competitive positions of Poland, Lithuania, and Ukraine and, as a result, the Lublin Triangle as a whole, in the system of the modern international division of labor. Based on the similarity and complementarity of the national business cultures, a group of other countries of Central and Eastern Europe (Latvia, Estonia, Slovakia, Romania, and Bulgaria) was selected. Under certain conditions, they could also become members of the Lublin Triangle, which would further strengthen and develop the European Union.

**Keywords:** national business cultures, comparative analysis, Lublin Triangle, Central and Eastern Europe, Poland, Lithuania, Ukraine, entrepreneurship, international integration, European Union

**JEL:** F23, O57

### Introduction

At the beginning of the 21st century, serious economic, social, and political problems emerged in the development of the global economy. Unfortunately, they worsened significantly at the end of the 2010s and the beginning of the 2020s. Many countries have not been able to overcome the recession after the global financial crisis of 2008–2009, and on a broader, institutional level, anti-globalization manifestations have increased significantly. The content of such problems is predetermined by several other aggravating phenomena, processes, and trends. The main ones are the following.

There are open contradictions in some countries’ approaches to and assessments of the forms and mechanisms for implementing the European Union’s (EU) common economic policy. This is perhaps best exemplified in the long and very painful Brexit, with the United Kingdom leaving the EU. As a result of war and general instability in the MENA region, the huge influx of migrants became a catalyst for centrifugal tendencies in several EU countries. In parallel with this, and in some cases even before that, military conflicts took place in Transnistria (Moldova), Abkhazia and South Ossetia (Georgia), and Donbas (Ukraine). As a result, long-term contradictions have formed between the major players of modern world politics, and those are unclear and have a delayed nature of their manifestations.

In early 2020, the COVID–2019 pandemic began to spread rapidly, against the background of the insufficiently effective regulatory policy of both the World Health Organization and the most developed countries of the world in general. The inability of OPEC and the OPEC+ Treaty to achieve its main objective, i.e., to regulate the oil market by means of production, was clearly manifested, which led to a drop in oil prices and aggravated the wave of the new economic decline. This mirrored what had already happened in the global gas market. In total, COVID–19 and the collapse of prices
in the world energy markets had consequently led to uncontrollable tendencies in other commodity markets, in the world financial and stock markets; and in general – in the system of international economics and politics.

The combination of such negative economic, institutional, and natural manifestations is nothing more than a systemic social crisis. Along with this, there are grounds to assume that such tendencies will intensify further (at least in the medium-term perspective) due to the predicted additional negative political, scientific, technical, and environmental factors.

Against this background, the problematics of substantiation of the formation of new alliances and associations of states as a complementary foundation of modern society has got significantly actualized. At the same time, we are not talking about diminishing the activities of effectively functioning international integration associations.

Therefore, the establishment in June 2020 of a new platform for cooperation in Central and Eastern Europe between Poland, Lithuania, and Ukraine – the “Lublin Triangle” – is quite logical. It is a throwback to the Union of Lublin of 1569, which founded the federal state of the Kingdom of Poland and the Grand Duchy of Lithuania (which at that time included a major part of modern Ukraine), better known as the Polish-Lithuanian Commonwealth. For more than two centuries, up to the partitions of the Commonwealth in 1772–1795, it was one of the mightiest powers in Europe.

Such new associations can logically be built only on the basis of stable, mutually beneficial processes, at least within their framework. However, the formation of such processes is possible only if they rely on a set of common, fundamental economic, institutional, and natural foundations inherent in their states. Contemporary interdisciplinary studies indicate that one of these few basic foundations is represented in such a complex phenomenon of the theory and practice of economic comparative studies and international entrepreneurship as national business cultures.

The experience of the interwar period allows us to re-evaluate a number of common characteristics inherent in Poland, Lithuania, and Ukraine:
- they have deep institutional (historical and psychological) roots;
- in terms of their spatial location they are identified by subregional (primarily intra-continental) nature;
- they have common borders and an advantageous geographical location.

Thus, a complex scientific and practical problem arises in understanding the content of the national business cultures when assessing this interdisciplinary phenomenon as a stimulating (or constraining) factor in terms of cooperation between these countries within the framework of the newly created Lublin Triangle.
Review of the literature on the research topic

The foundations of scientific knowledge of the theory of national business cultures were laid by the well-known Dutch scientists and practitioner managers Geert Hofstede (1984) and Fons Trompenaars (Hampden-Turner and Trompenaars 2011). Significantly, most of their research was practically oriented towards improving managerial practices. Founded in 1980 and 1985, respectively, by Hofstede, the Institute for Research on Intercultural Cooperation and Hofstede Insights were the world’s first research centers on this issue (not counting the Foreign Service Institute, created in the United States in 1947 under the patronage of the State Department for the training and reprofiling of high-level diplomats and businessmen). Based on the synthesis of Hofstede’s and Trompenaars’ approaches, they substantiated the indicative parameters of national business cultures, including “Power distance,” “Individualism,” “Masculinity,” “Uncertainty avoidance,” “Long-term orientation,” and “Indulgence.” (Hofstede Insights n.d., National culture).

These indicative parameters are used to analyze and assess the national business cultures of individual countries or groups of countries. Today, Hofstede Insights is the most authoritative organization in its field, conducting public research of national business cultures. They use the techniques proposed by Hofstede and Trompenaars, i.e., an assessment of the extreme values of the indicative parameters from their lowest to the highest, with a quantitative expression for each country (from 0 to 100 points).

In the history of world comparative studies, notable proponents of the managerial direction of investigating national business cultures include Minkov (Minkov and Hofstede 2014), Erdman (2017), and Rozkwitalska (2018).

In the 1980s, in the development of issues of national business cultures, in addition to managerial aspects, a new direction emerged, communication. It represents an analysis of aspects of the communicative behavior and interaction of people from different countries (and/or carriers of different cultures). This direction is associated with the famous scientist and practitioner from England, Richard Lewis (2019). Notable followers of Lewis include Deutscher (2010) and Katan (2014).

In the 1990s and 2000s marketing aspects of national business cultures studies drew up the prevailing topicality. This concept involved not only the widely understood problematics of international business itself, but also the synthesis of the theory and practice of history, sociology and cultural studies and even some aspects of psychoanalysis. The most reasoned marketing approach in the study of national business cultures was presented by Clotaire Rapaille (2019), followed by Cohen (2005) and de Mooij (2015).

In general, in the most advanced countries of the world at the beginning of the 21st century, the intensity of the development of issues of national business cultures decreased. Along with this, the issue became of greater importance in the ex-socialist countries, which had been really implementing the European integration policy.
Within the complex conception in Poland and Ukraine these aspects (in the context of implementing management practices) developed most (Glinkowska-Krauze, Kaczmarek, and Chebotarov 2020), and in Lithuania – in the context of considering business behavior and business values of the Lithuanians (Rutkovska, Smetona, and Smetoniené 2017).

In order to determine possible profiles of future managers, issues of national business cultures are raised in joint Polish-Ukrainian developments (Glinkowska and Chebotarov 2018; 2019). The first comparative studies of the national business cultures of the countries of Central and Eastern Europe appeared on the example of Germany, France, Poland, Hungary, and Ukraine (Glinkowska-Krauze, Chebotarov, and Chebotarov 2020). Recently, the first comparative study of the national business cultures of Poland, Lithuania, Belarus, and Ukraine was carried out.

The creation of the Lublin Triangle confirms the need for comparative studies of the national business cultures of Poland, Lithuania, and Ukraine. However, it also raises a number of complex questions about substantiating specific areas and forms of cooperation between the countries, as well as the comprehensive development of the Lublin Triangle.

The purpose of the article is to conduct a comparative, interdisciplinary analysis of the national business cultures of Poland, Lithuania, and Ukraine in the context of strengthening the scientific and practical argumentation for the creation and expansion of the Lublin Triangle format by involving other countries of Central and Eastern Europe.

Methodology, methods, and empirical base of the research

In this study, the methods of the unity of analysis and synthesis (when studying the parameters of the national business cultures of Poland, Lithuania, and Ukraine), the unity of the logical and the historical (in the context of taking into account the institutional prerequisites for creating the Lublin Triangle), and the grouping method and comparative analysis (when identifying a group of countries of Central and Eastern Europe, which, based on the similarity of their national business cultures, can also become participants in the Lublin Triangle).

In addition to the developments of Hofstede Insights, the empirical foundations of this study of national business cultures consist of detailed questionnaires for business representatives and government authorities. It was also based on interviews with expert analysts conducted by the authors in the context of a joint project entitled “National business cultures of Poland and Ukraine: improving the scientific and practical foundations of cooperation in European and world markets” with grant support from NAWA (Narodowa Agencja Wymiany Akademickiej – National Agency for Scientific Exchanges of Poland) and the Ministry of Education and Science of Ukraine.
The main material of the article

The interdisciplinary nature of national business cultures is due to the wide range of factors that shape them. These factors are structured and co-ordered, and form two groups. The first group (economic, institutional, international, and psychological) is determinant. The second group (demographic, communicative, scientific-technical, and natural-geographical) acts as a derivative or co-ordered in relation to the first group.

There is no system-based categorical denomination of the definition of “national business cultures”. Therefore, our theoretical-methodological and scientific-practical developments serve as a basis for our definition of this denominative category.

National business cultures are a system of intrinsic values, properties, and behavioral canons of entrepreneurship; basic provisions and norms of business, as well as traditions and ethics of doing business, which are evolutionarily formed and reproduced in time and space, and in the combination specific to a particular country (or group of countries close in parameters).

The chosen characteristics of the main parameters of national business cultures are based on assimilation of achievements of science and practice by the world comparative economic studies, and are as follows.

The “Power distance” parameter allows us to characterize the distancing of middle and lower-level managers from making significant managerial decisions. “Individualism” measures the cultivation and dissemination of an individualistic approach to establishing and managing a business. “Masculinity” measures society’s preference for success in business, assertiveness, and materialism. In countries with a high level of “Masculinity”, power competition in organizations is usually resolved through struggle and conflict, rather than through mutual concessions based on the interests of the parties. “Uncertainty avoidance” measures the degree to which societies, and by extension, managers are uncomfortable with and deal with uncertainty and ambiguity. “Long-term orientation” shows whether managers concentrate their actions on the short- or long-term perspective. “Indulgence” in comparative economic studies is understood as valuing the gratification of natural desires, egoism, and profit-making in entrepreneurship, and the penetration of these “values” into all other spheres of society (Hofstede Insights n.d., National culture).

Chart 1 illustrates the characteristics of the national business cultures of the selected countries by the parameters “Power distance”, “Individualism” and “Masculinity” with their respective quantitative estimates.

According to the “Power distance” parameter, the national business cultures of the Lublin Triangle countries are characterized by great variation. Lithuania has the smallest distance between the power of middle and lower managers and the management hierarchy (42 points); according to this indicator, Lithuania does not differ much from the most developed countries in the world. Poland (68 points) occupies a middle position, which generally corresponds to the developed countries of Europe. The highest distance from power is characteristic of the business environment of Ukraine (92 points).
National Business Cultures as a System-forming Factor of the "Lublin Triangle"

The "Individualism" parameter is exactly the same in Poland and Lithuania (60 points each). Such a score is quite typical for Western countries. According to Hofstede Insights, Ukraine (25 points) is a classic country of the collectivist approach, which is typical for the countries of the East. However, according to the authors' empirical research, Ukraine's indicator on this parameter is much higher and slightly different from that of Poland, occupying approximately the middle position between the countries of the West and the East.

In general, the "Masculinity" parameter reflects quite similar characteristics of the national business cultures of Lithuania and Ukraine (19 and 27 points, respectively). Poland, with a score of 64 points, is a representative of the more Western properties of pragmatism in establishing and doing business.

Chart 2 similarly illustrates the characteristics and assessments of the national business cultures of the Lublin Triangle on the other three parameters adopted in modern economic comparative studies.

The scores on the "Uncertainty avoidance" parameter represent not just similarity, but great closeness of national business cultures of Poland and Ukraine (93 and 95 points, respectively), although Lithuania differs from them in this regard (65 points).

Regarding "Long-term orientation", the national business cultures of Lithuania and Ukraine are close (82 and 86 points, respectively). Poland, on the other hand, is a country with a pronounced short-term business orientation (38 points).

According to the "Indulgence" parameter, the national business cultures of Lithuania and Ukraine are also very close (16 and 14 points, respectively); Poland is also considerably close (29 points).

A generalized comparative analysis of the national business cultures of the countries of the Lublin Triangle shows that they are, indeed, quite close to each other. In five
of the six parameters, the national business cultures of these countries are similar in pairs (or even, as with “Individualism” in Poland and Lithuania, identical).

At the same time, an objective analysis shows that the national business cultures of Lithuania and Ukraine, paradoxically at first glance, are more similar. This follows from the similarity of these countries’ business cultures in terms of “Masculinity” (19 and 27 points, respectively), “Long-term orientation” (82 and 86 points), and “Indulgence” (16 and 14 points).

Based on the structure and current trends of national economic complexes of Poland, Lithuania, and Ukraine in the sectoral dimension, the most effective cooperation of these countries will be in the agri-food sphere (agriculture and, especially, in the processing and food industries), industrial construction (primarily in the implementation of large infrastructure projects related to automotive and rail transport logistics, and modernizing ports and terminals), energy (including nuclear), oil refining, IT, and in almost all segments of the service sector.

In addition to the sectoral dimension special attention should be paid to interregional cooperation. A more systematic establishment of Euroregions and cross-border clusters will be appropriate here. Cooperation when creating free economic zones can be very productive, which is confirmed by the analysis of the activities of the Lodz free economic zone. The cooperation of the countries of the Lublin Triangle in creating Euroregions and free economic zones could be effective, and with a focus on real support from the European Union.
Within such cooperation in the sectoral and territorial dimensions between these countries’ business structures (both bilaterally and trilaterally) based on the similarity and complementarity of national business cultures, it would be appropriate to focus on their domestic markets. At the same time, it makes sense to consider accelerating the transition from simple export-import operations between business entities to more advanced forms of integrated cooperation (Glinkowska 2018). This is based on studying the theoretical, methodological, and applied practical aspects of national business cultures.

With institutional and organizational-methodological support and the implementation of a direct economic, regulatory policy by those states, cooperation between Poland, Lithuania, and Ukraine could act as a powerful integration center for several other Central and Eastern European countries (which also have close and complementary national business cultures with the countries of the Lublin Triangle). These countries could include Latvia, Estonia, Slovakia, Romania, and Bulgaria, as confirmed by the parameters of their national business cultures (Table 1).

The main conclusions of the comparative analysis of the national business cultures of this group of countries, based on the Hofstede Insights’ developments, given in Table 1 can be summarized as follows.

For the selected eight countries, almost all parameters of national business cultures are characterized by high similarity and complementarity.

Table 1. Parameters of national business cultures of Poland, Lithuania, Ukraine, Latvia, Estonia, Slovakia, Romania, and Bulgaria

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Power distance</th>
<th>Individualism</th>
<th>Masculinity</th>
<th>Uncertainty avoidance</th>
<th>Long-term orientation</th>
<th>Indulgence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>68</td>
<td>60</td>
<td>64</td>
<td>93</td>
<td>38</td>
<td>29</td>
</tr>
<tr>
<td>Lithuania</td>
<td>42</td>
<td>60</td>
<td>19</td>
<td>65</td>
<td>82</td>
<td>16</td>
</tr>
<tr>
<td>Ukraine</td>
<td>92</td>
<td>25</td>
<td>27</td>
<td>95</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>Latvia</td>
<td>44</td>
<td>70</td>
<td>9</td>
<td>63</td>
<td>69</td>
<td>13</td>
</tr>
<tr>
<td>Estonia</td>
<td>40</td>
<td>60</td>
<td>30</td>
<td>60</td>
<td>82</td>
<td>16</td>
</tr>
<tr>
<td>Slovakia</td>
<td>100</td>
<td>52</td>
<td>100</td>
<td>51</td>
<td>77</td>
<td>28</td>
</tr>
<tr>
<td>Romania</td>
<td>90</td>
<td>30</td>
<td>42</td>
<td>90</td>
<td>52</td>
<td>20</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>70</td>
<td>30</td>
<td>40</td>
<td>85</td>
<td>69</td>
<td>16</td>
</tr>
</tbody>
</table>


According to the “Power distance” parameter, Ukraine (92 points), Romania (90 points), and Slovakia (100 points), as well as Lithuania (42 points), Latvia (44 points), and Estonia are close to each other (40 points). In addition, Poland (68 points) and Romania (70 points) have similar national business culture properties.

Regarding “Individualism”, three countries (Poland, Lithuania, and Estonia) score 60 points. This subgroup of countries is, on the one hand, close to Slovakia (52 points), and on the other, Latvia (70 points). Bulgaria and Romania are identical in this respect (30 points each), quite close to Ukraine (25 points).
According to the “Masculinity” parameter, Romania and Bulgaria are very close (42 and 40 points, respectively), as are Lithuania (19 points), Ukraine (27), and Estonia (30). Latvia (with 9 points) logically “gravitates” towards Lithuania.

Within the “Uncertainty avoidance” parameter, Poland (93 points), Ukraine (95), Romania (90), and Bulgaria (85) are very close. Meanwhile, Lithuania, Latvia, and Estonia (65, 63, and 60 points, respectively) are close to Slovakia (51).

Regarding the “Long-term orientation” parameter, Lithuania and Estonia are identical (82 points each), as are Latvia and Bulgaria (69 points each). Ukraine (86) and Slovakia (77) are very close to the first subgroup.

Finally, according to the “Indulgence” parameter, three countries are identical: Lithuania, Estonia, and Bulgaria (16 points each). Ukraine and Latvia are very close to them (14 and 13 points, respectively), as is Romania (20 points). The other two countries, which are also practically identical in this respect (Poland and Slovakia – 29 and 28 points, respectively), do not differ much from Romania (20 points).

From the data in Table 1, the following generalizations can be made. The selected group of eight countries of Central and Eastern Europe is characterized by very close similarities in four of the six parameters used in such comparative studies, four (“Individualism”, “Uncertainty avoidance”, “Long-term orientation” and “Indulgence”). Such similarities are inherent in seven to eight countries. For the other two parameters (“Power distance” and “Masculinity”), the similarity is slightly less significant.

Therefore, the spread of integration ties between Poland, Lithuania, and Ukraine, both at the interstate level and between business entities, in priority areas of activity and deepening organizational and economic excellence of such cooperation, could impact (example and impulse) the formation of similar cooperation within the markets of the expanded group of Central and Eastern European countries.

Conclusions from the presented study

National business cultures represent one of the fundamental components of not only entrepreneurial activity, but also the economic organization of modern society as a whole. This component is interdisciplinary in nature. At the same time, it can act as both a stimulating or constraining factor for the development of business, and international integration, in particular.

For the Lublin Triangle, national business cultures are a potentially powerful factor in multilateral cooperation both at the interstate level of the founding countries, Poland, Lithuania, and Ukraine, and at the level of their business structures. This is very much predetermined by the mutual centuries-old history of the Kingdom of Poland and the Grand Duchy of Lithuania. Its origins, in our opinion, were laid not only by the Union of Lublin in 1569, but also by the Union of Krevo of 1385.
Cooperation between the countries of the Lublin Triangle meets the spirit of the EU, and it could become a significant additional factor to ensure the economic and political sustainability of its eastern frontier.

Based on the similarity of national business cultures, other countries of Central and Eastern Europe – Latvia, Estonia, Slovakia, Romania, and Bulgaria – are very close to the founding countries of the Lublin Triangle. Thus, the successful cooperation of Poland, Lithuania, and Ukraine within the framework of the Lublin Triangle can become an important component of integration cooperation between the countries of Central and Eastern Europe and the European Union as a whole.

**Areas for further development include** understanding the broad institutional basis (prerequisites) of cooperation between Poland, Lithuania, and Ukraine, and substantiating the specific economic mechanisms, in particular, in the development of investment projects in the selected priority industry sectors and areas of cooperation between the countries of the Lublin Triangle. This could become the basis for expanding the Lublin Triangle format and ensuring its highly competitive position in the modern system of the international division of labor.

**References**


National Business Cultures as a System-forming Factor of the “Lublin Triangle”

Narodowe kultury biznesowe jako czynnik systemotwórczy „Trójkąta Lubelskiego”

Opierając się na rozważaniu ewolucji kształtowania się wiedzy naukowej w historii rozwoju badanego problemu, autorka określiła definicję „narodowych kultur biznesu” jako złożonego, interdyscyplinarnego, podstawowego zjawiska współczesnych studiów porównawczych i przedsiębiorczości międzynarodowej jest podawany. W oparciu o ogólnie przyjętą na świecie metodologię badań porównawczych: indykatory parametry narodowych kultur biznesowych oraz z uwzględnieniem odpowiadających im szczegółowych opracowań empirycznych przeprowadzonych przez autorów w ramach realizacji wspólnego polsko-ukraińskiego ministerialnego projektu, systematycznie przeprowadzana jest analiza narodowych kultur biznesowych krajów założycielskich nowej platformy współpracy w Europie Środkowo-Wschodniej – „Trójkąt Lubelski” (Polska, Litwa i Ukraina). Ujawniono cechy bliskiego podobieństwa i dużej komplementarności narodowych kultur biznesowych tych krajów. W dużej mierze determinuje to nie tylko ich wspólna wielowiekowa historia, ale także szereg innych uwarunkowań instytucjonalnych, a także naturalnych i ekonomicznych. Priorytetowe sektory i sfery integracji Polski, Litwy i Ukrainy są określone zarówno na poziomie międzypaństwowym, jak i na poziomie interakcji ich struktur biznesowych. Realizacja tego podejścia zapewni wzrost pozycji konkurencyjnej Polski, Litwy i Ukrainy, a tym samym całego „Trójkąta Lubelskiego” w systemie współczesnego międzynarodowego podziału pracy. Na podstawie podobieństwa i komplementarności narodowych kultur biznesowych wybrano grupę innych krajów Europy Środkowo-Wschodniej (Łotwę, Estonię, Słowację, Rumunię i Bułgarię), które pod pewnymi warunkami mogą również zostać członkami Trójkąta, co w naturalny sposób doprowadzi do dalszego wzmocnienia i rozwoju Unii Europejskiej.

Słowa kluczowe: narodowe kultury biznesowe, analiza porównawcza, „Trójkąt Lubelski”, Europa Środkowo-Wschodnia, Polska, Litwa, Ukraina, przedsiębiorczość, integracja międzynarodowa, Unia Europejska

© by the author, licensee Łódź University – Łódź University Press, Łódź, Poland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license CC-BY-NC-ND 4.0 (https://creativecommons.org/licenses/by-nc-nd/4.0/)
Received: 22.11.2020; verified: 28.10.2021. Accepted: 3.11.2021