Rezekne Academy of Technologies Faculty of Economics and Management Business and Social Processes Research Centre

Latgale National Economy Research

Journal of Social Sciences

No. 1 (10)

Latgale National Economy Research. Journal of Social Sciences No. 1 (10) Rezekne: Rezekne Academy of Technologies, 2018. 168 p.

Recommended for publication by the Scientific Council of Rezekne Academy of Technologies on September 18, 2018.

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The journal will be included in databases Index Copernicus and EBSCO

ISSN 1691-5828 Online ISSN 2256-0955

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Foreword

The journal of social sciences "Latgale National Economy Research" published by Rezekne Academy of Technologies is issued this year under in the light of the Centenary of the Republic of Latvia. Accordingly, it is natural that an increasing number of authors have focused on the topics being nowadays important for the region at the global level – the journal highlights the reciprocal interaction of science and the economy and the application of science in tackling economic problems.

In the present issue of the journal, the authors have focused on such issues as sustainable development that nowadays has become one of the key problems in the environmental, social, and economic fields, the conception of virtual currencies, emphasizing the role of commercial banks in financial markets, the basic principles of democracy, which nowadays influence legislation, the employment of the elderly population, and an assessment of the experience of Latvian students gained in the European education area, analysing the role of knowledge of English in implementing Erasmus programmes, as well as other global economic matters.

The studies focusing on Latgale region and its potential – tourism and natural resources – have to be emphasised as well. The researchers have examined the 19th century cultural and historical objects in Riebini municipality as well as opportunities for the development of tourism products in the municipality. Riebini municipality, where 32 various sightseeing sites are available, ensures a constant, foreseeable and seasonal flow of tourists. The findings and conclusions made by the authors could be practically applied thus contributing to the tourism industry development in the municipality and increase of the tourists flow in the future.

In the age of digitalisation, people seek the shortest routes to save time on sightseeing. One of the natural treasures of Latgale region the Razna National Park occupies almost 60 ha and is one of the most popular tourist destinations in our region. Therefore, the paper entitled "The Search for the Shortest Route for Tourists Visiting..." is particularly important, as the shortest routes connecting the sightseeing sites of the nature park are computed. The Editorial Board is convinced that introducing the findings of the research in travel guides could significantly contribute to travel quality and the satisfaction of tourists.

The Editorial Board is also certain that the papers included in the journal and their findings and conclusions provide an opportunity for new research investigations and discoveries that can contribute to the development not only for Latgale region but also for the entire country and enhance their competitiveness on the European Union scale in the next centenary of Latvia. The journal's topics and research findings already now shape and complement the academic and scientific environment of Latvia, providing an opportunity for foreign academics, scientists, and researchers to compare and analyse the findings and conclusions.

On behalf of the Editorial Board, I thank the authors of the papers – academic staff, scientists, master and doctoral students, researchers, national and local government officials, and businesses – for their cooperation and contribution to the journal.

A NEW PARADIGM OF SUSTAINABLE DEVELOPMENT DIMENSIONS

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Abstract. Sustainable development has become an universal phrase and the area of many policy initiatives, especially those regarding environmental organizations. The revision of the dimensions of sustainable development gives vital support to develop and implement indicators for them. The dimensions of sustainable development are inseparable and mutually reinforcing. Sustainable development actions depend on complexity and working with different interests of environment and development. It is impossible to predict what needs future generations will have. The obligation of the current generation is both to use and protect the world resources in ways that meet human development opportunities more justifiably today, but which do not exclude choices for such actions tomorrow. The aim of the research is to analyse the dimensions of sustainable development. More deeply, the research tasks are to outline the hierarchical organization of sustainable development criteria and indicators and to create a new paradigm of sustainable development dimensions. The methods of research are monographic, quantitative, deductive, and inductive. The key result: a new paradigm of sustainable development dimensions is created. Sustainable development is a concept, possibly surrounding closely every aspect of human society. The meaning of the dimensions of sustainable development is all the time in progress. There is a new approach to the dimensions given in the research. Sustainability could be understood better in terms of "here and now", "later" and "elsewhere". The existence of sustainability criteria guarantees sustainability in the long perspective. It can be suggested that the sustainability criteria analysis and their practical use could be further developed.

Keywords: sustainable development, sustainable development dimensions, sustainability criteria, sustainability indicators.

JEL code: *D63, Q56, I38, F63*

Introduction

The concept of development involves well-being for all and the concept "sustainable" means that such development must not come at the expense of future generations.

The issue of sustainable development addressing environmental, social, and economic sustainability has become one of the main challenges nowadays. Sustainability is an important idea being generally referenced and widely supported. It is usually considered as the stable pursuit of several things: ecological sustainability, social equity, as well as health and economic welfare. It is grounded on the ethical commitment that not just contemporary populations' well-being, but also the comfort and enhanced opportunities of future generations are important. Sustainability requirements can be

regulated with the help of different tools, e.g., sustainability criteria, sustainability standards, or their combination.

As the recent leading paradigm of development, sustainable development has been accepted globally and has had a significant influence on international treaties as well as national policies and strategies. The pursuit of sustainable development is now stated as a principal policy goal for most of the world institutions. Sustainable development underlines the obligation to realise further economic growth in an environmentally - friendly way, as the past patterns of the economic development have had grave influences on the global environment. This is confirmation of how understanding of the sustainable development global challenge has moved on to include the complex environmental, social, and economic development.

Equal importance of the achievements of the economic development and environmental sustainability can be recognised after examination of the dimensions of sustainable development criteria. The implementation of sustainable development has faced various difficulties since its appearance as a developed model. A major challenge is the resource use. Economic development processes are strictly related with natural resources. The environment depends on the maintenance of these resources. All the economic activities make demands on the resource base, and the past economic development can be closely associated with the rates of resource extraction. Inequalities in access to the resources also pose the main challenge of sustainable development.

The aim of the research is to analyse the dimensions of sustainable development. More deeply, the research tasks are to outline the hierarchical organization of sustainable development criteria and indicators and to create a new paradigm of sustainable development dimensions. Attention is paid to the fact that sustainability criteria cannot function as the only guarantee for sustainable development. They should be accompanied and complemented by other tools. The existence of sustainability criteria guarantees sustainability in the long-term. It can be suggested that the analysis of the sustainability criteria and their practical use need to be developed further.

The sustainability criteria and their content should be linked to the understanding of what sustainable development and sustainability are.

The criteria and indicators of sustainable development

The concepts of sustainable development and sustainability are the basis for understanding and defining sustainability criteria. Sustainable development was first described in 1987 as probably the best-known basic definition of sustainability. It is stated in *Our Common Future*, also known as the *Brundtland Report* by the United Nations World Commission on

Environment and Development (WCED) published in 1987: "...meeting the needs of the present without compromising the ability of future generations to meet their needs" (Kilbert et al., 2010). Many works have occurred since the *Brundtland Report* to explain the worldwide consensus about the goals of sustainability, development of subsequent and previous global efforts (such as *Agenda 21, The Earth Charter, The Rio Declaration*) on the aims, standards, and models of sustainability. The definition of sustainable development covers a difference and a potential conflict between the interests of the present and future generations.

Whistler's 2020 (Canada) sustainable community movement describes sustainability as "... a minimum condition for a flourishing planet in the long term"; it becomes harder to define the term of "sustainability" (Kilbert et al., 2010). The word "sustainability" is used more and more frequently from a wide variety of perspectives with a number of different purposes in mind. As a result, it becomes harder to define the term "sustainability".

Further clarifications of the concept of "sustainable development" have been mainly based on the three-pillar approach, which distinguishes among environmental, social, and economic dimensions of sustainable development (Iglesias et al., 2008).

The history of the sustainable development concept is closely linked to the changing perceptions of environmental concern, nature conservation and development during the last century. The flourishing of the sustainable development concept and its emergence as a new development paradigm can be explained by the rise of international environmentalism and development studies in the middle of the 20th century. There have been many changes in thinking in relation to the meaning, purpose, and actual practice of development since the emergence of development studies in the 1950s. During the 1960s, economic growth and the use of modern scientific and technical knowledge to achieve progress in the developing world were prioritised (Elliott, 2008). The main difficulties concerning the concepts of sustainable development and sustainability are still transformation and operationalization at the practical level.

It is necessary to examine the dimensions of sustainable development criteria in order to gain a detailed understanding of this multifaceted concept. By exploring the criteria of sustainable development, the way in which the concept has unified the ideas of various disciplines in order to make best use of economic and social development in an environmentally-friendly manner is emphasized. By bearing in mind the challenges, which the sustainable development implementation practices meet, as well as the limitations of looking for economic growth and environmental sustainability could be recognized. The theoretical knowledge of sustainable development criteria could be used for analysis of how sustainable development practices

have been implemented and determination of how well-matched the criteria of sustainable development are, both in policy and in practice.

There are many uses of the indicators and the criteria of sustainable development, so sometimes there is confusion of the terms.

Sustainable development is a large issue. It refers not only to physical aspects. It involves many other aspects, for example, environmental such as public health, education and many more. In order to qualify and evaluate those different aspects and choose the best one, considering existing resources, mainly funding, the criteria are needed.

There should be some indicators for the criteria. For instance, the number of educated persons per 1000 inhabitants. Such kind of indicators has recommended values generally produced by international organizations. Indicators of a sustainable community point to areas where the links between the economy, environment, and society are quite weak.

The criteria are intermediate into which the indicator providing information could be integrated. The indicators define what information is delivered to evaluate the criteria. To infer the status of a particular criterion as variable components, the indicators can be used.

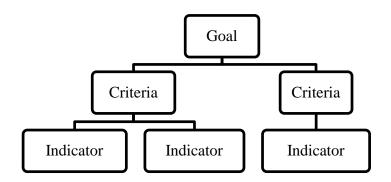


Fig. 1 Hierarchical organization of criteria and indicators (Source: compiled by the author)

It is important to measure sustainable development. The society needs statistics to shift emphasis from measuring economic development to sustainable development. The concept involves choice - making between using resources to maximise the current human well-being and preserving resources for the future use.

Many composite indicators and criteria have been proposed in the academic literature during the last two decades. The sustainable development indicator "knowledge of countries and organizations" has increased significantly, as the emphasis has been placed on measuring progress of achieving sustainable development including the Millennium Development Goals (MDGs) at the national and international levels.

In a number of sources, the assessment function of sustainability criteria has been highlighted. Thus, Zink (2005) defines sustainability criteria as criteria that are applied to assess opportunities and risks deriving from economic, environmental, and social sustainability dimensions. Koplin et al. (2007) points out those sustainability criteria of an environmental character form requirements to reduce the input of natural resources and minimize environmental risks. Goldschmidt et al. (2013) underlines that sustainability criteria could be of a qualitative or quantitative nature. The research group also stresses that sustainability criteria are not static and often require continuous assessment and modification over time (Pavlovskaia, 2014). Sustainable development criteria can provide crucial guidance for decisionmaking. Thus, criteria can be used for translation of social sciences into manageable elements of data that can facilitate the decision-making process. They can support calibration progress towards sustainable development goals. They also can provide an in-time warning system to avoid economic, social and environmental problems.

The issue of sustainable development criteria has also been examined from different perspectives. The indicators have been along the following levels, precisely:

- global;
- national;
- local.

The global level is needed to ensure national comparisons.

Since the UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, in June 1992, there have been a numerous attempts to find more operationally useful definitions and sustainable development criteria. These have been broadly categorized into three areas, precisely:

- economic;
- environmental;
- social (Qizilbash, 2001).

The United Nations Conference on Environment and Development in 1992 documented the significant role that indicators of sustainable development could play in decision making about sustainable development. The Commission on Sustainable Development (CSD) approved its Work Programme on Indicators of Sustainable Development in 1995. The first of CSD Indicators of Sustainable Development were developed between 1994 and 2001. The new reviewed edition of the CSD indicators has been established in response to conclusions by the CSD and the World Summit on Sustainable Development in 2002. A large number of countries had developed their own national indicator sets, mostly based on the CSD indicators. Further work on indicators continues at the national and local level in a harmony with national circumstances and priorities.

Sustainable development dimensions

As tools for policy monitoring, indicators should not be related only with governmentally defined targets, but in order to permit policy assessments, it has to be clear, which value of the indicator is more desirable than another one. Indicators to be used on different levels of decision-making obviously need different levels of detail.

The specific topics of sustainable development need to be measured for the three conceptual dimensions of human well-being, i.e., "here and now", "later", and "elsewhere" (Framework and suggested..., 2013).

There is no academic agreement on how to measure the human wellbeing of the present generation ("here and now"). Basically, human wellbeing is determined by what people consider as most important in their lives. This could be a combination of subjective and objective measures (Framework and suggested..., 2013). Selection of the measures is based on a number of important empirical measures. For instance, these measures could be labour, education, housing etc.

The well-being of future generations depends on the resources the current generation leaves or saves ("later"). Typical prejudice is that most of the future people are non-existent; therefore, the question is why we should sacrifice for non-existent people.

The "elsewhere" dimension captures the ways that the countries affect the human well-being of the rest of the world. The transboundary impacts of a country may affect other countries via various channels. For example, the indicators on international aid from the developed countries to the less developed ones, the extent to which one country may deplete the resources of other countries etc. (Framework and suggested..., 2013).

Taking into account the previous quotes of the research, the following relevance between sustainable development criteria and indicators at different levels and dimensions is worked out.

Table 1 Sustainable development criteria dimensions and some possible indicators (Source: compiled by the author)

		Ind	icators (exam	ples)
Dimensions	Criteria	Levels		
		Global	National	Local
"Here and	Social	Human	Poverty	Community
now"		development		participation
		index		
"Later"	Environmental	Biodiversity	Air quality	Local air quality
"Elsewhere"	Economic	Gross domestic	Taxes	Employment
		product		

These have been the most commonly used criteria with measurement indicators of sustainable development. Integration of the sustainable development dimensions is not just an ambition, but it is vital for the ecosystem, society, and economy existence. Such an integrated approach may appear too complex to implement. However, there are many examples of successful interlinks that follow the above-mentioned principles. There should be a movement from a sectoral approach to a more holistic one, with sustainable development as a main context.

Conclusions and suggestions

Conclusions:

- 1. Sustainable development has become a universal phrase and the area of many policy initiatives, especially those regarding environmental organizations. Sustainable development is a concept, possibly surrounding closely every aspect of human society.
- 2. More than three decades after the WCED had defined "sustainable development" and put this notion of sustainability on the global agenda, the meaning of the sustainable development dimensions is all the time in progress.
- 3. Barriers to the efficient function of sustainability dimensions may occur because of different implementation approaches among the involved performers on different levels.

Suggestions:

- 1. The author of the research suggests a new approach to sustainable development dimensions. Sustainability could be better understood in terms of "here and now", "later", and "elsewhere". The dimensional sustainability framework is more inclusive, plural, and useful to outline specific policies towards sustainability. The revision of the dimensions of sustainable development gives vital support to develop and implement indicators for sustainable development.
- 2. Sustainable development dimensions have to perform many functions:
 - to lead to better decisions and more effective actions by simplifying, clarifying and making combined information available to policy makers;
 - to help incorporate physical and social science knowledge into decision-making;
 - to help measure progress by using sustainable development indicators;

- to provide an early warning to prevent economic, social, and environmental setbacks;
- to be a useful tool for presenting ideas, thoughts, and values.

The sustainable development dimensions are inseparable and mutually reinforcing. The sustainable development actions depend on the complexity and combining different interests on the environment and development. It is impossible to predict what needs future generations will have. The obligation of the current generation is both to use and to protect the resources of the world in ways that meet human development opportunities more justifiably today, but which do not exclude choices for such actions tomorrow.

References

- 1. ASTROULAKIS, N. (2013). Ethics and International Development: The Development Ethics Paradigm. EAST-WEST Journal of Economics and Business, XVI (1): pp.99-117.
- 2. ATKINSON, G., DIETZ, S., NEUMAYER, E., AGARWALA, M. (editors) (2014). *Handbook of Sustainable Development: Second Edition*. Edward Elgar Publishing Limited p. 265.
- 3. ELLIOT, J. (2008). An Introduction to Sustainable Development, 3rd ed. Retrieved February 20, 2018, from http://www.researchkh.org/userfiles/image/upload/1454164020676.pdf
- 4. IGLESIAS, A, SCARDIGNO, A, BUONO, F. (2008). *State of the art on evaluation of water policies approaches, methods and experiences*. Sustainable Development. 5:2–3.
- 5. KIBERT, C.J., THILLE, L., PETERSON, A., MONROE, M. (2012). *The ethic of sustainability.* Retrieved Devember 2, 2017, from http://www.cce.ufl.edu/ethics/text/
- 6. PAVLOVSKAIA, E. (2014). Sustainability criteria: their indicators, control, and monitoring (with examples from the biofuel sector. Retrieved January 31, 2018, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5044937/
- 7. QIZILBASH, M. (2001). Sustainable Development: Concepts and Rankings. *Journal of Development Studies*, Vol. 37(3), pp. 134-161.
- 8. ROGERS, P.P., JALAL, K.F., BOYD, J.A. (2008). An Introduction to Sustainable *Development*. Glen Education Foundation Inc. p. 416.
- 9. SINGH, B. (1996). *Economic without ethics: the crisis of spirituality.* Retrieved December 12, 2017, from http://www.pcdf.org/1996/80singh.htm.
- 10. Framework and suggested indicators to measure sustainable development. (2013). Joint UNECE/Eurostat/OECD Task Force on Measuring Sustainable Development. Retrieved January 31, 2018, from https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2013/SD_framework_and_indicators_final.pdf
- 11. Report of the World Commission on Environment and Development: Our Common Future. (1987). Retrieved December 12, 2017, from http://www.undocuments.net/our-common-future.pdf

CULTURAL-HISTORICAL OBJECTS OF RIEBIŅI MUNICIPALITY IN THE 19th CENTURY – RIEBIŅI MANOR, PASTARI WINDMILLS AND BUFALIŠKI (GEĻENOVA)

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Abstract. The present research is based on the method of source analysis, and its objective is to study a cultural and historical heritage of the manor of the end of the 19^{th} century. In the documents of the Latvian State Historical Archives (the Russian Imperial Census of 1897) contain information about the manor and the buildings that had ben purchased by S. Kierbedz and M. Reut. The research does not confirm the widespread assertion that Eugenia Kerbedz has substantially renovated Riebiņi castle at the end of the 19^{th} century for the work and recreation of the artists. The cultural-historical objects mentioned in the paper are not properly maintained today, and their potential regarding the tourism industry is not deployed. The potential of use depends on the type of use and location, as well as their technical condition. The census records are useful for family research.

Keywords: Bufališki (Gelenova) park; Eugenia Kierbedz; Mihail Reut; Pastari windmills; Riebini Manor: Stanislaw Kierbedz.

JEL code: Z1

Introduction

"Preiļi land" (Terra Preylen) was first mentioned in 1348. During the Inflanty period, Polish, Belarusian and Russian Old Believers settled there. Later, this area was called Krevenmuiža (in English – Krevi manor). In 1758, Michael Veisenhof (Michał Weyssenhoff) bought Riebiņi, Krevi, Stefanopole, Stražvalde, Veronika (Kokali) manors and the rich deciduous forest of Riebiņi. He reconstructed the castle of Riebiņi and built a park. The property was inherited by his son Tadej (born in 1769). He did not take care about Riebiņi manor and sold it to Jacob de Perrin (Aftanazy, 1992), the general of the Russian army. Riebiņi park (8 ha) is nowadays recognized as a natural monument, with more than 10 species of the exotic trees and shrubs. In general, the information is gathered about the cultural-historical objects of the municipality in the above-mentioned area, but the details concerning some of the objects are not accurate, including Riebiņi manor, Pastari windmills, Geļenova. There are still many myths about the origins of these places, their inhabitants and life there.

The tasks of the research are to describe the cultural-historical objects – Riebiņi Manor, Pastari Windmills and Bufališki (Geļenova). To achieve the aim of the resehar, the following methods are used: analysis, the descriptive

method, document study. Therefore, the purpose of the paper is to find and analyse the references on the above mentioned places in objective sources. The research study is based on the method of source analysis. The research period is from 2017 to 2018.

Riebiņi manor

In 1874, Arnold de Perrin sold Riebini manor and Stefanopole halfmanor to Stanislav Kerbedz (Stanisław Kierbedź, 10 March 1810 -10 April 1899) (Воронин, Воронина, 1982). S. Kerbedz did not live permanently in his property situated in Vitebsk province, as for outstanding service he had also received the property in Poland. (Воронин, Воронина, 1982). In the reference of the owner of Riebini manor in the title page of the Russian Imperial Census of 1897, it was recorded that Stanislav Kerbedz was a secret counsellor. It is known that he has left his post at the age of 81 in 1891. He moved from St. Petersburg to Warsaw where he lived until 1899. The property of Riebini was inherited by his eldest daughter Eugenia Kerbedz, who was born in St. Petersburg on 8 October 1859 and died in Rome on 10 July 1946 (Eugenija Kerbedienė public profile 2017). Eugenia was married to her cousin Stanislav Ippolitovich Kerbedz. Their daughter Felicia Ella Ehrlichia (1888 - 1963) was married to Voldemar Tishkevich Leliv (1877 – around 1934) (Eugenija Kerbedienė public profile 2017), had no descendants. After her death in 1978 in Rome, Eugenia Kerbedz was reburied in the family chapel in Warsaw (Eugenija Kerbedienė public profile 2017). While Maria Teresa Bulhak Jelska Allegranza (14 February 1935, Warsaw), the granddaughter of Eugenia's youngest sister Sophia (Sofija Dimšienė (Kerbedytė) 12.VII 1871 – 08.VIII 1963, died in Senigallia, province of Ancona, region Marche, Italy) (Eugenija Kerbedienė public profile 2017) (reference is available on the Internet geni.com, posted by *Julian Krzysztof* Jacoby) is currently living in Senigallia, (AN) Via Camposanto Vecchio 49, CF BLH MTR 35A54 Z127M, (Str. Camposanto Vecchio 2017) where Stanislav Kerbedz once built a mansion. It is also indicated on the road map.

In 1899, Eugenia Kerbedz inherited and fixed up the manor house of Lūznava and the castle of Riebiņi manor and invited the artists there. She arranged workshops and salons. After the agrarian reform in 1918, Riebiņi manor came into possession of the local government of Silajāņi Civil Parish. A primary school was established there (functioned until 1975) (Novads 2018).

According to the Polish historian of culture R. Aftanazy (Aftanazy, 1992), Joseph Veisenhof visited Riebiņi in 1883 and found that the castle was empty, but a reliable source for getting information about the properties of the privy counsellor can be found in the Latvian State Historical Archives –

in the archive of the Russian Imperial Census of 1897 in Courland, Livland, and Vitebsk provinces. It confirms that the castle was inhabited at least in 1896/97. The Form [B] for Vitebsk province was printed in Russian and filled in handwriting in Russian. Mostly, these notes are well-readable, and the registered names and place names are retained in the original form below.

The records inform that *Riebiņišķi manor* (in Russian - *имение*), as it was called during the Russian Empire, was built of stone, it consisted of 3 residential buildings (in Russian - *жилихь строениій*), 10 farms (in Russian - *хозяиствь вь этомь поселкт*ь). On the front page, it is indicated that it was inhabited by 22 men, 27 women, constantly – by 4 men and 4 women. The people have come here from Liklinska, Koluža, Ilūkste and other civil parishes (LNA LVVA, 2706.f.,2.a., 198.l.,1033.lp.). Below, the details on the families that lived in these farms as part of the complex of the manor are included. The secretary gave no more precise details.

The following pages contain information for each building individually. Outside the manor, S. Kerbedz owned some other houses, but there is no information in the questionnaire about the building material of other buildings, which suggests that they were all of stone, as indicated at the beginning. Apart from *Riebiniškis* manor, Kerbedz owned 2 buildings with 9 farms in Stefanopole manor (in Russian - имение) (LNA LVVA, 2706.f.,2.a., 198.l.,288.lp.), which also had its own administrator – Antons Vuškāns, who was forty years old. The secretary Georgy Mosteiko also mentioned one wooden house with a thatched roof in the village of Ladi (in Russian поселокь) (LNA LVVA, 2706.f.,2.a., 198.l.,288.lp.), owned by the privy counsellor, the nearby Riebinišķi mill (in Russian - мельница) (LNA LVVA, 2706.f.,2.a., 198.l.,1099.lp.), most probably built of stone, as well as very small properties - one wooden house inhabited by the Lanci family, in Petrovka village (in Russian - застенокь) (LNA LVVA, 2706.f.,2.a., 198.l.,1131.lp.) and one thatched building (in Russian - литная сторожка при деревне Замостье, владельческая усадьба) (LNA LVVA, 2706.f.,2.a., 198.l.,1103.lp.), inhabited by Grzybowski – Zamostje. Nowadays, some of the place names, including Ladi, mentioned in the records have not survived. The details on the windmills owned by S. Kerbedz are not clear. There were several windmills in the surrounding area, for example, Dubna windmills (LNA LVVA, 2706.f., 2.a., 198.l., 120.lp.) owned by baron Korf, Zamkova Korchma water mill (LNA LVVA, 2706.f., 2.a., 198.l., 456.lp.) etc.

Pastari windmills

The nearby Pastari windmills is another object built at the beginning of the 20th century, as evidenced by the project of 11 January 1902,

co-ordinated by the vice-governor and architect of Vitebsk province, who its implementation (Kultūras piemineklu restaurēšanas permitted projektēšanas kantoris, 1985). The project was implemented with deviations both in the planning and in the facade solution. In relation to Pastari, the population census includes the data according to which in 1897, it was inhabited by the Antonovs, Endrics, Pastors, Pastors (Kalves), Sinoks, Povulovs, Pavlovs, Jurišs, Sermos, Pudulis, Anusāns, Pīterovs, Bārtuļevs, Reinīks, Meļnīks, Cars, Fomins, Betlers, Trūps, Saimenieks, Brišks, Cakuls, Krištoks, Strigs (Pastors), Plečs (Pastors), Bolušs peasant families (121 males and 128 females) (LNA LVVA, 2706.f., 2.a., 198.l., 222.-309.lp.), mostly employed in farming, and they were the owners of their wooden buildings. There were no buildings of other importance in Pastari.

The existing windmills in Pastari were reconstructed in 2012. Now they are hollandaise-type windmills with a rotatable mechanism of wind-catching (visitlatgale.com/lv 2018). The ground floor of the windmill is built of broken boulders. The upper floors are built of wood. The building is covered with boards and shavings. Unfortunately, the mills now stand empty and neglected, and are no longer functioning. The Soviet-era documents of the office of Restoration projects of cultural monuments contain the "Pastari Windmill Pre-project Study Case" which includes interesting ideas about the reconstruction intentions, which were planned in 1985. It was planned to restore the architecture and equipment of the windmills to ensure that the arms of the windmills rotate by usage of wind power; it was planned to open the mills for viewing, placing there: on the 1st floor – to establish a lobby with a dressing room and a kitchen niche; on the 2nd floor – to exhibit the mill plant and establish a cafe for 25 places; on the 3rd floor - to exhibit the mill equipment (millstones) and the traditional farming tools of the region; on the 4th floor – to arrange an exposition on the historical development of the village and kolkhoz (visitlatgale.com/lv 2018). The project envisaged the restoration of the broken windows, the cleaning of the floors and the construction of cobblestones, insertion of millstones instead of the threshold, painting the wall separating the kitchen niche with the theme of the trip to the mills, etc. On the walls between the pillars, it was planned to place the ceramic formations from the fairy tales, in which the action takes place in the mill ("The Devil's Mill", "The Cat's Mill"). For serving the table, it was planned to use matte clay, glass, and metal dishes without using tablecloths, but only linen napkins. For the improvement of the neighbourhood at the mills, it was also planned to create a parking space. Unfortunately, the ideas concerning Pastari windmills remained on a paper, although in other places in Latvia, for example, in the recreation complex in Bauska, the open-air museum "Ausekli Mill", in the mill of the Valdgale manor complex (3 km from Talsi), which was restored by Giuseppe Rikardi, the Italian, nowadays, there are also tourist places to visit and see. The premises of the mills serve for celebrations or guest accommodation.

In Lithuania, for example, in Šeduva, such plans have been successfully implemented, and the cultural-historical objects there are currently well-functioning in the tourism industry.

There is a slight difference in the occupations of everyday life of the inhabitants of Lūznava manor and Riebiņi manor: there were 93 people living in Lūznava manor, there was a wider range of specialists: groom Bulapko, coachman Šelkovskis, glass-cutter Babrov, smith Koņuševskis, gardeners Ksenjopolsky, Semjonov and Tumov, forest guard Czechovich, herders and farmers (Brīvere, 2017). Riebiņi manor was inhabited by 114 people, but only peasants dominated here. Only the miller Reidnieks and the forest guard Bmenskis are mentioned as the representatives of other occupations. Therefore, there are well-grounded reasons to claim that, at least in 1896-1897 in Lūznava manor, there were much more activities than in Riebiņi, including recreational opportunities for artists.

In both manors, it was common that the farm holdings were mostly farmed by peasants. The Roman Catholics mostly arrived from either Režica or Dvinsk district. In the vicinity of Riebiņi, there were some entrants from Courland province, one from Riga.

When analysing the records, it appears that spouses were most likely to come from the same place or from the immediate vicinity (with few exceptions), and they represented one mainstream church. There are no mixed marriages between these couples in the modern sense.

Of the records, 50% indicate that people stayed there temporarily (in Russian - врем. преб.).

Many personal names in the questionnaire are written according to the Russian imperial-time secretary's understanding concerning the names and surnames of Latvian farmers in Vitebsk province, such as *Pētersons Gustavs*, the son of *Ivans*, who is a Lutheran from Riga, and most likely is John's son. Other personal names are, in turn, fixed by Latgalian pronunciation, for example *Garkalne Iļža*, *Šalkovska Īva*.

Bufališki (Geļenova) at the end of the 19th century

Geļenova manor was sometimes called Bufališkiai (Polish *Bufaliszki*) (Latviešu konversācijas vārdnīca, 1936) by the Poles, and the information about this place is recorded in 1897 by the secretary of the Population Census L. Skrinda (LNA LVVA, 2706.f., 2.a., 198.l.,50.lp.) (LNA LVVA (Latvian State Historical Archives), 2706.f., 2.a., 198.l., p. 50). The records inform that half-manor Bufališki (in Russian - *Буфалишки*) belonged to landlord Mikhail Mihailovich Reuts (LNA LVVA, 2706.f., 1.a.,199.l.,542.-550.lp.). His father

Mikhail Ignatovich von Reuts was the administrator of Vārkava half manor (Vārkavas novada 2018) (judging by the age of each member of the family listed on the list of high-born landlords, born in 1795), whose wife – Eugenia Timmane (born in 1803), son Mikhail (1842 – 29 October 1920, in Poznan, Poland) (latgalesdati.du.lv, 2018), daughters Ksaveri (born in 1832) and Eugenia (born in 1835) – in 1844, registered the properties Solojoņi and Antonišķi in the district of Režica and Kamenec (until 1927 – Jaunaglona) in the district of Dinaburg, which was bought from the Count Borha (LNA LVVA, 3930 f.,1a., 4.l.,70.lp.). He also owned Varkava manor with the half-manors. M. Reuts was considered to be one of the wealthiest landlords in Latgale. After death of Mikhail Reuts, the manor and land were inherited by his son Mikhail, who did not care for the properties and went to France for his debts (Stepiņa, 2011).

In 1897, in the Reuts property in Bufališki, two half-manors – in four buildings – were inhabited by 4 families, total of 16 people (see Annex 2). There are no records of the manor houses in the Population Census Questionnaires, which indicates that they were either no longer there, or they have not been inhabited. As regards the inhabitants of Bufališki, most of whom were peasants, it turns out that they were of different ages – of older age, maturity age and children; they lived in wooden buildings with thatched roofs. The Morozs family lived in the manor house in the forest and, judging by the record, was mostly attracted to forest work. Alexey Adamovich, the owner of the other half-manor, together with other family members cultivated the land and was a bee-keeper. The third house of the second halfmanor was inhabited by the family of Stanislav Poplavsky, Polish landlords. In terms of the nationality, these half-manors were inhabited by Latvian and Belarusian peasants, and all of them were Roman Catholics. They had arrived in Bufališki from Režica district or Dvinsk district. Another striking feature was that most of them were uneducated; only Adamovich Marija, the Belarusian owner of the first house of the second half-manor, who was 33 years old, has been taught at homeschooling and her 14 years old son Ulyan attended a folk school. The folk school was also attended by the resident of the second house of this half-manor – 26 years old Henrih, who was the son of Izidor Adamovich. The rest of the people could not read or write.

The uncertainty arises from the fact that the first and the second houses of the second half-manor were inhabited by the Adamovich families, which seemed to be relatives, as both the hosts – 55 years old Alexey and 64 years old Izidor were the sons of Adam, who came from the Antonišķi village, from the Režica district, though, it is indicated that Alexey's native language was Belarusian, but Isidor's – Latvian.

Mikhail Reuts also owned a populated forest house in Kapčevka and half-manors in Čuksti (three buildings inhabited), with a house in Opsa, a

populated forest house in Pušica, four houses in the Kirkiliškiai village, one house in Močilka, one house in Punishche half-manor, two houses in Čadrinka, and one house in Gryaznoje half-manor (LNA LVVA, 2706.f.,1.a.,199.l.,550.-590.lp.).

The secretaries of the population census Leonty Galimov and Andrejs Vīksna, whose recordings have been corrected in some places by L. Galimov, provide the following information about the Reuts: in 1897, Kamenec manor (in Russian - владельческое имение) consisted of 24 buildings, 17 of which (built of both stone and wood) were residential buildings permanently inhabited by 56 men and 81 women, different strata of people. It should be noted that the number of people (33) living and working in the manor's main building was considerable, and they occupied various positions - the administrator, the supervisor of servants, the guard of the forestry factory, the guard of the manor, the cook, the kitchen worker, the laundry washer, the embroiderer of towels, the chamber-maid, the servant, the poultry farmer and the herder (LNA LVVA, 2706.f.,1.a.,199.l.,4.-16.lp.). No gardener is mentioned in the lists, which suggests that in Kamenec, M.M.Reuts had not laid out any remarkable park or garden. All of the people of Kamenec manor were Roman Catholics, except for one person, a servant who came from the Kurzeme province – 40 years old Andrejs Vīksna, the supervisor of servants, and also the filler of the above-mentioned population census questionnaires. Two persons – the landlord's wife Alexandra and the herder Kazimirs Brekis - were born in St. Petersburg, the rest had come from the districts of Dvinsk or Režica. 15 people belonged to the families of landlords, the rest to the families of peasants. The native language of 23 people was Polish, and the native language of 10 people was Latvian. The host himself and his 2 children (daughters Teresa and Jadviga) had studied abroad (not specified more precisely), the members of the Reuts family - Mikhail and Mariya - in Riga, son Ryhlevich Iosif - in Riga Polytechnic School, the supervisor of servants Andrejs Vīksna – in the Kurzeme folk school, manor administrator Godlevskis had graduated from gymnasium, the landlord's wife Alexandra, her eldest daughters Eugenia and Elena, cook Malatok, servant Isidor Volodzko, towel embroiderer Albertina Urbanovicha, and laundry washer Anna Silicka were taught at home-schooling.

The manor house, built of stone and covered with a sheet metal roof, was inhabited by the landlord's family (8 men, 20 women). The owner of the manor, Mikhail Mihailovich Reuts, was 55 years old (1842 – 1920), his wife Alexandra Lvovna was born in 1852 in St. Petersburg. There are records of their six children – daughters Eugenia (born in 1871) and Elena (born in 1872). The son of the owner, Mikhail, who was twenty four years old, is not mentioned right after his parents, as it was required by the tradition and the person registration rules, but as the 5th person in the list after the eldest

sisters Eugenia and Elena. In 1897, neither father, nor his son or daughters Mariya and Jadviga resided in Kamenec, but judging by the record had temporarily moved abroad.

However, the legend about the origin of Gelenova (Helenova) manor and park tells about the landlord's daughter Helen, after whom the place was named. It can be explained on the basis of the above-mentioned record of the population census, which testifies the fact that M. Reuts had a daughter Elena (Helena). This source does not provide any additional information about this.

During the described period, according to the data contained by the State Inspection for Heritage Protection, on the peninsula of the Bicanu Lake, the Gelenova (Helenova) park is laid out on a free plan (7.1 ha). The area of the larch trees was 0.6 ha, including exotic tree species, which during the Soviet times heavily overgrew. From the former access road, the linden alley led to the park. The central castle building, the remains of which were demolished in 1990, was located on the top of the gently sloping hill. There were vast fields with valuable trees and shrubs on the slopes facing the lake. In the southern part of the park, there was a forest-like plantation with larch and red oak groups. In total – trees of 12 native species. Introduced species: conifers - European larch, Japanese larch, round pine, Weymouth pine, western white cedar; deciduous trees and shrubs – silver maple, Tatarian maple, caragana arborescens, hornbeam, green ash, white walnut, Ninebark, Canadian poplar, red oak, white spiraea, Cornus stolonifera "White Gold", Snowberry, Large-leaf linden, and Holland linden. The park is included in the list of the protected objects (Gelenovas muiža PDC: 08-04-III-37-3033). At the end of the 19th century, the international trade route (Lithuania -Daugavpils - Rušona - Rēzekne - Ludza - Pleskava - Novgorod) crossed Rušona, which also affected the possibilities for supplying these exotic plants to the area.

Many of the relatives of Reuts have been mentioned in the cases of the property (LNA LVVA, 7067.f., 1.a.,4.l.) (which belonged to the members of the Polish rebellion) and the deportation of their owners beyond the boundaries of the province in 1866 -1887, but the Reuts of Kamenec did not directly participate in these events as they were not deported, but they were included in the lists at the beginning of the 19th century. In this context, the archive holds the claim of Alfon Oskerko, a retired colonel of the rank-and-file police, in 1894, for lifting the ban to landlord Mikhail Mihailovich Reuts (printed in the collection of 1893 on the bans in the district of Dvinsk) (LNA LVVA, 710.f.,1.a.,559.l.). It is about the ban in amount of 25 928 roubles for the defendant's property in Kamenec manor, as indicated in the collection of 1893. On 14 December 1893, this case was terminated in the court, but nothing was said there about the lifting of the ban, which is why Oskerko submited a copy of the court and a receipt from the Treasury.

There is quite a lot of evidence of the lawsuits of M. Reuts. In 1899, Mikhail Mikhailovich Reuts appealed for renewal of the deadline of the court decision of 27 August 1898 (LNA LVVA, 710.f.,1.a.,1238.l.), in the case with land owners Konstancija Zenenova, Marija Vanda, and Romāns Kazimirovičs Korsaks on the property rights for the Lake Bešona. Subsequently, the lake was divided among the both applicants in half.

In 1898, M. Reuts also submitted a claim against notary Aleschenko, who had confirmed his purchase agreement with Konstantin Gizbert-Studnicki for the three-part property in Krinica Dvinsk. The senior notary ignored this claim, until M.Reuts submitted the statement from the governor of Vitebsk that he was entitled to purchase land in Vitebsk province (LNA LVVA, 710.f.,1.a.,1121.l.), apparently still in connection with the restrictions on the activities of the persons involved in the Polish rebellion.

In 1895, according to a report by police officer Morev, it became clear that Mikhail Mihailovich Reuts was banned from the property. The National Bank's lawyer submitted the collection order for the recovery of the bills in favour of the bank at 2 500 roubles from the land owners Ksaveri Stanyslavovich Volsk and Mikhail Mihailovich Reuts and claiming to pay this bond for the property of M. Reuts in Vārkava, the district of Dvinsk. The order for this decision was delivered to M. Reuts.

However, in 1908, a record was made for the christening in Višķi, for Mikhail Zbignev, a son of the land owners of the district of Dvinsk, Mikhail August Iahim and Jadviga Martinovna Jakubska-Reuts, who was born in St. Petersburg on 16 June 1906. He was christened on 24 April 1908. His godparents were Mikhail Mikhailovich Reuts, Sofia Leonovna Benyslavska, Hieronymus Molls and Maria Dimcha (LNA LVVA, 710.f., 1.a.,1121.l.).

Conclusions and proposals

The Latgale Cultural Heritage List includes more than 600 different objects: castles, manor ensembles, churches, peasant farms, urban areas. Almost half of them are national monuments. Many areas and objects without historical and cultural importance are also of very high economic value. Many old manor and park complexes dating from the 18th and 19th centuries have survived in Latgale.

The population census records are useful for the family research. This study does not confirm the widespread assertion that Eugenia Kerbedz substantially renovated Riebiņi castle at the end of the 19th century for the work and recreation of artists. There are no records in the population census questionnaires of artists' workshops or similar premises. Only in 1897, the arrival from Jelgava of the twenty-one-year-old Polish governess Pisanko

Stanislava was recorded. Besides, she was registered in the status of the guest – apparently, her services were not needed anymore.

None of the Kerbedz family members have been recorded in the questionnaires, so none of them during this time, stayed in Riebiņi or in Lūznava.

The cultural-historical objects mentioned in the article are not fully managed today and their potential, including the tourism industry, is not being used. Not all the objects can be used equally. The potential for use depends on the type of use and the location, as well as their technical condition.

By clarifying the facts on the origin of some of the known stories, the guided tours, based on the facts, not on approximate orientated events, can be provided.

Gelenovo Park is not clean yet. On the excursion routes, the story of its origin has been unreasonably. The population census records confirm that the landowners were von Reut's family. In the 19th century one of M. Reuta's daughters was named Helen (Jelena). It can safely be asserted that the name of the park is associated with this woman.

There is no reason to say that Riebiņi Castle and Pastaru Windmills are not interesting tourist attractions. The potential of the objects is not used. Even after the reconstruction, Pastari windmills are left neglected, not closed, anyone can enter them. The Riebini Manor is located in the village, along the P58 road, but no reconstruction work has been done. The tourism today is only conditional – the physical object is not usable. The Pastari windmills are off the P58 road, but it is possible to realize such plans that do not require large investments. The surroundings are quiet, sparsely populated, dominated by the Latgale countryside. A Pastari windmill can carry out a project that does not cost much, for example, a country hotel. Can use the idea of the Soviet Restoration Design Cabinet. The whole potential of this object has not been lost yet.



The research was elaborated with the financial assistance of Rezekne Academy of Technologies provided through a research grant for the "Maintenance and renewal of the cultural and natural heritage in Riebini municipality".

References

- 1. AFTANAZY, R. (1992). Dzieje rezydencji na dawnych kresach Rzeczypospolitej. Cz. 1, [Wielkie Księstwo Litewskie, Inflanty, Kurlandia]. T. 3, Województwo trockie, Księstwo Żmudzkie, Inlanty Polskie, Księstwo Kurlandzkie. 343.
- 2. BRĪVERE, I. (2017). *Lūznavas muiža un tās ļaudis 19.–20. gs.mijā*. Starptautiskā studentu un docētāju zinātniski-praktiskā konference INDIVĪDS. SABIEDRĪBA. VALSTS. 266.-277.lpp.
- 3. Geļenovas muiža PDC Rušonas pagasts Preiļu rajons Lietas Nr.: 08-04-III-37-3033
- 4. Eugenija Kerbedienė public profile. Retrieved 11 January 2018, from https://www.geni.com/people/Eugenija-Kerbedien%C4%97/600000003972078 4458
- 5. Kultūras pieminekļu restaurēšanas projektēšanas kantoris A/p Pastoru vējdzirnavas. Pirmsprojekta izpēte. 4.sējums. Skiču projekts. R., 1985., 2.lpp.
- 6. *Latviešu konversācijas vārdnīca* (1936) XIV sējums 28051-28097slejas. Rīga
- 7. LNA LVVA, 2706.f., 2.a., 199.l. Galēnu (Vidsmuižas) pagasts 5.daļa, p.50.- 1103)
- 8. LNA LVVA, 2706.f., 2.a., 199.l. Līvānu pagasts 4.dala, 120.lp.
- 9. LNA LVVA, 2706.f., 2.a., 199.l. Līvānu pagasts 3.daļa, 456.lp.
- 10. LNA LVVA, 2706.f., 1.a., 97.l. Kapiņu pagasts 7.daļa, 4.-16.lp.
- 11. LNA LVVA, 3930.f., 1.a, 4.l. Посемейные списки дворян Двинского уезда, 1844, 70 lp.
- 12. LNA LVVA 7067.f., 1.a, 4.l. П Дело о распродаже имений, принадлежащих участникам восстания и высылке владельцев за пределы губернии 1866-1867, 3 lp.
- 13. LNA LVVA 710.f., 1.a., 559.l. По прошению Альфонса Оскерко о снятии запрещения с имения двор. Михаила Михайлова Реута, пропечатаного в сборнике запрещений в Двинском у. за 1893г. 3.lp.
- 14. LNA LVVA 710.f., 1.a.,1121.l. Дело по жалобе помещ. Мих. Михайловича Реутта на постановление старшего нотариуса сего суда 5.lp.
- 15. LNA LVVA 710.f., 1.a.,1121.l. Дело по жалобе помещ. Мих. Михайловича Реутта на постановление старшего нотариуса сего суда 4.lp.
- 16. Novads. Retrieved 11 January 2018, from http://www.riebini.lv/lv/sidemenu/novads
- 17. Pastaru vējdzirnavas. Retrieved 11 January 2018, from http://visitlatgale.com/lv/objects/view?id=250
- 18. STEPIŅA, I. (2011). Aglonas vēstures lappuses: Kungu mājas// Ezerzeme, 02.08.2011.
- 19. Str. Camposanto Vecchio, 49, 60019. Retrieved 11 January 2018, from https://www.google.it/search?q=Senigallia+(AN)+Via+Camposanto+Vecchio+49
- 20. Vārkavas novada kultūrvēsturiskais mantojums. Retrieved 11 January 2018, from http://www.varkava.lv/lv/augseja-izvelne/novads/kulturvesturiskie-objekti
- 21. Mihails Reuts. "Sludinājumi." *Valdības Vēstnesis*. 1922. 7. jūnijs. Retrieved 11 January 2018, from http://latgalesdati.du.lv/persona/9738
- 22. ВОРОНИН, М., ВОРОНИНА, М. (1982) Станислав Валерианович Кербедз. Ленинградское отделение «Наука»

TOURISM PRODUCT DEVELOPMENT POSSIBILITIES IN RIEBINI MUNICIPALITY

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Abstract. Tourism is one of the driving forces of the global economy, and its role in the national economies increases every year. Tourism is one of the leading export industries in the world, which, despite challenges and turbulences, develops steadily. However, to attract the attention and flow of tourists to the rural areas, it is important to create attractive and sustainable tourism products that could turn into tourist destinations. The aim of the research is to explore and identify possibilities for tourism product development in Riebini municipality. The following tasks were set to achieve the aim: to explore the theoretical aspects of tourism product and cultural tourism product development; to identify possibilities for tourism product development in Riebini municipality. The methods applied in the research: logical and constructive, synthesis and analysis, empirical survey. The research study was carried out within the framework of RTA research grant No. 13.15/5 "Maintenance and renewal of the cultural and natural heritage in Riebini municipality". The authors have developed proposals for development of the tourism sites in Riebini municipality that could transform them into tourist destinations.

Keywords: cultural tourism, Riebini municipality, tourism product, tourism product development, tourism resources.

JEL code: *R1, R3, Z3*

Introduction

In the Latvian Tourism Development Guidelines for 2014-2020, the objective of tourism development policy is set. It envisages sustainable development of tourism in Latvia, enhancing the competitiveness of tourism services in foreign markets; promotion of competitive tourism product development by supporting the creation of new, innovative tourism products with higher value added, including the development of infrastructure, the formation of regional tourism clusters, and the inclusion of Latvian tourism products in the overall tourism offer of the Baltic Sea region; as well as improvement of the quality of tourism products (Latvijas tūrisma attīstības pamatnostādnes, 2014).

Tourists are faced with a wide range of tourism products at the destinations they visit. One of the key challenges for the tourism provider is to understand what makes a trip memorable and establishes a successful

experience? How to create a niche tourism product? Tourism professionals emphasize the necessity of creating innovative and comprehensive tourism products providing an unforgettable experience for different customers.

The aim of this research is to explore and identify possibilities for tourism products development in Riebini municipality.

The following tasks were set to achieve the aim:

- to explore the theoretical aspects of tourism product and cultural tourism product development;
- to identify possibilities for tourism product development in Riebini municipality.

The methods applied in the research: logical and constructive, synthesis and analysis, empirical survey.

Object of the research: possibilities for tourism product development. Subject of the research: tourism products in Riebini municipality.

Hypothesis: The tourism resources in Riebini municipality could be turned into sustainable tourism products.

Theoretical aspects of a tourism product

In the academic terminology, the tourism product is defined as a commodity, service which is provided for a fee or is free of charge; wealth, values, and conditions or a set of those created by a human activity, having a real consumption value and being produced, created or adjusted by tourism companies and enterprises of other industries to satisfy the interests of tourists and to meet their needs. The basic tourism product is a trip consisting of a set of different services. A tourist can purchase a trip (tourism product) at his/her place of residence and consume it at the place of service (Tūrisma un viesmīlības terminu skaidrojošā vārdnīca, 2008). However, the Tourism Law defines a tourism product using the concept of a tourism service – a purposeful activity to meet the interests and needs of tourists. (Tūrisma likums, 1998)

Abdelati and Bramwell (Abdelati et al., 2015) emphasize that primary tourism products are the main attractions that draw the tourists to certain destinations. Diversifying, reinforcing, and linking these products can be crucial for the competitiveness and sustainable development of the destinations. The research explores the primary tourism products drawing the visitors to the destinations rather than the products (such as catering services, transport) that rarely are crucial in attracting the tourists (Jansen-Verbake, 1986). The physical, environmental, and sociocultural features or attributes of final attractions as major tourism products have been studied by the authors such as Jafari (Jafari, 1982), Smith (Smith, 1994). They emphasize the significance of physical and environmental qualities,

including climatic conditions, the landscape, and ecology, as well as sociocultural characteristics, including history, politics, arts, economic activities, lifestyles, monuments, and buildings. The development of primary tourism products in destinations is a complex task consisting of several elements comprising both tangible and intangible components, including cultures and associations with cultural elements as noted by Morgan (Morgan, 2014), Murphy, Pritchard & Smith (Murphy et al., 2000), Xu (Xu, 2010). The development of the tourism product as a destination accentuates the preservation of natural and cultural heritage in accordance with the sustainable tourism principles, which have been set as a development strategy for the last 30 years (Nickerson et al., 2016).

Cultural and natural heritage is an important intellectual and spiritual treasure serving as evidence of the living past and traditions. Its identification and preservation are in line with the principles of sustainable development.

An individual has always aspired to live and work in a comfortable, rational, and aesthetically high-quality environment that inspires, complements, and creates a mood. Every period leaves its footprints – its monuments – in the space, enriching it. The cultural heritage should not become a dogma, though it should not be given up due to the quality of the human life. The cultural heritage is a collection of all individual and humankind achievements – a huge, yet often underestimated force and energy that can be effectively used to develop the site.

The space, where we live, is not static; it is constantly evolving. Only the original has the highest value in the cultural and historical environment. Losing the original, the society loses a part of the heritage that cannot be recovered. The historical items of culture are covered by the layers of the previous periods – such as qualitative transformations, loss of certain elements, damages, and natural deterioration. Those, too, are the testimonies of the time and, hence, have a cultural value.

The cultural landscape is comprised of three basic elements – nature, culture, and people.

Nature encompass everything that has emerged due to the natural processes – terrain, lakes, areas where the natural processes dominate.

Culture embraces the items made by a person over the time – traditions, history, buildings.

A person is a user of the place – a local resident, or a guest of a municipality or city (Tempļakalna parka attīstības stratēģija, 2016).

Cultural tourism products in Riebini municipality

The Riebini local self-government has assigned the status of protected cultural and historical objects for 32 sites (see: Table 1).

Table 1 The important cultural objects of Riebini municipality as defined by the decision of the local self-government (Source: Riebiņu novada saistošie noteikumi, 2007)

Galeni pagasts	Riebini pagasts	Silukalns pagasts
The Roman catholic church	Riebini Manor park,	Obelisk dedicated to the
of Vidsmuiza,	Riebini Roman	soldiers of the WW II
Galeni Manor park,	catholic church,	
Galeni manor complex,	Pienini Roman	
Memorial house of Roberts	catholic church,	
Mūks in Galeni,	Riebini Manor	
Household building of	complex,	
J.Zeimuļs in Mičuļevka,	Stepanpole wayside	
Radži well in Sondori,	cross,	
Indāni walley	Pienini wooden	
Lomi Old Ortodox church,	church,	
Makarova Old Ortodox	Riebini orthodox	
church,	church,	
Common grave of the WW II	Skangeli Old	
soldiers in Galeni,	Orthodox church,	
Monument "White cross"	Memorial stone	
devoted for the victims of	devoted for J.Ivanovs	
"The Red Terror" in Galeni,	in Babri	
Memorial stone devoted for		
S. Belkovskis in Malta's		
Trūpi		_
Stabulnieki pagasts	Silajani pagasts	Rusona pagasts
Vilcini Old Ortodox church,	Kostigi Old Ortodox	Memorial site of the vicitms of
Polkorona Manor building,	church,	the Soviet terror in Caunes,
Houshold buildings of	Common grave of the	Houshold building of Kastire
Polkorona Manor	WW II soldiers	Manor,
		Landlords' house of Gailīši
		Manor,
		Rušona Manor,
		Memorial house of J.Baško,
		Memorial house of J.Streičs in
		Caici,
		Aglona railway station,
		Memorial site devoted to the
		deported persons in Aglona
		railway station,
		The wayside cross "White Cross"
		in Aglona railway station

Culturally and historically, the territory of Riebini municipality is situated in Latgale region. Riebini municipality includes the following rural territories (hereinafter – *pagasts*) – Riebini, Stabulnieki, Silukalns, Silajani, Galeni, and Rusona (Riebiņu novada Tūrisma..., 2014). Twenty-five cultural monuments are located in Riebini municipality. Twenty of them are the objects of national importance, and 5 – the objects of local importance (Valsts kultūras pieminekļu..., 2012).

Cultural monuments along with the lakes, landscapes, and natural sites are important tourism and recreational resources that should be deployed for the municipality's development. The most promising cultural tourism products are identified in the Tourism Development Strategy of Riebini Municipality for 2015-2022 (Riebinu novada Tūrisma..., 2014).

Table 2 The most promising cultural and cultural tourism products in Riebini municipality (Source: Riebinu novada Tūrisma..., 2014)

Resources	Deployment of suggestions for	Major resources with
	development of tourism	development potential
	products	
1	2	3
Architecture	To include in the tourism offer as one of the main objects of attraction, to ensure the provision of high-quality information (facts, interesting and attractively presented information).	A significant cultural landscape is created by the monuments of architecture such as Riebini Manor, Galeni Manor, Rusona Manor, Rusona Roman Catholic church, and others reflecting the lifestyle of the German landlords in the 18 th and 19 th centuries. Pastari windmill serves as the symbol of the municipality.
Museums	To promote the creation of a modern, interesting, and attractive tourism offer in museums for both local and foreign visitors, to cooperate with other museums and exhibition halls on possibilities for the exchange of exhibitions and collections	The memorial house of Roberts Mūks, a world-renowned philosopher and historian, in Galeni, including his work cabinet, manuscripts, printed materials, library, personal belongings, part of his collection of Buddha statues, pipes, furniture, paintings, and other belongings.

Table 2 continued

1	2	3
Intangible cultural	To involve tourists, let them participate, promote co-operation	Revitalizing and promoting traditions of cheese making,
heritage	in product development and	beekeepers, bread baking, beer
(craft skills,	selling of homemade products.	brewing, handicrafts,
rites, folk		woodworking, ceramics, and
medicine,		others at least regionally. It is
etc.)		necessary to raise the awareness of
		the local people that these
		traditions have to be revived and
		passed on to the future
		generations.
Gardens,	To include in the tourism product	Riebini Manor and park, Galeni
parks	offer.	Manor and park, Gelenova park
		are the sites both for cultural and
		sporting events, and the attractions for individual tourists.
Castle	To include in the tourism offer as	Ancient Latvian castle mounds and
mounds,	the attractions intertwined with	worship sites – Šņepsti castle
worship	legends and myths.	mound, the stone of sacrifice
(sacrifice)		Upurakmens, the sacrifice site
		Spuldziņu Melnaiskalns, and
		others.
Notable	To use them for promoting the	The homeland of R. Mūks,
persons of	image and recognition of Riebini	traditions of applied arts (Silajāņi
Latvian	municipality in wider tourism	pottery school), the heritage of
culture, and	target markets.	J.Pīgoznis, J.Ivanovs, J.Streičs, and
other		others.
prominent		
persons	m · · · · · · · · · · · · · · · · · · ·	
Religious	To incorporate in the tourism offer	Churches of all the most common
(sacred) tourism	in accordance with the	denominations in Latvia are
tourisiii	requirements of the target market, to create routes including these	situated in Riebini municipality.
	objects.	
	Objectsi	

Cultural tourism product development possibilities in Riebini municipality

In 2017, within the framework of RTA research grant No. 13.15/5 "Maintenance and renewal of the cultural and natural heritage in Riebini municipality", in cooperation with Riebini municipality, the authors have developed a strategy of cultural tourism objects in Riebini municipality. The strategy of cultural tourism objects is part of the tourism strategy of Riebini municipality and part of the overall hierarchy of municipal policy documents.

Currently, the rich natural resources and their diversity determine the existing tourism offer in Riebini municipality. For example, the water resources of Rušona pagasts attract both active tourists and the pilgrims visiting the most popular tourist attraction in Latgale – the Aglona Roman Catholic Basilica. On August 15, the Feast of the Assumption of Mary into Heaven, the number of visitors of the Basilica reaches up to 450 000 persons (Aglonas novada oficiālais...). The Puppet Museum, the King's Hill of Christ, the Lake Velnezers also are among the most interesting tourist attractions in Latgale (Kristus Karaļa kalns..., 2015).

Klepers in his dissertation "Tourism spatial structures in Latvia, their formation, manifestations, and meanings in the promotion of tourism a destination in the market" (Klepers, 2012) has developed a synthetic zoning approach for identification of the tourism spatial structure. The author suggests using this approach to identify the factors determining the development of tourism in the region, adding to them one more criterion – significance of place perception, that is, places that already have a certain set of ideas in the perception of visitors. Consequently, they can be conditionally divided: fourth-level destinations – a region (e.g. Baltic Sea region), third-level destinations – a country (e.g. Latvia), second-level destinations – a local region (e.g., Latgale), and an initial spatial unit – local destination – a tourist attraction (e.g., tourist attractions of Riebini municipality) (Compiled using Klepers)

The value of Riebini municipality is mainly determined by its natural and cultural resources and objects. Experts' observations suggest that the municipality's possible development scenario involves the provision of recreational, cognitive, and active leisure activities in the rural environment.

The possible development directions of the cultural objects of Riebini municipality are designed with the aim to ensure the socio-economic development of the municipality, deploying the significant natural and cultural resources at its disposal. However, it should be acknowledged that the sustainability of the natural and cultural resources is possible only if there are the necessary funds for their renewal and maintenance, considering the protection, maintenance, and development of the authentic environment and its elements. By investing the necessary financial resources, a unique cultural heritage can be preserved for a long run.

Table 3 Development directions and sustainability of the cultural objects in Riebini municipality (Source: compiled by the authors)

Object	Location	How it could be used in tourism
Landlords house of Riebini Manor, Manor complex and park, Riebini Roman Catholic church	Riebini municipality, Riebini pagasts	To clean and improve the pond, to arrange recreation zones for all social groups. To develop active tourism, for example, horse riding routes of various complexity. To develop artisan food workshops (dairy candies workshop, healthy food workshop focusing on local resources) in the buildings of the manor. To create (include) a complementary offer in cooperation with other manor estates in Latvia, for instance, in connection with the Kerbedz family, the Korf family, and the Platenberg family estates. To create an attraction "Latvia in miniature" (starting with the replicas of the churches, the manor estates of Latvia) in the park. Viewing sites over the park of miniatures. Photo service (retro photo) as a complementary service if the tourism offers "Latvia in miniature", artisan food workshops, and Trail of Senses are developed. Along with creating this tourism product, to develop a new offer for the new-weds that can be linked to the opportunities offered by the Pienini church – organization of the matrimonial ceremonies. In the Riebini Manor house (by attracting investments), to set up a spa centre. "To dress" the manor in the canvas with the manor's authentic reproduction on it. The Trail of Senses – a route based on the human senses (e.g., walking barefoot). Organized recreational zones with barbecue facilities.
Rušona Roman Catholic church, its buildings, monastery, fence	Riebini municipality, Rusona pagasts, Vecrušona	The accommodation in the monastery for the target audience of adventure tourism, the hotel's furnishings and comfort level tailored to the lifestyle of Dominican monks. In addition, to offer "silence retreats" (no communication with the purpose – to harmonise inner peace). Event tourism – "One day in the monk's shoes". Ancient science centre (e.g. Alchemist Laboratory). To develop a tourism product based on the experience economy. Thematic experience involving 5 senses to make the tourist's experience live and personalized with involvement and participation. Ancient book exhibitions. In cooperation with schools – schools of historians, archaeologists.

Table 3 continued

		rable 5 continued
1 D×	Di alaini	Justine management of the Laterian language ("Luine angile")
Rušonas	Riebini	In the manor, snails (in Latvian language – "wine snails")
Manor	municipality,	are bred and homemade wine brewed – to include it in the
	Rusona	tourist routes (with tasting).
	pagasts,	The manor has a hotel with a spa offer, which is currently
	Vecrušona	scarcely provided in the region (Dembovska et al., 2017).
		If appropriate winter conditions, to organize winter
		events on the Lake Rusona including various activities
		aimed at different target groups – skating, skiing, sleigh
		rides, etc.
		A railcar built on the single-rail, which runs around the
		park and the lake (built as a carousel, roller coaster).
		Organized rest zones with barbecue facilities.
Pastari	Riebini	Old crafts tradition demonstration centre (workshop) -
windmill	municipality,	arrangement of experimental laboratories, for example, a
	Stabulnieki	flour workshop, agro-tourism (in cooperation with local
	pagasts,	farmers – farm-visiting days).
	Dravnieki	Domestic animals garden. Biological fields of agricultural
		plants (for example, medicinal plants, and cereals grown in
		the municipality) for visiting, the target audience -
		schoolchildren. A small area (no more than 1 ha). Seasonal
		tourism product.
		Organized rest zones with barbecue facilities.
Vidsmuiza		The patron (guardian) of the church and related feasts.
Roman		Organ music concerts.
Catholic		Creating thematic calendars of the sacred objects.
church,		To arrange events, happenings where the tourist visits
Pieniņi		one sacred object on a Sunday, scores points during the
Roman		year, the most active travellers of the municipality receive
Catholic		the reward (for example, the prize could be a weekend in a
church		significant sacred centre). This activity could be attributed
citaten		to Latgale tourism products, and Riebini municipality could
		initiate it. It could be positioned as a travel quest based on
		the principle of "Travel around Latvia's Manors and
		Castles!"
		Ancient Music Festival.
Galēni		Active tourism development – an obstacle course located
Manor		above the ground in the park trees. The target audience –
park and		children and adults, since there are the varying degrees of
Manor		difficulty on the track.
complex Kastīre		Rental of sports equipment.
Manor		Kemperi parking (amenities needed, including showers,
		electricity, laundry and cooking facilities).
stables		D (4)
Gailīši		Because of the current use of the building, it is difficult to
Manor,		combine it with an attractive tourist product (the tourist is
landlord		looking for positive emotions that are difficult to combine
house		with the current use of the object).

Conclusions and suggestions

Tourism could be integrated into non-agricultural entrepreneurship, as well as in agricultural enterprises, if it can solve a part of the marketing task – selling the goods. Visits, tastings, and tours at the production site can convince the potential buyers, strengthen loyalty, and encourage sharing the experience. Tourism becomes not only an additional source of income, but also an important component of marketing. Similarly, the crafts and traditional skills, coupled with quality and high design requirements, can be an adjacent tourism offer. Souvenirs, interior design items alongside with artisan food can be required at the tourist sites.

The strength of the Riebini municipality tourism destinations is the constant and predictable flow of tourists. It is not homogeneous, but with a pronounced seasonality. Thus, knowing the motivation of the travellers, there is a chance to develop purposefully new thematically related offers.

In Aglona, the neighbouring territory of Riebini municipality, one of the most popular tourist attractions of international recognition in Latgale region is situated – the Aglona Basilica with over 200 000 visits per year. Recently, the number of visitors has increased by more than 25% - from 250 000 in 2014 up to 314 734 in 2015.

The Aglona Basilica is one of the well-known sanctuaries in the world. Its interior – vaults, arches, and columns – are opulently decorated with Rococo style ornaments. The Aglona Roman Catholic basilica is the centre of the Latvian Catholic denomination, and the sanctuary of the world significance.

There are many tourist attractions and products in the Riebini neighbouring municipalities; they could become "partners" for attraction or cooperation. Local tourism destinations should be organized according to the principle of functional tourism districts taking into account characteristics of the destination, linked tourism flows, and networks of stakeholders.

In the case of Riebini municipality, there are three local tourism destinations developed:

- 1) Landlords' house of Riebini Manor, the Manor complex and park, Riebini Roman Catholic church:
- 2) Rušona Roman Catholic church, its buildings and monastery, fence; Rušona Manor;
- 3) Pastari windmill.



The research was elaborated with the financial assistance of Rezekne Academy of Technologies provided through a research grant for the "Maintenance and renewal of the cultural and natural heritage in Riebini municipality".

References

- 1. ABDELATI, M. B., BRAMWELL, B. (2015). Tourism product development and product diversification in destinations. *Tourism Management Journal*, Vol. 50, pp.213-224.
- 2. AGLONAS NOVADA OFICIĀLAIS TŪRISMA PORTĀLS. Aglonas novads. Tūrisms. Retrieved April 20, 2018, from https://ej.uz/mkcm
- 3. DEMBOVSKA, I., LITAVNIECE, L., SILICKA, I. (2017). Assessment of Spa Hotel Services' Development Opportunities in Rezekne City. Proceedings of the 18th annual International Scientific Conference "Economic Science for rural development". April 27-28, 2017. Jelgava, LLU, pp.201-212.
- 4. JAFARI, J. (1982). The tourism market basket of goods and services. The components and nature of tourism. In T. Singh, J. Kaur, D. Singh, & S. Misra (Eds.), *Studies in tourism, wildlife, parks, conservation*, p.1-12. New Delhi: Metropolitan.
- 5. JANSEN-VERBEKE, M. (1986). Inner-city tourism: resources, tourists and promoters. *Annals of Tourism Research*, Vol.13, Iss:1, pp. 79-100.
- 6. KLEPERS, A. (2012). Tūrisma telpiskās struktūras Latvijā, to veidošanās, izpausmes un nozīmes galamērķu virzībai tirgū. Retrieved May 15, 2018, from https://dspace.lu.lv/dspace/handle/7/5164
- 7. Latvijas tūrisma attīstības pamatnostādnes 2014.-2020.gadam. (2014). Retrieved June 1, 2018, from https://likumi.lv/doc.php?id=267332
- 8. MORGAN, N. (2014). Problematizing place promotion and commodification. In A. Lew, M. Hall, & A. Williams (Eds.), *The Wiley Blackwell companion to tourism.* p. 210-219. Chichester: Wiley.
- 9. MURPHY, P., PRITCHARD, M., SMITH, B. (2000). The destination product and its impact on traveller perceptions. *Tourism Management Journal*, Vol.21, Iss:1, pp.43-52.
- 10. NICKERSON, N.P., JORGENSON, J., BYNUM, B.B. (2016). Are sustainable tourists a higher spending market? *Tourism Management* Journal, Vol.54, pp.170-177.
- 11. SMITH, S. (1994). The tourism product. *Annals of Tourism Research*, Vol. 21, Iss:3, pp. 582-595.
- 12. Riebiņu novada Tūrisma attīstības stratēģija 2015.-2022.gadam. (2014). Retrieved May 1, 2018, from https://ej.uz/vomh
- 12. Riebiņu novada saistošie noteikumi Nr.5 "Par Riebiņu novada kultūras pieminekļu saglabāšanu, uzturēšanu un aizsardzību", apstiprināti ar 17.04.2007. domes lēmumu Nr. 9 /prot. 7
- 13. Tempļakalna parka attīstības stratēģija. (2016). Retrieved May 23, 2018, from www.aluksne.lv/citi%20dokumenti/Templakalna_STRATEGIJA%20(3).pdf
- 14. Tūrisma likums. (1998). Retrieved May 25, 2018, from https://likumi.lv/doc.php?id=50026
- 15. Tūrisma un viesmīlības terminu skaidrojošā vārdnīca. (2008). Retrieved May 20, 2018, from https://ej.uz/ii31
- Valsts kultūras pieminekļu aizsardzības inspekcija. (2012). Nosacījumi Riebiņu novada teritorijas plānojuma 2012. – 2014. g. izstrādei "Valsts aizsargājamo kultūras pieminekļu saraksts".
- 17. Kristus Karaļa kalns Aglonā. Vai tas tiešām ir tik ķecerīgs? (2015). Jauns.lv. May 20, 2018, from https://ej.uz/i16m
- 18. XU, J. (2010). Perceptions of tourism products. *Tourism Management Journal*, Vol.3, Iss:5, pp.607-610.

THE ROLE OF THE STOCK MARKET IN THE MOBILIZATION OF LONG-TERM FINANCIAL RESOURCES

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Abstract. The main purpose of the research is to define mobilization of long-term financial resources in the stock market, to analyse the current situation and give some suggestions for improvement of investment. The author tries to research the impact of investment on the stock market because everyone knows long-term financial resources are very significant for the market and affect economic growth. The paper examines the current state of investment activity in the stock market in our republic and around the world, as well as the impact on the economy of this activity is investigated. The author investigates the impact of investment activity in the stock market on the economy and ways of correct use of investment activity. Indeed, investment is a long-term investment in various sectors of the economy for making profit. Investment - consists of financial means put into objects of entrepreneurship and other types of activity, as well as material and intellectual resources for the purpose of earning (profit) or social benefits. Despite its popularity and presence in the news, the stock market is just one of many potential places to invest your money. Investing in stocks is often risky, which draws attention to the huge gains and losses of some investors. If you manage the risks, you can take advantage of the stock market to secure your financial position and earn money.

Keywords: capital, investment, market, securities market, share, stock.

IEL CODE: D53

Introduction

Mobilization of the resources can be either for short term or for long term. The economy consists of a huge number of enterprises and individuals, requirements of all of them differ. Some have surplus cash to save, while others need cash. Some firms/individuals have short term liquidity needs, some want money for long-term capital investment. Capital market intermediaries are like insurance companies, housing finance companies, pension funds, and investment funds etc., which mobilize savings and fund long-term investments. A person having surplus money for long term may be willing to 'lend' or to 'invest'. That forms distinction between debt and equity. The former, the lender, will get fixed return and the latter, the investor, will get a share of the profit.

As you know, the establishment of an efficient stock market is, therefore, indispensable for any economy that is keen on using scarce capital for sustainable economic growth. While governments need to play an active role in the business of the market through, say, privatization via the stock

exchange, regulatory bodies should embark on aggressive promotion of the exchanges' activities across all sectors of the economy, and encourage all potent players. Remember, it is an investment ground for all.

The financial sector plays an essential role in providing and channelling financing for investment. Beyond providing short-term finance for businesses' day-to-day operations and other temporary cash requirements, financial institutions, capital markets and institutional investors are also sources of long-term finance that is the finance that is available for an extended period of time. The importance of long-term finance lies in its pivotal role in satisfying long-term physical investment needs across all sectors in the economy and specifically in key drivers of growth, competitiveness and employment such as infrastructure, real estate, R&D and new ventures (OECD, 2013).

Investment is money or capital circulation with the purpose of earning additional income. Warren Buffet, the legendary investor, stated investment as follows: "The process of depositing money means a lot of money in the future". The main purpose of investment is to capitalize on one or more investment tools with the hope that your money will grow over time.

Resource mobilization through stock markets

Long-term financing uses long-term financial resources, for which it has to be reminded that long-term financial resources are also used to cover that part of current assets of the company, which has a permanent character and makes up the working capital of the company.

In the long-term functioning market economies, the financing of investment projects of the company is mainly provided by internal financial resources, and primarily by depreciation.

One of the hardest aspects of the stock market to judge is when to sell your investments. Since the market is constantly fluctuating, it is hard to judge accurately what will happen to stock prices in the future. Many investors get scared when the market drops and sell out of fear, while others hold on to declining stocks too long in hopes of a rebound. However, there are no set guidelines that govern whether to invest for a long period of time or a short period of time. Long term investing and short term investing each have their pros and cons, and it is hard to say definitively which strategy is more rewarding. Although each approach has its strengths and weaknesses, investors must decide for themselves what timeframe of investing will better suite their trading style and situation. Long-term investments typically take years and years before showing any profit, which is obviously not acceptable if the money is needed at the moment. By contrast, long-term investments span large time frames and offer typically greater rewards. Long-term

investments span many years, usually decades, and are relatively low risk. This type of investment works by compounding the initial amount, taking a small investment and turning it into a substantial profit.

Success in achieving major economic policy and long run financial objectives of the economy requires a good working policy on financial resource mobilization and expanded capital formation.

Thus, the main objectives of any financial resource mobilization policy should be:

- 1. To assist in increasing the Gross Domestic Saving Rate by changing the unnecessary and inappropriate consumption patterns.
- 2. To create an atmosphere conducive to channelling the investment to productive sectors by raising the total investment growth rate by significant percentage points as may be predetermined.
- 3. To avail regular supply of financial resources in required quantity in order to carry out development activities in an uninterrupted and sustainable manner.
- 4. To make efforts for efficient mobilization of internal resources and to make appropriate and optimum utilization of foreign assistance.
- 5. To utilize the internal and external resources in a complementary way considering their interrelationships.

The capital market refers to the organization and the mechanism through which companies, other institutions and the government raise longterm funds. Therefore, it constitutes all long-term borrowings from banks and financial institutions, borrowings from foreign markets and raising of capital by issuing various securities such as shares, debentures, bonds, etc. For trading of securities, there are two different segments in the capital market. One is the primary market and the other is the secondary market. The primary market deals with a new/fresh issue of securities and, therefore, it is known as the new issue market. On the other hand, the secondary market provides a place for purchase and sale of existing securities and is known as the stock market or a stock exchange. The new issue market primarily consists of the arrangements that facilitate the procurement of long-term finance by companies in the form of shares, debentures and bonds. The companies usually issue those securities at the initial stages of their formation and so also later on for expansion and/or modernization of their activities. However, the selling of securities is not an easy task, as the companies have to fulfil various legal requirements and decide upon the appropriate timing and the method of issue. Hence, they seek assistance of various intermediaries such as merchant bankers, underwriters, and stockbrokers etc. to look after all these aspects. All these intermediaries form an integral part of the primary market. The secondary market (stock exchange) is an association or organization or a body of individuals

established for the purpose of assisting, regulating and controlling the business of buying, selling and dealing in securities. It may be noted that it is called a secondary market because only the securities already issued can be traded on the floor of the stock exchange. This market is open only to its members, most of whom are brokers acting as agents of the buyers and sellers of securities. The main functions of this market lie in providing liquidity (ready encashment) to securities and safety in dealings. It is because of the availability of such facilities that people are ready to invest in securities (Levine, 2005).

Equity markets are seen as a prerequisite for corporations to get access to capital they need for innovation, value creation and growth. This is particularly important in the aftermath of the financial crisis when national economies seek more long-term corporate investment. However, the last decade has seen fundamental changes in equity market structure and trading practices and the way that the equity is owned. This has changed the framework in which companies operate and conditions for exercising corporate governance. These changes have had a direct impact on the willingness and ability of new companies to be listed on stock exchanges (OCED, 2013).

Several forces are converging to reshape global capital markets in the coming decade. The rapid accumulation of wealth and financial assets in emerging market economies is the most important of these. Simultaneously, in developed economies, aging populations, growing interest in alternative investments, the move to defined-contribution pension schemes and new financial regulations are changing how money is invested. These forces point to a pronounced rebalancing of global financial assets in the coming decade, with a smaller share in publicly listed equities (McKinsey Global Institute, 2011).

In modern times, people are often divided into two groups for their ideas about investment. The first group of people thinks that investment is a kind of gambling. They are convinced that if you have invested, you will definitely lose one day. However, the second group of people believes that investing is a must. They simply do not know where to begin. The main purpose of investors is to make a right decision on what they have invested before earning income.

The key to investing in stocks is that the investor is able to earn profit as a shareholder and can find ways to increase his/her capital by choosing the right position. Shares are investments that provide partial ownership in the company and that are parts of the company's profits and assets. In the past, stockholders got a share certificate, which was also referred to as a "security certificate", confirming how much they owned.

However, nowadays share ownership is registered electronically and shares are registered by the investor's brokerage firm called "street name". "Street name" is the input of the shareholder who is acting as an owner instead of a share certificate to the list in electronic form. That is, in this case there is no need to go to the stock market and lose time for the shareowner. By contacting the broker, the investor records how much the stock is needed, the broker registers all of the shares needed instead of the shareholder, thereby making all the operations within a very short time frame (Frank, 2011).

A person who holds a corporate bond does not have ownership of the company. The financial position of the bondholder is similar to the financial position of the lender. The company's shareholder is actually a shareholder. The company that wants to invest in capital equipment may negotiate with the broker to organize a new number (issuance) of its share certificates. The broker, in turn, is developing a plan for introducing the company's investment proposal and offering new shares to the public for sale.

Although each of the investment resources is a segment of the financial market, each of them has specific features according to types of securities. Securities, in turn, act as mediators for the investor, and the investor, thanks to this, is investing in them.

As you know, there are various participants involved in the stock market as brokers, stock analysts, portfolio managers, traders, investment banks. Each of these participants has a specific role. However, most of these activities are interrelated and depend on each other to ensure the market's effectiveness.

Although there was significant evidence of market efficiency, researchers also noted that there were a number of ineffective and anomalous cases that led to incorrect valuation of securities. If market anomalies persist, there may be exceptions to the market efficiency concept. In other words, market anomalies occur when the price of an asset or securities does not coincide with existing and relevant information available in the market. Although it is interesting to consider these mentioned shortcomings, it is not always practically easy to try to take advantage of them. In fact, most researchers have come to this conclusion that these anomalies violate not only the market's effectiveness, but also these are the results of a statistical methodology used to detect these anomalies (CFA Institute, 2012).

Consequently, if these methodologies are corrected, most of these anomalies will disappear.

Shortcomings in the banking system and fear of losing savings force people to think about making a profit by investing in alternative ways. Today, we often hear how to invest in the stock exchange. There are two ways to invest in stock markets: either independently or through investment companies. To invest independently is to invest by brokers who sell securities. It is more difficult to sell securities without a broker.

Speaking about the risks involved in investing in the stock market, it should be noted that, if there is awareness, it is almost equal to zero risk. The investor should also consider carefully the structure of its portfolio. It should not be just one company's shares. The most effective portfolio includes the shares of 4-6 companies. This will make more revenue. Investing in securities will help to achieve high returns in a short period of time. However, it is not enough to have information of stock exchanges to gain high returns on investment, but it is important to collect information about all financial markets. The investor should also have information on production and economic development laws, as well as financial analysis skills. It should be noted that the investor can expect a higher yield as long as it remains in the market (Mladjenovic, 2011).

Today, the advantages of investing in listed equities are being questioned in light of corporate scandals and a perception that the markets may no longer serve the interests of ordinary investors. However, equity markets, when functioning properly, provide significant benefits across an economy. They are an important source of long-term financing for high-growth companies; they allocate capital efficiently; and they disperse risk and reduce vulnerability to bankruptcy. These advantages outweigh shortcomings, we believe, and make public equity ownership an important element of a balanced global financial system.

Every bank has in common the concept of converting money and making a profit for doing so. You deposit your money in a local bank - they pay you interest and then make a profit by loaning it as a mortgage.

Investment banks have numerous ways how they perform this service. E.g., they convert the shares of a privately held corporation into those of a public company. They collect a commission on the sale of shares. On the other hand, they structure and sell municipal bonds, thus converting a city's tax base into cash. Alternatively, they arrange to sell the stock of a company to a buyer and collect a commission for doing so. Investment banks help corporations issue new shares of stock in an initial public offering or follow-on offering. They also help corporations obtain debt financing by finding investors for corporate bonds. The investment bank's role begins with preunderwriting counselling and continues after the distribution of securities in the form of advice. Investment bankers are agents who act on behalf of investors in the stock market. As agents, investment bankers have multiple roles. They conduct market research in the form of legal and market analysis before the investment takes off. When a company wants to raise money through the stock market, it approaches an investment bank for the two

analyses to gauge the viability of the company decision. Investment bankers then determine whether the company should raise money through debt issuance or equity.

The biggest deals on Wall Street and other stock markets in the world are brought to the table by investment bankers. They are virtually behind all financial transactions that move the stock markets, including security offerings, mergers and acquisitions and initial public offerings. Investment bankers operate behind the scenes, which makes their functions less known to the public. However, understanding the operations of stock markets begins by understanding the functions of investment bankers. Investment banks perform a less glamorous role in stock offerings as well. It is their job to create the documentation that must go to the Securities and Exchange Commission before the company can sell its shares. This means compiling financial statements, information about the company's management and current ownership and a statement of how the firm plans to use proceeds.

The securities market of Azerbaijan is quite young compared with other countries. For the development of this field, the President of the Republic of Azerbaijan signed a State Programme for development of the securities market in the Republic of Azerbaijan in 2011.

The emergence of market makers, transparency of transactions and improvements of corporate standards to increase liquidity in the securities market have led to the development of this field. Enlightening the market participants, explaining the advantages of the field, establishing the Capital Markets Training Centre by the SCS are just a few of the works done for the development of the field.

The author thinks that after this stage, further development of the securities market depends on professional participants. At present, it is possible to trade in shares, corporate and government bonds, as well as, currency and commodity-based derivatives. In the market, there are the dealers of investors who act as a market maker at any time to trade some corporate bonds and all types of derivatives, which is a factor in supply and demand.

In 2014, annual yields of government bonds, of corporate bonds, of profitability from equity valuation of shares and of profitability on derivatives with credit leverage ranged from 1.5 - 4.25%, 8 - 13%, up to 60% and more than 100% per annum respectively. In this case, the investor should understand that financial assets with high profitability are highly risky as profitability is directly proportional to the risk.

The securities market plays a major role in expanding the scope of financial relations in every society. The operation of an organized securities market in Azerbaijan is one of the main factors in the development of the country's economy. If we look at the statistics, we will see the development of this market even though it is young. During the first half of 2017, there was an increase in individual market segments, although the securities market generally dropped.

Thus, the secondary market of securities increased by 54% and exceeded 2.975 billion manat during the reporting period. The government securities market increased 4.3 times, while corporate securities market decreased by 64%. During January-June 2017, the securities market decreased by 26% compared with the same period of last year and amounted to 5.230 billion manat.

As we see, Azerbaijan securities marked featured growth in 2017; significant qualitative changes also took place along with positive quantitative changes. In general, the amount of deals in the primary stock market made up AZN 1 bln, which was 6.5 times more than that in the previous reporting period. Deals for corporate securities decreased in comparison with the figure in the same period of the previous year and amounted to AZN 1.9 bln. However, we can see an increasing trend in the securities market; in 2016, it made up AZN 1.9 bln, which was 54% less than in 2017.

Table 1 General indicator of the stock market in Azerbaijan (2016-2017) (Central Bank of the Republic of Azerbaijan, 2018)

General indicators								
	2017 January-June		2016		Difference	Market share		
			January-June					
	Deals	Amount (AZN)	deals	Amount (AZN)	in amount	(%)		
Corporate securities	1430	1904387576	1342	5240534751	-64%	36%		
Primary market	95	1176613000	135	4954166440	-76%			
Secondary market	1335	727774576	1207	286368311	2.5 times			
Government securities	310	1106388702	107	259173678	4.3 times	21%		
Primary market	266	1077507510	74	166195805	6.5 times			
Secondary market	44	28881192	33	92977874	-69%			
Derivative financial instruments	36723	2207563336	20838	1552826372	42%	42%		
Repo/reverse-repo	17	11577452	0	0		1%		
Securities market	38480	5229917066	22287	7052534802	-26%	100%		
Primary market	361	2254120510	209	5120362245	-56%	43%		
Secondary market	38119	2975796556	22078	1932172557	54%	57%		

One of the main conditions for the development of the securities market in Azerbaijan is the forming of trademarks of local companies as a brand. This is because confidence in the brand of the issuer, which has invested its shares in the stock market, can attract cheap financial resources from investors, which, in turn, will lead to the stock market turnover increase. At the same time, as in the world practice, the shares of companies with strong trademarks are much more expensive than those of ordinary companies, which, in turn, leads to an increase in equity market capitalization. In this way, the interest of small investors in the debt securities market will increase and of institutional investors are largely dependent on their strategic objectives. Generally, participating in the management of brand companies and thus gaining profits from re-selling securities as a result of future increase in exchange rates would be important factors for them.

Conclusions and suggestions

At the same time, nowadays the activities of foreign investors in the Azerbaijan Securities Market are among the most important factors in the development of the country's economy. Despite the number of problems in the stock market in Azerbaijan, the foreign investors and international organizations consider the Azerbaijani market as a prospective market in terms of capital investment, which is associated with a favourable investment condition in the country.

Nowadays the securities market is of particular importance in attracting and allocating funds as a part of the financial market. The author suggests that it would be necessary to be fully utilized of commercial bank activities in the securities market and to enhance this activity in the establishment of investment resources, as commercial banks have more investment opportunities.

The evidence presented in the paper does not provide strong support for the view that stock market inefficiency, to the extent that it exists, has an economically significant influence on business investment. When other determinants of investment are controlled for, share prices do not seem to explain much of the variation in investment in any of G7 countries. For some countries, there is an evidence that an estimate of 58 components of share prices not related to available information correlates with investment to a statistically significant degree. However, the magnitude of this relationship is too small to be meaningful economically, and the design of the tests are biased towards such a finding.

References

- 1. Central Bank of the Republic of Azerbaijan (2018). Key macroeconomic indicators. Retrieved July 23, 2018, from https://www.cbar.az/lpages/statistics/keymacroeconomic-indicators/
- CFA Institute (2012). Equity and Fixed Income. 2.
- FRANK, R.H. (2011). Microeconomics and behaviour. P.214 3.
- LEVINE, R. (2005). Finance and Growth: Theory and Evidence, in Handbook of 4. Economic Growth, ed. P. Aghion and Durlauf (Amsterdam: North-Holland Elsevier.
- 5. McKinsey Global Institute (2011). The Emerging Equity Gap: Growth and Stability in Investor Landscape. Retrieved Iulv 23. 2018. https://www.mckinsey.com/industries/private-equity-and-principalinvestors/our-insights/emerging-equity-gap
- MLADJENOVIC, P. (2011). Investment in Stock exchange. 6.
- OECD (2013). Role of Banks, Equity Markets and Institutional Investors in Long-Term 7. Financing for Growth and Development. Retrieved July 23, 2018, from http://www.oecd.org/daf/fin/private-pensions/G20reportLTFinancingForGrowth RussianPresidency2013.pdf

THE SEARCH FOR THE SHORTEST ROUTE FOR TOURISTS VISITING SIGHTSEEING OBJECTS OF THE RAZNA NATIONAL PARK

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Abstract. The aim of the paper is to popularize the Razna National Park's tourist attractions. The opportunity to choose the shortest route to visit all the most interesting potential sightseeing objects is offered. The authors continue their research on the theoretical and practical aspects of searching for the shortest route. Theoretical research has been carried out and mathematically the shortest route has been calculated for various sightseeing objects of the Razna National Park. The paper also provides mapping of these objects and an analysis of the locations of the sightseeing objects at different levels. The main goal of the paper is to show the possibilities of applying mathematical models in solving practical tasks – to determine the shortest route between the sightseeing objects. This research describes an optimization method called Simulated Annealing. The Simulated Annealing method is widely used for various combinatorial optimization tasks. Simulated Annealing is a stochastic optimization method that can be used to minimize the specified cost function given a combinatorial system with multiple degrees of freedom. In this paper, the application of the Travelling Salesman Problem is demonstrated, and an experiment aimed to find the shortest route between the Razna National Park sightseeing objects is performed. Common research methods are used in this research: the descriptive research method, the statistical method, mathematical modelling.

Keywords: optimization, Razna National Park, Simulated Annealing, tourism objects,

Travelling Salesman Problem.

JEL code: *C61, R15*

Introduction

The Razna National Park (RNP) is a "Natura 2000" territory located in Rezekne municipality, Makonkalns, Chornaja, Kaunata, and Luznava parishes, in Dagda municipality, Andzeli, Andrupene, and Ezernieki parishes, and in Ludza municipality, Rundeni parish. The park occupies an area of 59 615 ha. It was created to protect the natural values of the Lake Razna and the surrounding areas, as well as the cultural and landscape environment characterising Latgale in the entire Latgale territory. There are many lakes in the park area. For instance, the Lake Razna with its 57.56 square kilometres surface area is the second largest lake in Latvia. Due to its sandy beaches, it is also called the Latgale Sea. The Lake Ezezers is unique – about

70 isle-type elevations are counted there. However, about half of them are reedy shallow places. The lake is said to have 33 – 36 isles.

There is also the third highest hill in Latvia in the RNP area – the Great Liepukalns (289 m above the sea level), which is distinguished for its impressive relative height for the Latvian environment – 86 metres. The Hill Makonkalns (248 m above the sea level), located next to the Lake Razna still has the preserved fragments of the practically inaccessible Volkenberg's Stone Castle built by the Livonian Order in the 13th century. It is really worth visiting Latvia's youngest national park not only to be impressed with the amazing landscapes, but also to get acquainted with the special charm of the Latgale region (Razna, 2018).

The paper offers the analysis of the locations of the RNP sightseeing objects by their availability. The theoretical research has been performed and the shortest path between different RNP sightseeing objects is calculated mathematically, the mapping of these objects and the calculation of the shortest route between RNP sightseeing objects are offered, starting from Rezekne or Daugavpils.

The software is developed that allows finding the shortest path between different RNP sightseeing objects, with the aim to optimize and determine the shortest path between the sightseeing objects. The research study was carried out using Visual Studio capabilities in programming. The aim of the paper is to work out recommendations for potential tourists in developing a RNP sightseeing route thus popularizing the Razna National Park tourist attractions.

Common research methods are used in the research: the descriptive research method, the statistical method, mathematical modelling.

The background of the research study

Simulated Annealing (SA) is a stochastic optimization method used for the optimization of an objective function (energy). It allows finding the global extreme for the function that has local minimums. The SA principle was announced in a classical work (Kirkpatrick et al., 1983) and developed in other works (Laarhoven & Aarts, 1987), (Otten & Ginneken, 1987), (Granville et al., 1994), (Ingber, 1993).

Further, the well-known combinatorial task – the Traveling Salesman Problem (TSP) – will be offered as the SA algorithm application.

The TSP task is to find the minimum route between N cities – entering each city only once and, in the end, returning to the original city. This is a well-known combinatorial task that can be solved with a variety of combinatorics or graph theory techniques. In literature, TSP solving methods with the SA algorithm are also provided (Cook, 2011), (Coughlin & Baran,

1985), (Applegate et al., 2006), (Grabusts, 2000).

The authors have already done some research on SA and TSP (Grabusts & Musatovs, 2017), so a complete mathematical description in this paper is no longer needed.

Experimental part

In order to realize and verify the operation of the SA algorithm, the following task was selected: the GPS coordinates of RNP sightseeing objects were given. The TSP-12 problem with the help of the SA method has to be solved (i.e., the shortest distance between the RNP sightseeing objects should be determined).

All the information about the RNP sightseeing objects is taken from the Nature Conservation Agency website (Dabas aizsardzības pārvalde, 2018) (see Fig.1).

\mathbb{H}	Apskates	objekts

Juguļu akmensLūznavas muižaMākoņkalnsInteraktīvā karteInteraktīvā karteInteraktīvā karte

Piloru ozolu audzePūdnīku skūlaVecslobodas pilskalnsInteraktīvā karteInteraktīvā karte

DIC RāznaEžezersLielais LiepukalnsInteraktīvā karteInteraktīvā karte

Andrupenes lauku sēta
Interaktīvā karte

Jaundomes muižas vides izglītības centrs

teraktīvā karte Interaktīvā karte

Fig. 1 RNP sightseeing objects (in Latvian) (Source: Dabas aizsardzības pārvalde, 2018)

Juguli stone. The stone's dimensions: height – 3.6 m, length – 6.5 m, width – 1.8 m. Grey granite with garnet inclusions. The stone is located in the territory of Kaunata parish, Juguli village. Juguli stone is sometimes called Kozulis stone.

Pilor oak grove surrounds one of the countless Ezezers bays. Ezezers is the richest lake in the Baltic States with its islands and peninsulas. The recreation area on the shore of the lake welcomes visitors to have a rest in the shadow of the centuries-old oaks and please the eyes with a magnificent lake landscape. The oak grove is the most beautiful in spring when the trees leaf out – in late April and early May – when a lot of spring plants bloom in the forest undergrowth. A pontoon footbridge runs into the lake.

The Nature Education Centre "Razna" has found its home in the Administration building of Makonkalns parish, Rezekne municipality, on the shore of the Lake Razna.

The museum "Andrupene Farmhouse" is a Latgalian house complex of the beginning of the 20th century, which includes dwelling house, barn, bathhouse, granary, and smithy. Tools, household items, and furniture create a special rural atmosphere and ambience that tells about life and farming in the countryside during the first years of Latvia's independence and during the Soviet rule.

The Luznava manor is a pearl of Art Nouveau in Latgale – Luznava manor castle was built in the early 20th century from bricks and broken boulders in historicism and Art Nouveau style. Its owners were Polish noblemen Kerbedzi. The building is surrounded by a 23.7 hectare landscape park with the pond system and the Madonna statue. An 850 m long walking path in the park was renovated. The park has a large variety of tree species. Here you can see a snake fir, a multitrunk lime-tree, a walnut, a Siberian larch. After the restoration, the Tourist Information Centre of the Rezekne Municipality Council are housed in the palace. This place also has exhibition and concert halls.

The best way to get acquainted with the traditions of Latgale pottery is at the workshop of the founder of "Pottery school" E. Vasilevskis, in Akminisi. The work of the master is based on the idea of careful use of the natural resources and the share of ecological footprint a person leaves on the earth.

Ezezers is the lake richest with islands in the Baltic States. There are more than 33 islands. The largest is the Great Bear island (45 ha). The lake is located in the nature reserve area of the Razna National Park.

The Jaundome Manor Environmental Education Centre – the Environmental Education Centre and the Exposition Hall are located in the renovated Jaundome Manor barn, which was built in the early 19th century. The Environmental Education Centre offers water flora and fauna expositions, nature cognitive outdoor classes, equipment rental for bird watching, seminar rooms, interactive materials about Ezezers, and guided excursions around Jaundome Manor.

Makonkalns, also known as the Hill Padebesi (249 m above sea level), is located near the Lake Razna. There is the tourist trail around Makonkalns, the Volkenberg castle ruins can be seen. The top of the mountain offers scenic views of the Lake Razna and the vast forest. The Volkenberg Castle, literally – Cloudcastle – is on the top of the Hill Padebesi, or Makonkalns. The castle with masonry walls was built by the Livonian Order in the 13th century. It consisted of the fortress and the main castle, which had a trapezoidal form with wings of 62 and 52 meters in length. It is reported that before there was a Latgalian wooden castle. The Volkenberg medieval castle and castle ruins are the state archaeological and architectural monument.

Vecsloboda castle mound is one of the largest castle mounds of its time in Latgale. The highest hill (222.1 m above sea level) in the neighbourhood

was chosen for its building. The archaeological findings indicate that the castle mound was inhabited in the second half of the 1st century and in the first part of the 2nd century A.D. The antiques found during the research expeditions are kept in the museums of Rezekne, Riga, and Vilnius. Vecsloboda castle mound is an archaeological monument of national importance, which plays an important role in understanding the traditions of inhabitants of the eastern part of Latvia. The castle mound is overlooking Lake Razna and the Latgale heights.

The Great Liepukalns is the third highest point in Latvia – 289.3 meters above the sea level. At the top of the hill, there is the highest wooden viewing tower in Latvia (34 m) offering spectacular views of the surrounding landscape – the hills, Razna and other lakes. The tower has nine viewing platforms at different levels, so everyone can climb as high as they want. From the parking lot to the viewing tower, there is an 830 m long nature trail with information stands.

The GPS coordinates of RNP objects are given in Table 1.

Table 1 Denotations and GPS coordinates of the sightseeing objects (Source: Google maps)

No.	Name of objects	Latitude	Longitude
1	Juguli stone	56.333312	27.604050
2	Pilor oak grove	56.187634	27.607759
3	Nature Education Centre "Razna"	56.290257	27.437406
4	Andrupene Farmhouse	56.190369	27.397211
5	Luznava manor	56.354874	27.252533
6	Pottery school	56.298230	27.540769
7	Lake Ezezers	56.181674	27.656084
8	Jaundome Manor Environmental Education Centre	56.143531	27.593839
9	Makonkalns	56.279185	27.415190
10	Vecsloboda castle mound	56.342567	27.578539
11	Great Liepukalns	56.271042	27.654441
12	Rezekne, Hotel Latgale	56.505808	26.330464

The SA algorithm in this case was carried out in 1000 steps. The algorithm was used to calculate the shortest route – 168 km (see Figure 2). Attachment of the RNP objects to the map is shown in Figure 3.

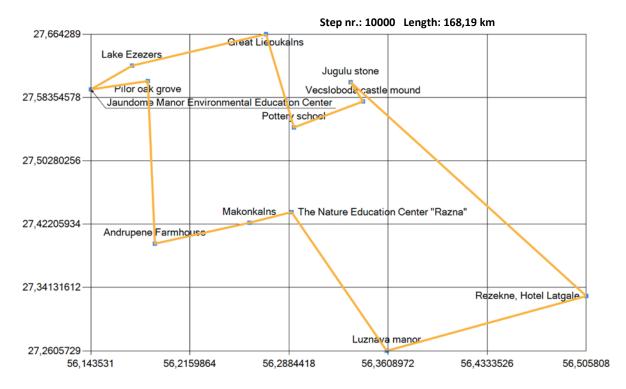


Fig. 2 The shortest path between the RNP objects computed using SA algorithm (a route from Rezekne) (Source: the authors' construction)



Fig. 3 The attachment of the shortest path among the RNP objects to Google maps (route from Rezekne) (Source: compiled by the authors)



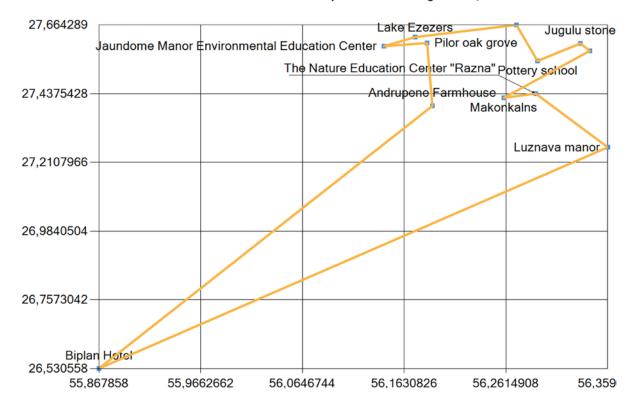


Fig. 4 The shortest path between the RNP objects computed using SA algorithm (route from Daugavpils) (Source: compiled by the authors)

Similarly, tourists from Daugavpils can plan a route through the RNP sightseeing objects – in this case, it should be taken into account that the way will be longer (270 km).

The SA algorithm in this case was carried out in 346 steps. The algorithm was used to compute the shortest route – that is 270 km (see Figure 4). The attachment of the RNP objects to the map is shown in Figure 5.

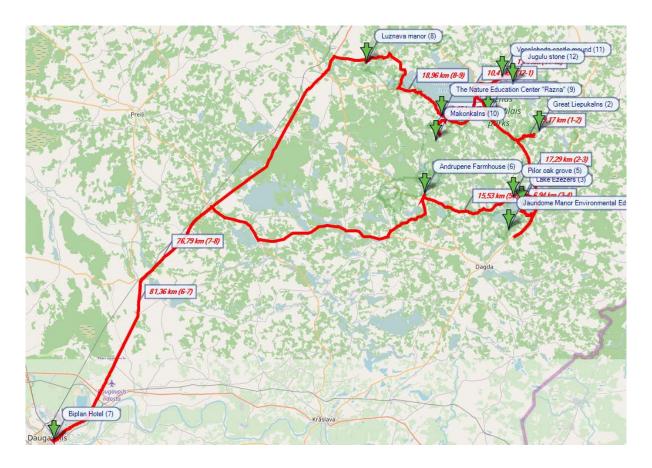


Fig. 5 The attachment of the shortest path between the RNP objects to Google maps (route from Daugavpils) (Source: compiled by the authors)

In such a way, the route from anywhere can be planned – including the RNP sightseeing objects. This would allow tourists to save their time and money in route planning.

Conclusions

The paper describes the SA method and gives an example of its application for solving the TSP problem.

The authors propose that their simulation's result should be simplified, however, in the case it is needed to exclude the sightseeing objects from the existing network of the RNP object list, it would allow simulating the overlapping of the sightseeing objects on the map and determining the potentially shortest route to the chosen RNP objects.

In this paper, the software that allows finding the shortest way or route between different objects of the RNP with the purpose to optimize and determine the shortest route among tourist sightseeing objects has been developed.

References

- 1. APPLEGATE, D.L., BIXBY, R., CHVÁTAL, V., COOK, W. (2006). *The Traveling Salesman Problem: A Computational Study*. Princeton University Press.
- 2. COOK, W. (2011). *In Pursuit of the Traveling Salesman*. Princeton: Princeton University Press, USA.
- 3. COUGHLIN, J.P., BARAN, R.H. (1985). *Neural Computation in Hopfield Networks and Boltzmann Machines*. University of Delaware Press.
- 4. Dabas aizsardzības pārvalde (2018, April 10). Retrieved from https://www.daba.gov.lv/public/lat/turistiem/latgale1/raznas_nacionalais_parks /ko_darit/ (in Latvian).
- 5. GRABUSTS, P. (2000). Solving TSP using classical simulated annealing method. *Scientific Proceedings of Riga Technical University: Computer Science. Information Technology and Management Science*, RTU, Riga, Issue 5, Volume 2, pp. 32-39.
- 6. GRABUSTS, P., MUSATOVS, J. (2017). Optimal Route Detection Between Educational Institutions of Rezekne Municipality. *Latgale National Economy Research. Journal of Social Sciences*, No. 1(9), pp.25-34.
- 7. GRANVILLE, V., KRIVANEK, M., RASSON J-P. (1994). Simulated annealing: A proof of convergence. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 16(6), pp. 652–656.
- 8. INGBER, L. (1993). Simulated annealing: Practice versus theory. *Math. Comput. Modelling*, 18, pp. 29–57.
- 9. KIRKPATRICK, S., GELATT, C.D., VECCHI, M.P. (1983). Optimization by Simulated Annealing. *Science*, vol. 220, pp. 671-680.
- 10. LAARHOVEN, P.J.M., AARTS, E.H.L. (1987). Simulated Annealing: Theory and Applications. D.Reidel Publishing Company, Holland.
- 11. OTTEN, R.H., GINNEKEN, L.P. (1989). *The Annealing Algorithm*. Kluwer Academic Publishers.
- 12. Razna National Park (2018, April 10). Retrieved from http://www.latvia.travel/en/sight/razna-national-park.

EVALUATION OF LATVIAN STUDENTS' LEARNING EXPERIENCE IN THE EUROPEAN EDUCATION AREA

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Abstract. The objective of contemporary education is to enhance the competiveness of graduates not only in the local market but also at the European Union scale; therefore, stronger co-operation with foreign education and research institutions can significantly improve the knowledge and skills of Latvian students, which can gradually contribute to Latvia's competitiveness in high value added activities within global value chains. This, of course, underlines the increasing importance of foreign language skills. In fact, knowledge of the English language in today's labour market is taken for granted, and the competiveness of those employees, who can speak at least three foreign languages, including one of the Scandinavian languages, is increasing. The aim of the research was to identify Latvian students' learning experience in European countries in scope of short study mobility programmes. Based on the secondary information sources such as statistical data aggregated by the Ministry of Education and Science of the Republic of Latvia and Flash Eurobarometer Report No466, the authors have analysed Latvian students' mobility destinations and intentions of studies abroad. The research findings suggest that currently there is a contradiction between students' personal intentions and their real behaviour. The countries that are currently most often chosen as study mobility destinations rather offer valuable cultural experience than practical skills that could be useful in academic and professional work.

Keywords: higher education, knowledge economy, European Union.

JEL code: *123; 125*

Introduction

Knowledge as a resource is increasingly becoming one of the key determinants of society's development. The experience of leading economic systems shows that it is important to invest resources in educating the public. A significant pre-requisite for the knowledge economy is the quality of higher education (adequate material and technical resources, remuneration of the teaching staff, as well as constant improving of study programmes, students and lecturers' competences (Panina, 2008) as well as

availability of exchange of experiences both among local and international higher education and research institutions and businesses.

According to an OECD survey (2017), today innovation is the key driver of productivity growth and essential in capturing higher value added from participation in global value chains. In 2015, Latvia invested only 0.6% of GDP in research and development, among the lowest in the OECD countries. Thus, business-driven research and development is particularly weak. Less than one-fifth of product and process innovations are completely new to the market. One factor limiting the innovation performance of Latvian firms is the low co-operation between businesses and higher education and research institutions (CSB, 2016). In Latvia, co-operation with foreign firms and research institutions is particularly important but is rare.

Stronger co-operation with foreign research institutions would facilitate transfer of the advanced technologies from the advanced OECD economies and contributes to Latvia's competitiveness in high value added activities within the global value chains. This, of course, underlines the increasing importance of foreign language skills. In fact, knowledge of the English language in today's labour market is taken for granted, and the competiveness of those employees, who can speak at least three foreign languages, including one of the Scandinavian languages, is increasing. The Russian language does not lose its meaning, too. Either we want it or not, it is still important for those working in Latvia (NRA, 2017). Moreover, in the OECD Economic Survey of Latvia (OECD) it is emphasized that Latvia's government should identify which education programmes currently are effective in promoting co-operation between businesses and research institutions, particularly international co-operation with foreign firms and research institutions. Since Latvia has become a Member State of the European Union, a wide range of study opportunities in the European education area for Latvia higher education institutions have become available and annually involve an increasing number of programme participants taking advantage of international exchange.

Based on the secondary information sources such as statistical data aggregated by the Ministry of Education and Science of the Republic of Latvia (MoE) and Flash Eurobarometer Report No466, the authors have analysed the experience of Latvian students' learning in the European education area. The **aim of the research** was to identify students' learning experience in European countries. The specific **research tasks** were: 1) to identify the main trends and study destinations of Latvian students' mobility; 2) to analyse Latvian students' language skills and expectations of students' mobility programmes.

1. Student mobility in the EU partner countries and its objectives

Today in higher education institutions, student mobility is available in any subject academic discipline. To ensure high-quality mobility activities with maximum impact on the students, the mobility activity has to be compatible with the student's degree-related learning and personal development needs. The study period abroad must be part of the student's study programme to complete a degree at a short cycle, the first cycle (Bachelor or equivalent), the second cycle (Master or equivalent), and the third or doctoral cycle. In order to better support students to acquire the skills necessary for their future, a partnership between the Erasmus+ and Horizon 2020 programmes has been established. This partnership will provide and promote further traineeship opportunities for students and recent graduates who wish to acquire digital skills and competences required to perform jobs and thrive in an economy and society, which is being continuously digitally transformed. Students and recent graduates from all disciplines are invited to apply for a traineeship in these domains. These traineeships are expected to take place in the EU Member States as well as in Horizon 2020 associated countries (European Commission, s.a.).

The Erasmus Programme, which today can be regarded as great success, started during the Delors' presidency, and nowadays Erasmus has certainly become the most known programme across Europe and is one of the 2017 flagship initiatives of the European Commission. Over the past 30 years, the programme has given 9 million people an opportunity to study, train, volunteer, or gain professional experience abroad (European Commission, 2017a). Since 1987, the overall budget of the programme has increased significantly. Looking at the current Multiannual Financial Framework (MFF), it is clear that European decision-makers are willing to allow more and more young people to benefit from this experience. Owing to this budget increase, the Erasmus programme is expected to give extended opportunities for individuals to study abroad, which will be raised from slightly below 500 000 in 2014 to above 800 000 in 2020, totalling over 4 million learning mobility opportunities throughout the period 2014-2020 (European Commission, 2017b).

2. Latvian students' mobility trends

In Latvia, the students' mobility is gradually increasing; however, the specific weight of students who had studied abroad in Erasmus+ or other mobility related programmes was only 2% in the 2016/2017 study year. The top 5 higher education institutions that have shown the highest activity in the students' mobility promotion are the University of Latvia (LU), Riga

Technical University (RTU), Stradins University (SU), Latvia University of Life Sciences and Technologies (LLU), and Turiba University (TU), which have the widest network of co-operation partners in the European Union and its partner countries such as Turkey, Norway, Liechtenstein etc. Although Erasmus co-ordinators at the higher education institutions are working actively to encourage students to apply for mobility programmes, often there are many objective and subjective justifications for low students' activity. Very often as objective justification for the students' reluctance is a language barrier, which is one of the main reasons why the students cannot manage studies abroad. However, the analysis of the most often chosen students' mobility destinations according to the statistical data of the MoE convincingly shows that among the most desired countries there are Germany and Spain, followed by the Czech Republic, Poland, Lithuania, Portugal, and France. In fact, the countries where the English language is the primary language (UK, Ireland) or the second official language (Cyprus, Malta) have been very seldom selected for mobility, although they are active mobility partner countries. Among partner institutions, the Nordic countries (Finland, Sweden, Norway, Denmark) were also rarely chosen as students' mobility destinations. In the above-mentioned five Latvian higher education institutions that have been the most active in students' mobility activities, in LU, RTU, and SU, the greatest number of students in 2016/2017 had chosen Germany for their receiving country, while LLU students convincingly had chosen the Czech Republic, but TU - France.

3. Latvian students' experience and language skills on the background of the EU-28 countries

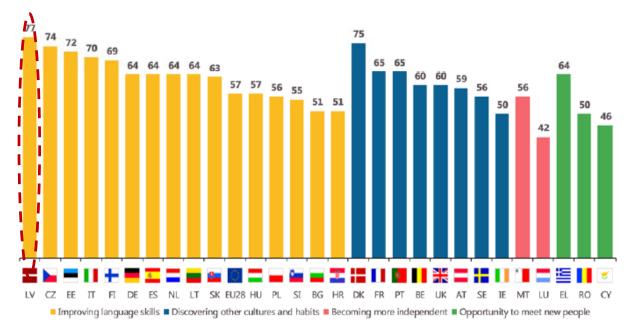
In its Communication of 22 May 2018 on Building a stronger Europe, the European Commission has emphasized that the European Education Area has three main components:

- promoting cross-border mobility and cooperation in education and training;
- helping to overcome unjustified obstacles that make it more difficult to learn, train or work in another country with the aim of realising the "free movement of learners", and creating a genuine European learning space;
- supporting the Member States in improving the inclusive, lifelong-learning based and innovation-driven nature of their education and training systems.

In scope of this message, the European Commission Directorate-General for Education and Youth, Sport and Culture has also conducted an extensive survey "The European Education Area", which is published in the report

Flash Eurobarometer 466 (2018). The findings of this research are very useful and reflect each country's students' current expectations and needs regarding education opportunities. Further, on, the authors will focus on the Latvian students' experience in international mobility programmes.

On the question "what do you think are the three main benefits of your experience abroad", Latvian students have most convincingly claimed that improving language skills has been most beneficial for them, and this answer is also characteristic to those youngsters who represent countries, which are most chosen by Latvians for their international mobility – the Czech Republic and Germany, while students from English speaking countries such as the UK, Ireland, Malta and Cyprus are more looking for the new culture exploring and opportunity to meet new people.



Base: Respondents who had an experience abroad (N=2,127) Fig. 1 Main benefits of experience abroad, % (Source: EC, Flash Eurobarometer 466, 2018)

Asked about languages spoken and read, including the respondents' mother tongue, Latvian respondents reflected comparatively better results – the majority of the surveyed respondents speak three languages, which is not so typical on the background of the EU-28 average and compared with the other two Baltic States – Estonia and Lithuania, which could be explained by larger Russian minority existence in Latvia.

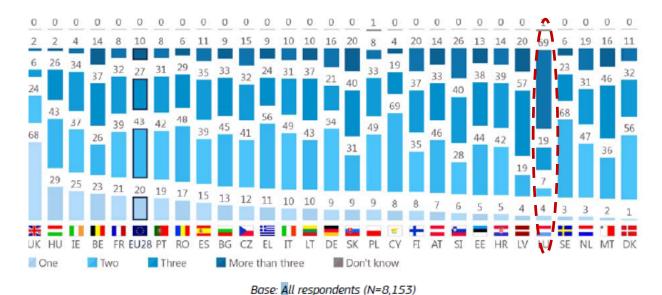
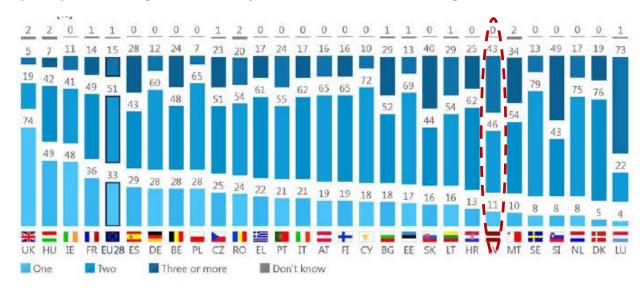


Fig. 2 Languages spoken and read by respondents, % (Source: EC, Flash Eurobarometer 466, 2018)

Regarding the number of languages indicated as comfortable enough to follow the studies (including mother tongue), Latvian respondents again are highlighted by their abilities to follow studies in three or more languages (43%), which lags behind only Slovenia and Luxemburg.

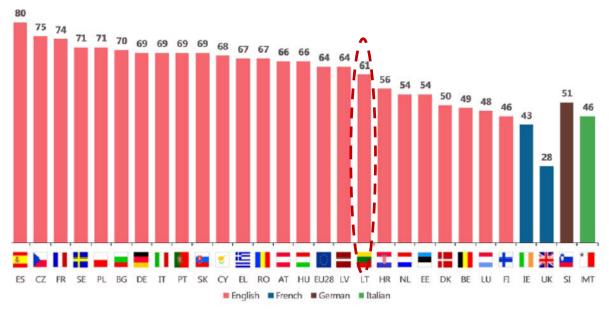


Base: All respondents (N=8,153)

Fig. 3 Number of languages indicated as comfortable enough to follow studies, % (Source: EC, Flash Eurobarometer 466, 2018)

Although in most cases knowledge of three languages is again explained by the existence of a substantial Russian minority in Latvia, nevertheless, this should not be taken as granted, as the responses of other students indicate growing interest in learning the Russian language – e.g. 39% of Cypriots claimed their interest and need to learn Russian, which was also mentioned

by Finland's respondents (33%), Slovakia, Slovenia (both 25%), and Austria (24%), which generally increases the current competiveness of Latvian students in Europe's labour market.



Base: Respondents who would like to improve their command of a language they have already learned (N=6,879)

Fig. 4 Command of languages that respondents would like to improve, (%) (Source: EC, Flash Eurobarometer 466, 2018)

In relation to the students' needs and intentions to further improve their command of languages, it turned out that the majority of Latvian students (64%) still consider that their English language knowledge needs to be improved, which suggests that their attitude is more critical than the one of Lithuanians and Estonians who are already quite satisfied with their current English language knowledge.

Conclusions and suggestions

The analysis of Latvian students' learning experience suggests that despite the fact that Latvian students lack self-awareness and are generally modest; their language skills are above average compared with the other Baltic States and the EU-28 average. Moreover, participation in Erasmus+ and other international programmes convincingly helps to improve language skills, which was claimed by 77% of the Latvian respondents.

Although 64% of the Latvian respondents have claimed their need to improve English language knowledge, still the majority of students had chosen non-English speaking countries as their mobility destinations. This gives evidence that there is a contradiction between the students' intentions and their real behaviour. Despite the growing demand for Scandinavian languages skills in Latvia owing to proximity, close economic and cultural

ties with the Scandinavian countries, the choice of these countries for study mobility has been very rare among Latvian students.

Since 64% of the Latvian respondents have claimed their need to improve English language skills, it would be advisable to motivate students to apply for study mobility in those countries where the English language is the primary language or the second official language, thus not only improve language use for daily needs, but master the written, academic, professional, and standard English language that is demanded in the labour market in Latvia. The current experience of the authors shows that although 90% of the university master level students speak English, only small part of them are able to independently write a report or short abstract on their master's thesis. Moreover, most of them find it difficult to participate in an international conference with an oral presentation on their research findings. Therefore, the task of Erasmus co-ordinators is to convince students to choose such mobility destinations, which would be the most useful for their further academic or professional work.

References

- 1. European Commission (2017a) fact sheet "The Commission is today launching celebrations on the occasion of the 30th anniversary of the start of Erasmus, one of the most successful programmes of the European Union", Brussels, 26 January 2017.
- 2. European Commission (2017b) Statement of estimates of the European Commission for the financial year 2017, June 2016.
- 3. European Commission Flash Eurobarometer 466 "The European Education Area". Retrieved on 29 June 2018, from http://ec.europa.eu/commfrontoffice/publicopinion
- 4. European Commission Mobility Project for Higher Education Students and Staff. Retrieved on 29 June 2018, from https://ec.europa.eu/programmes/erasmus-plus/programme-guide/part-b/three-key-actions/key-action-1/mobility-higher-education-students-staff en
- 5. Latvijas Republikas Izglītības un zinātnes ministrija, Centrālā statistikas pārvalde (2016). Latvijas tautsaimniecība. Makroekonomiskais apskats #69; 2016-4 (Economy of Latvia, Macroeconomic review #69; 2016-4). Retrieved July 2, 2018, from https://www.em.gov.lv/files/tautsaimniecibas_attistiba/makro/makro 69.pdf
- 6. NESTERE, L. (2017). Darba tirgū augstā vērtē skandināvu valodu pratēji. Neatkarīgā rīta avīze, Karjera, 10.10.2017. Retrieved on 2 July 2018, from http://nra.lv/latvija/225020-darba-tirgu-augsta-verte-skandinavu-valodu-prateji.htm
- 7. OECD Economic Surveys: Latvia 2017, OECD Publishing, Paris. Retrieved on 29 June 2018, from http://dx.doi.org/10.1787/eco_surveys-lva-2017.
- 8. PANINA, L. (2008). Augstākas izglītības ekonomisko resursu struktūra: iespējas un izaicinājumi. Daugavpils Universitātes zinātniskie raksti. Daugavpils: Daugavpils universitāte, 2008. 11.lpp.

Pārskats par Latvijas augstāko izglītību 2017.gadā. Galvenie statistikas dati. Latvijas 9. Republikas Izglītības un zinātnes ministrija, Augstākās izglītības, zinātnes un inovāciju departaments (2018). Retrieved on 29 June http://www.izm.gov.lv/images/statistika/augst_izgl/AII_2017_parskats.pdf

CONCEPT OF VIRTUAL CURRENCIES IN MODERN ECONOMIES

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Abstract. In recent years, development of blockchain technology and virtual currencies (VCs) have been followed not just by the media and industry professionals all over the world - there rarely could be found a person who has not ever heard the term 'bitcoin'. Despite the popularity of VCs, there is a lack of comprehensible information in the Latvian language about what the virtual currency (VC) is, as well the concepts of digital and VCs are often misused as synonyms. The research is based on the analysis of special literature and scientific publications on the system of VCs. The aim of the research: to explore the concept of VCs in the modern economy. General scientific research methods are used in the research: the method of monographic or descriptive research, the comparative analysis method for studying the concept of VCs, the classification, legal regulation, and future development possibilities. The results of the research show that VCs are a type of digital currency, though, the opposite statement is not correct. Thus, all VCs are digital, but not all digital currencies are virtual. Exploration of the legal framework of VCs suggests that it is at an early stage of development. With the increasing number of VCs and along with strengthening of the legal framework of VCs, the issue of possible directions of the future development of VCs is raised. Two points of view dominate: the future currency or payment system, for example, smart contracts.

Keywords: currency, digital, economy, virtual.

JEL code: *G15, E42*

Introduction

The VCs, with regard to the potential benefits and potential risks of their use, aroused wide-ranging discussions shortly after their appearance that were followed up not only by the media and industry professionals around the world. There rarely could be found a person who has not heard the term *bitcoin* and the story about Laszlo Hanyecz's, a Florida-based programmer's, purchase of two pizzas from Papa John for 10 000 Bitcoin (BTC) on May 22, 2010 (Zuckerman, 2018). Despite the popularity of VCs, the author believes that there is a lack of comprehensible information in the Latvian language on what really a VC is. The results of the author's research on the use of the concepts of digital and VC both in scientific publications (Lemieux 2016; Zalan, 2018; Zamani, Giaglis, 2018) and the mass media (Apsīte, 2017; Kalniņa, 2018) suggest that often these terms are used as synonyms. *Europol* researchers (Europol, 2017) also admit that the terms "virtual" and "digital" are often misused as synonyms.

The topic of the paper is insufficiently studied in Latvia and creates the necessity to explore the concept, type, legal regulation, and development possibilities of VCs, based on the analysis of special literature and scientific publications of Latvian and foreign researchers.

Aim of the research: to explore the concept of VCs in the modern economy. The following *research tasks* have been set to achieve the aim of the research:

- 1) to explore the concepts of a digital and virtual economy and currencies;
- 2) to systematize VC taxonomy, to develop a VC classification, and provide its characterization;
- 3) to describe the legal framework of VCs and provide an assessment of development opportunities for VCs;
- 4) to draw conclusions.

Object of the research: VC.

The research study is based on the analysis of special literature and scientific publications on the VC system. The research uses general scientific *research methods*: the method of monographic or descriptive research and the comparative analysis method to study the concept, classification, legal regulation and future development possibilities of the VCs.

Linkage between the concepts of a digital and virtual economy and currency

When researching the currencies, the author encountered the concepts that do not have an unequivocal use in both scientific publications and the mass media: digital currency, VC, and cryptocurrency. In the opinion of the author, the most common uncertainties arose right in the use of the words digital currency and VC. To clarify common and different aspects of the terms "digital" and "virtual", the author has added a word "economy", thus arriving to the terms "digital economy" and "virtual economy".

The Oxford Dictionary defines a digital economy as "an economy which functions primarily by means of digital technology, especially electronic transactions made using the Internet" (English Oxford Living Dictionaries). The term 'digital economy' refers to an economic model and society that is driven by computer technology (ALAERDS et al., 2017), to an economy that is based on digital technologies, although we increasingly perceive this as conducting business through markets based on the Internet and the World Wide Web (Boston Consulting Group) and a term for all of those economic processes, transactions, interactions and activities that are based on digital technologies (Techopedia). The European Association for Business and Commerce (2015) describes a digital economy as all economic activities

mediated by software and enabled by telecoms infrastructure. The researchers of the Bureau of Economic Analysis (Barefoot et al., 2018) includes the following in the term "digital economy": (1) the digital – enabling infrastructure needed for a computer network to exist and operate, (2) the digital transactions that take place using that system ("e-commerce"), and (3) the content that digital economy users create and access ("digital media"). After summarising the above mentioned explanations of the term "digital economy" and systematization of conceptual approaches towards the notions of a digital economy (Tsyganov, Apalkova, 2016), the author concludes that the digital economy can be described as all economic activity that is based on digital technologies.

The digital economy is also sometimes called the Internet Economy, the New Economy, or the Web Economy (ScienceDaily), in the Akadterm (2015) database – the digital economy; e-economy; Internet economy; new economy; online economy; web economy. The author believes there is a difference between these terms and agrees (Techopedia) that the digital economy differs from the Internet economy, as the Internet economy is based on Internet connectivity, whereas the digital economy is more broadly based on any of many digital tools used in today's economic world.

The term 'virtual economy' refers to the process of exchanging virtual items and services with VC within a virtual world (Nazir, Lui, 2016). According to the author, Lehdonvirta and Mirko (2011) have precisely characterised the main elements of a digital and virtual economy: the digital economy – online services, communities, games, online shopping, e-commerce, e-government; the virtual economy – exchange of virtual goods, currencies, links, and digital labour.

The author believes and agrees with Annison (2017) that difference between digital currencies and VCs can be understood in a similar fashion: where digital currencies are non-physical representation of traditional fiat money, VCs represent a truly online asset, which does not have value other than in its virtual world.

Dandapani (2017) evaluates the impact of the Digital Age on e-finance in five key areas, including payment systems, digital and cryptocurrencies. Digital currency is electronic money that serves as an alternative currency in digital or online transactions. A major motivation for the evolution of digital currencies has been the drive to enhance e-commerce productivity by reducing time and transaction costs in commerce.

E-money, also known as digital money, electronic money and e-currency, is a form of money that is digitally stored as opposed to actual paper or coin currency. The use of e-money typically involves computers, the Internet and wireless transfers. E-money is convenient because it does not require the consumer to carry cash and can be used for making purchases

and receiving payments any time, 24 hours a day, seven days a week (Hose, 2017). In *Letonika.lv* (2009), the terms digital cash, electronic cash, e-cash, e-money, digital money are used as synonyms. According to the Financial Action Task Force (FATF), (2014), digital currency can mean a digital representation of either VC (non-fiat) or e-money (fiat) and thus is often used interchangeably with the term "VC". A VC is a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community (European Central Bank, 2012). VCs are digital representations of value, issued by private developers and denominated in their own unit of account (International Monetary Fund, 2016). According to the definitions provided by the FATF, the European Central Bank (ECB), and the International Monetary Fund (IMF), VC is a type of digital currency, though the opposite statement is false. Thus, all VCs are digital, but not all digital currencies are virtual.

VCs share the following characteristics: they are form of private money usually created in a decentralised way; they exist exclusively in digital form; thus far, most VCs have been based on Blockchain technology and most of them have a global character (Dabrowski, Janikowski, 2018). Mikołajewicz-Woźniak and Scheibe (2015) consider that the VC as a payment system is quite new and still a marginalized phenomenon. Nevertheless, the pace of VC market growth after its recent introduction and appearance of Bitcoin successors seems to be the signs of future changes in the financial service sector.

It can be concluded that the VC is a digitally reflected value that, unlike the traditional currency, is not converted into banknotes or coins, which are commonly used to pay for goods and services on a daily basis, but exists as an algorithm.

Classification of VCs and its characteristics

The variety of views regarding the division of VCs has encouraged the author to compile them and create a classification of VCs (Fig.1.).

VCs can be convertible (or open) or closed non-convertible (or closed). Convertible VC can be exchanged back and forth for real currency, while non-convertible VC can only be used in the environment for which it was designed.

According to the FATF (2014), there are the following participants of the VC system: an exchanger, an administrator and a user. *An exchanger* (also sometimes called a VC exchange) is a person or entity engaged as a business in the exchange of VC for real currency, funds, or other forms of VC and also precious metals, and vice versa, for a fee (commission). *An administrator* is a

person or entity engaged as a business in issuing (putting into circulation) a centralised VC, establishing the rules for its use; maintaining a central payment ledger; and who has the authority to redeem (withdraw from circulation) the VC. *A user* is a person/entity who obtains VC and uses it to purchase real or virtual goods or services or send transfers in a personal capacity to another person (for personal use), or who holds the VC as a (personal) investment.

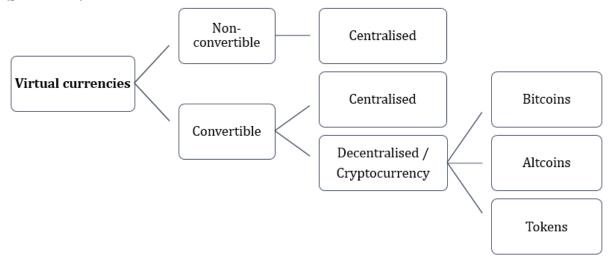


Fig. 1 Classification of VCs (by the author, based on Allen & Overy's Fintech group, 2015; FATF, 2014; BBVA, 2017; CoinMarketCap, 2018a)

Centralised VCs have a single administrating authority (administrator) – i.e., a third party that controls the system. An administrator issues the currency; establishes the rules for its use; maintains a central payment ledger; and has authority to redeem the currency (withdraw it from circulation). Decentralised VCs (cryptocurrencies) are distributed, open - source, math-based peer-to-peer VCs that have no central administrating authority, and no central monitoring or oversight.

Depending on the participants and possibilities to exchange the particular currency to fiat currency, three types of currency can be distinguished in the classification of VC:

- Non convertible and centralised VCs: an administrator, exchangers, users; a third-party ledger; cannot be exchanged for fiat currency. Example: the World of Warcraft Gold
- Convertible and centralised VCs: an administrator, exchangers, users; a third-party ledger; can be exchanged for fiat currency. Example: WebMoney
- *Convertible and decentralised VCs:* exchangers, users (no administrator); no trusted third-party ledger; can be exchanged for fiat currency.

Cryptocurrencies are decentralized peer-to-peer digital currencies based on computer cryptography for security. Popular cryptocurrencies include Bitcoin, Lite Coin, Zerocoin and Peercoin (Dandapani, 2017). The existence of a VC/cryptocurrency is based on a decentralized computer network. Emission of VC and its transactions are not monitored by either the central bank, any institution or a commercial bank – it is considered that the VC "regulates itself". When performing a transaction with a VC, all computers of the network compete, generating a response to a cryptographic question of variable complexity and thus confirming the transaction. These computers are referred to as *miners*. All transactions performed with VCs are fixed in a virtual ledger, based on blockchain technology, and is publicly available. Thus, the transparency of the system is ensured - everyone has the opportunity to make sure, if the transaction has taken place. When performing a transaction with a VC, the sender sends the VC from his/her virtual wallet to the virtual wallet of the recipient. This requires the address of the recipient's wallet, which is the only detail known about its owner. Thus, the individuals/entities of the VC transactions are in fact anonymous because the virtual wallet does not have such identifiable details as, for example, the bank's IBAN code or the name and surname of the natural person (Tomsone, 2018).

The benefits of cryptocurrency: anonymity, preservation of investment value even during an economic crisis, multiplication of investment potential, high liquidity, ability of technological defence, ability to trade in the global market, not affected by inflation. Main disadvantages: not all trading outlets support cryptocurrency, fluctuating prices, possible restrictions on the use, complicated secure storage, and, in case of the loss of interest, cryptocurrency can lose its value (Grišins, 2017; Gavars, 2018).

Grišins (2017) and Gavars (2018) believe that it is necessary to keep up with two of the most popular cryptocurrencies, i.e., *Bitcoin* and *Ethereum*, and do not recommend making major savings in cryptocurrencies. Harwick (2016) admits that in relation to the stability of value, however, cryptocurrencies reveal their inadequacy as day-to-day currency. Bitcoin, for example, despite making up 86 percent of the entire cryptocurrency market, has suffered from frequent and severe jumps and crashes since its inception in 2010.

The *Bitcoin boom* has been around for some time in Asia, especially in China. This year, there is a lot interest of Japanese on this currency as well (Japan has acknowledged bitcoins as a legal method of payment). There are also enough bitcoin fans who call it a new gold and a politically neutral contribution that can be useful when the traditional belief in traditional paper money is gone. In addition, more and more merchants announce that they accept bitcoins as a payment. (Skupelis, 2017). Latvians who want to

invest in purchasing cryptocurrency have to consider that there are only nine companies in Latvia supporting the virtual money payment – a bar, a real estate company, a hostel, an Apple equipment repair centre, and the national airline company *airBaltic*. However, for the most part, it is just a marketing trick for businesses, they do not have their own cryptocurrency account, and the payments received are immediately converted into euros (LNT ziṇas, 2018).

Altcoins are alternative cryptocurrencies launched after the success of Bitcoin. Generally, they project themselves as better substitutes for Bitcoin. The success of Bitcoin as the first peer-to-peer digital currency paved the way for many to follow. Many altcoins are trying to target any perceived limitations that Bitcoin has and come up with newer versions with competitive advantages. As the term 'altcoins' means all cryptocurrencies, which are not Bitcoin, there are hundreds of altcoins. ... "Altcoin" is a combination of two words: "alt" and "coin"; alt signifying 'alternative' and coin signifying (in essence) 'cryptocurrency.' (Investopedia).

Nowadays, cryptocurrencies (Turner, Irwin, 2018; Wegberget al., 2018), such as bitcoin, are commonly used in a variety of cybercrimes (for example, the currency of choice for many criminals, money laundering), anonymity/pseudonymity, rapid international transaction settlement, decentralisation and contained networks, money laundering, terrorist financing, fraud, cybercrime (Carlisle, 2017). Public institutions (in Latvia) recognize that cryptocurrencies are also attractive to money launderers, terrorists, and criminal circles. The State Police informs that the investigators have initiated several criminal procedures related to cryptocurrencies. All of them are about trading in prohibited goods (LNT ziṇas, 2018).

Cryptocurrencies are divided: coins (i.e., Bitcoin) and tokens. According to William Mougayar, the author of 'The Business Blockchain', a token is "a unit of value that an organization creates to self-govern its business model, and empower its users to interact with its products, while facilitating the distribution and sharing of rewards and benefits to all of its stakeholders." ... In the words of Cristina Carrascosa, a lawyer specializing in blockchains, "a token can be used in whichever way the person or organization designing and developing it decides. Tokens admit several layers of value inside it, so it is the token's designer who decides what a specific token has inside... An example of this potential 'replacement effect' are the so-called ICOs, or Initial Coin Offerings. ICOs are a new business fund-raising alternative: Instead of a traditional fund-raising round, or even an IPO, companies offer tokens – not shares – to the market, and investors use digital currencies such as bitcoin to pay for these tokens. Everything through the blockchain (BBVA (2017).

In Latvia, the start-up *Digipulse* could be mentioned. The company successfully implemented the ICO campaign, resulting in the investment of 1 million in return for the assets issued by the company – tokens, which were sold for already known coins such as the *Ethereum* currency. The company has developed a solution that will keep all the assets safe and, after the owner's death, will ensure that they get to the "right" hands (Buimistere, 2018; Labs of Latvia, 2018).

A variety of opinions about coins and tokens is described by this example: you can ask 10 different cryptocurrency experts to describe the difference between a coin and a token and you are likely to get 10 different answers. This is because the cryptocurrency community uses the terms "coin" and "token" interchangeably, all the time (Midlife Croesus, 2017).

CoinMarketCap separates coins and tokens using the following logic: "A *coin* is a cryptocurrency that can operate independently. A *token* is a cryptocurrency that depends on another cryptocurrency as a platform to operate. (CoinMarketCap, 2018a). According to *CoinMarketCap* data, there were 1752 VCs, including 823 coins and 929 tokens, used in the market for exchange, in August 2018, (CoinMarketCap, 2018b). The number of VCs is steadily increasing. For example, in June 2017, 745 VCs were recorded (Europol (2017). These facts rise the issue of significancy of the regulatory issues of VCs.

Legal framework and future prospects for VCs

Despite the growing popularity of cryptocurrencies, several countries have demonstrated their negative attitude. On social networks (Twitter, Facebook, and Google), it is forbidden to place ads for cryptocurrencies, thus protecting consumers from a high financial risk. In China, deals with cryptocurrencies are completely forbidden since 2018, the Vietnamese government has also banned them, as well Indonesia has declared the cryptocurrencies to be an illegal means of payment. Bitcoin values have been negatively affected by South Korean speculations over bans on trading in cryptocurrencies. The European Union (EU) and the United States of America (USA) have not banned trading in the cryptocurrencies, though they agree on the introduction of an appropriate regulatory framework. Despite the fact that several countries have banned cryptocurrencies, some countries have seen their potential. Thus, the Central Bank of Singapore tests its own cryptocurrency, the Swedish Central Bank is discussing the introduction of cryptoKrona, but Switzerland has created the most favourable environment for development of cryptocurrencies. In Estonia, the *MotherShip* project is implemented - the exchange of cryptocurrencies and linking it with e-residency (Rupeika-Apoga, 2018).

Studies on the legal framework of VCs in the EU countries (European Central Bank, 2015), Japan, Germany, the USA, and Russia (Berdnikova, 2017), the USA, Switzerland, and the People's Republic of China (Dabrowski, Janikowski, 2018) show that the legal framework for VCs is at the early stage of development.

Malta has become the leader in the legal regulation issues and policies area. There are three laws in the process of adoption: the Law on Virtual Financial Assets, the Law on Digital Innovation, the Law on Technology Innovation and Services, as well as the establishment of a control body that will control and license this business. Malta will be the first country in Europe to have a clear set of rules on procedures to be taken in particular situation and stipulating which body is responsible for that. This is the result of close private-public cooperation (Meļķis, 2018).

In Latvia, the Financial and Capital Market Commission (FCMC) in its publication "Opinion on the Legal Regulation of Bitcoins and Similar Instruments" (FKTK, 2017) on 12 February 2014 (updated on September 21, 2017) informed that the regulatory enactments that are in the area of competence of the FCMC are not applicable to the VCs and, therefore, commercial activities related to buying and distribution of the VCs, are not considered to be a financial instrument or emission of electronic money, or performance of payment services, and warns about the risks associated with the use of the VC.

Amendments to the Law on the Prevention of Laundering the Proceeds from Criminal Activity (Money Laundering) and of Terrorist Financing (2017) were adopted on October 26, 2017, and they can be considered as an innovative initiative of the Latvian legislature, encouraging the introduction of the concept of a VC and VC service provider in the regulatory enactments, as well as defining supervisory functions for such activities in the field of money laundering and terrorist financing. This was a step ahead of the EU, as the European Parliament (EP) adopted the Directive on the prevention of money laundering and terrorist financing on 30 May 2018. According to the LR "Law on the Prevention of Money Laundering and Terrorism Financing" (2008), VC is a digital representation of the value which can be transferred, stored or traded digitally and operate as a means of exchange, but has not been recognised as a legal means of payment, cannot be recognised as a banknote and coin, non-cash money and electronic money, and is not a monetary value accrued in the payment instrument.

Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU stipulates that "VCs" means a digital representation of value that is not issued

or guaranteed by a central bank or a public authority, is not necessarily attached to a legally established currency and does not possess a legal status of currency or money, but is accepted by natural or legal persons as a means of exchange and which can be transferred, stored and traded electronically". The aforementioned EU directive will reduce the anonymity that is usually associated with the use of VCs. VC exchange platforms and wallet depositary service providers will have to ensure that customer due diligence checks are applied, as is the case with banks. "The anonymity of VCs allows their potential misuse for criminal purposes. ... To combat the risks related to the anonymity, national Financial Intelligence Units should be able to obtain information allowing them to associate VC addresses to the identity of the owner of VC (Directive (EU) 2018/843..., 2018).

The acquisition, sale, and circulation of cryptocurrencies in Latvia are becoming increasingly popular. The State Revenue Service (SRS) explains the activities with cryptocurrencies for both natural persons and legal entities (VID, 2018).

With the increasing number of VCs, with the strengthening of the legal regulation of VCs, the issue of the possible directions of further development of VCs arises. Dabrowski and Janikowski (2018), analysing the impact of VC on monetary policy, argue that the main question is whether they have the potential to compete with the sovereign currencies issued by central banks. That is, the monetary dominance of major central banks and major currencies seems to remain unchallenged in the near future.

As for the future use of bitcoin, the best-known cryptocurrency, two points of view dominate: the future currency or the payment system, for instance, smart contracts. Cryptocurrencies ensure smart contracts. These are digital contracts between two parties who do not know each other or do not trust the other party, and they allow safe and anonymous business or stock exchange transactions without interference of the intermediaries – central institutions, law or regulatory systems. Smart contracts operate the same way as traditional ones – they define the rules and penalties for executing or breaking the contract, but, unlike the case of the paper-based contracts, everything is done automatically. Decentralization is the key to a safer and more difficult to crack system (Buimistere, 2018)

Experts of *OP Corporate Bank* have proposed three forecasts for the financial industry: cash will start to disappear within 15 years; banks will issue their VCs, and the artificial intelligence will replace the employees of the Latvian banks (LMT Smart Future, 2017).

Most often, the experts are cautious when talking about investing in VCs. Wences Casares, the founder and CEO of the *Xapo*, offers the following formula for the investment: take 1% or less of what you own and invest in bitcoin, then forget it at least for the next five years; better for the next ten

years. You either will lose one percent of your net worth that most people can afford, or you will get a million (Rupeika-Apoga, 2017). Manager of *INVL Index Direct* A. Martinov recommends to those thinking about investing in bitcoins (if they have not yet invested in financial markets, but have savings) to buy bitcoins or some of the altcoins for an amount not exceeding one fifth of the monthly income... Indeed, for those who are already investing and have experience about traditional financial instruments, 1-3% of the total portfolio is a reasonable limit. In addition, when investing money in bitcoins or altcoins, one can immediately say farewell to it and settle for losses, and erase it from balance sheet, and not engage in speculations, and, after buying, wait for several years, as it will not be possible to survive such a large price fluctuations with other mood (Hāka, Ž.)

Today, technologies have become a daily reality, and the digital revolution changes how and what we produce, what services are available, and how we use them. In this aspect, VCs will gain more and more popularity and recognition, along with the ever-expanding range of opportunities.

Conclusions

Difference between digital currencies and VCs can be understood in a similar fashion: where digital currencies are a non-physical representation of traditional fiat money, VCs represent a truly online asset that does not has value other than in its virtual world. VC is a type of digital currency, but the opposite statement is not true. Thus, all VCs are digital, but not all digital currencies are virtual.

VCs can be convertible (or open) or closed non-convertible (or closed); centralised VCs or decentralised VCs (cryptocurrencies). Cryptocurrencies are decentralized peer-to-peer digital currencies based on computer cryptography for security. Cryptocurrencies have high risk and high returns. Advantages of cryptocurrencies: anonymity, preservation of investment value even during an economic crisis, multiplication of investment potential, high liquidity, technological defensive ability, ability to trade in the global market, and they are not affected by inflation. The main disadvantages of cryptocurrencies are: not all of the sales outlets support payment in cryptocurrencies, fluctuating prices, possible restrictions on the use of cryptocurrencies, complicated secure storage, and, in case of loss of interest, cryptocurrencies may be lost. It is suggested to stay on two most popular cryptocurrencies, namely *Bitcoin* and *Ethereum*, and not to make most of savings in cryptocurrencies.

Altcoins are the alternative cryptocurrencies launched after the success of Bitcoin. "Altcoin" is a combination of two words: "alt" and "coin"; alt signifying 'alternative' and coin signifying (in essence) 'cryptocurrency.'

Cryptocurrencies are divided into coins (e.g., *Bitcoin*) and tokens. A token is "a unit of value that an organization creates to self-govern its business model, and empower its users to interact with its products, while facilitating the distribution and sharing of rewards and benefits to all of its stakeholders."

According to *CoinMarketCap* data, there were 1752 VCs, incl. 823 coins and 929 tokens, being exchanged in the market in August 2018. The number of VCs steadily increases. For example, in June 2017, 745 VCs were recorded. Consequently, the issue of legal regulation of the VCs becomes more significant.

The exploration of the legal framework for VCs suggests that the legal framework for VCs is at the early stage of its development. However, the acquisition, sale, and circulation of cryptocurrencies in Latvia are becoming more and more popular. The SRS explains the activities with cryptocurrencies of both natural persons and legal entities.

With the increasing number of VCs, with the increasing legal regulation of VCs, the issue of possible directions for the further development of VCs is raised. Two points of view dominate: the future currency or the payment system.

References

- 1. *AkadTerm* (2015). *Digitālā ekonomika*. Retrieved July 27, 2018, from http://termini.lza.lv/term.php?term=digital%20economy&lang=EN
- 2. ALAERDS, R., GROVE, S., BESTEMAN, S., BILDERBEEK, P. (2017). The Foundations of our Digital Economy. Retrieved July 27, 2018, from https://ej.uz/a3gn
- 3. Allen & Overy's Fintech group. (2015). *Virtual currencies. Mining the possibilities*. Retrieved July 27, 2018, from https://ej.uz/gbee
- 4. ANNISON, T. (2017). *Digital vs Virtual Currencies*. Retrieved July 27, 2018, from https://themarketmogul.com/difference-virtual-digital-crypto-currencies/
- 5. APSĪTE, A. (2017). *Digitāla valūta, tik vienkārša kā e-pasts, izgudrota Latvijā.* Dienas Bizness, 17.10.2017.
- 6. BAREFOOT, K., CURTIS, D., JOLLIFF, W., NICHOLSON, J.R., OMOHUNDRO, R. (2018). *Defining and Measuring the Digital Economy*. Retrieved July 27, 2018, from https://ej.uz/4srn
- 7. BBVA (2017). *What is a token and what is it for?*Retrieved July 27, 2018 from https://www.bbva.com/en/what-is-a-token-and-what-is-it-for/
- 8. BERDŅIKOVA, T. (2017). *Virtuālo valūtu tiesiskais regulējums šodien un rīt.* Jurista vārds, 26.09.2017./Nr.40 (994).
- 9. Boston Consulting Group (n.a.). *The Digital Economy*. Retrieved July 27, 2018, from https://ej.uz/nqwc
- 10. BUIMISTERE, A. (2018). *Nost ar bankām (un riska kapitālistiem*)! Forbes, 2018.gada marts, Nr.80. Retrieved July 27, 2018, from https://nodepower.io/forbes.pdf
- 11. CARLISLE, D. (2017). Virtual Currencies and Financial Crime Challenges and Opportunities. Royal United Services Institute for Defence and Security Studies. Retrieved July 27, 2018, from https://ej.uz/jvj3

- 12. CoinMarketCap (2018a). *Frequently Asked Questions*. Retrieved July 27, 2018, from https://coinmarketcap.com/faq/
- 13. CoinMarketCap (2018b). All Cryptocurrencies. Retrieved July 27, 2018, from https://coinmarketcap.com/all/views/all/
- 14. DABROWSKI, M., JANIKOWSKI, L. (2018). *Virtual currencies and central banks monetary policy: challenges ahea.* Retrieved July 27, 2018, from https://ej.uz/gbe9
- 15. DANDAPANI, K. (2017). Electronic finance recent developments. *Managerial Finance*, Vol. 43, Iss: 5, pp.614-626.
- 16. Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU. Retrieved July 27, 2018, from https://ej.uz/duad
- 17. English Oxford Living Dictionaries (n.a.). Retrieved July 27, 2018, from https://en.oxforddictionaries.com/definition/digital_economy
- 18. European Association for Business and Commerce (2015). *DIGITAL ECONOMY: The Industry Speaks*. Retrieved July 27, 2018, from https://ej.uz/nsfk
- 19. European Central Bank (2012). *Virtual currency schemes*. Retrieved July 27, 2018, from https://ej.uz/rkk5
- 20. European Central Bank (2015). *Virtual currency schemes a further analysis.* Retrieved July 27, 2018, from https://ej.uz/v7cw
- 21. Europol (2017). Virtuālās valūtas. Retrieved July 27, 2018, from http://lzra.lv/files/Citi%20dok/Nr_138_Virtual_Currencies_LV.pdf
- 22. FATF (2014). *Virtual Currencies Key Definitions and Potential AML/CFT Risks.* Retrieved July 27, 2018, from https://ej.uz/brte
- 23. FKTK (2017). *FKTK viedoklis par Bitcoin un līdzīgo instrumentu tiesisko regulējumu*.Retrieved July 27, 2018, from https://goo.gl/CUA879
- 24. GAVARS, J. (2018). *Globālais kriptovalūtu bums: kā aprēķināsim nodokļus Latvijā?* Retrieved July 27, 2018, from https://ej.uz/1r7n
- 25. GRIŠINS, J. (2017). *Investīciju rokasgrāmata jeb kā krāt un pelnīt.* Rokasgrāmata. Rīga: Capitalia. 17 lpp.
- 26. *Grozījumi Noziedzīgi iegūtu līdzekļu legalizācijas un terorisma finansēšanas novēšanas likumā* (2017). Retrieved July 27, 2018, from https://ej.uz/gjjs
- 27. HARWICK, C. (2016). Cryptocurrency and the Problem of Intermediation. *Independent Review.* Vol. 20, No.4, pp.569.-588. Retrieved July 27, 2018 from http://www.independent.org/pdf/tir/tir_20_04_05_harwick.pdf
- 28. HĀKA, Ž. (2017). *Var paspēt ielēkt, bet uzmanīgi,* Dienas Bizness, 21.12.2017.
- 29. HOSE, C. (2017). Forms of E-Money. Retrieved July 27, 2018, from https://ej.uz/zs2q
- 30. International Monetary Fund. (2016). *Virtual Currencies and Beyond: Initial Considerations*. Retrieved July 27, 2018, from https://ej.uz/rnbe
- 31. Investopedia (n.a.) *Altcoin*. Retrieved July 27, 2018, from https://ej.uz/ushy
- 32. KALNINA, I. (2018). ES digitālās valūtas iniciatīva. Dienas Bizness, 22.01.2018.
- 33. Labs of Latvia (2018). 'Digipulse' prezentē pasaulē pirmo decentralizēto digitālo aktīvu seifu. 02.07.2018. Retrieved July 27, 2018, from https://ej.uz/esxx
- 34. Law on the Prevention of Money Laundering and Terrorism Financing. (2008) Retrieved July 27, 2018, fromhttps://likumi.lv/ta/en/en/id/178987
- 35. LEHDONVIRTA, V., MIRKO, E. (2011). *Converting the Virtual Economy into Development Potential: Knowledge Map of the Virtual Economy*, Washington, DC; infoDev / World Bank, p.75.

- LEMIEUX, V. L. (2016). Trusting records: is Blockchain technology the answer? Records Management Journal, Vol. 26, Iss.: 2, pp.110-139.
- Letonika.lv (2009). Terminu un svešvārdu skaidrojošā vārdnīca. Retrieved July 27. 37. 2018, from https://ej.uz/nx2v
- LMT Smart Future (2017). Finanšu nākotne: skaidras naudas vietā nāks virtuālās 38. monētas. Retrieved July 27, 2018, from https://ej.uz/fa47
- 39. LNT ziņas (2018). Latvijā saistībā ar kriptovalūtām sākti vairāki kriminālprocesi. Retrieved July 27, 2018 from https://ej.uz/1qjr
- 40. MEĻĶIS, D. (2018). Bez regulējuma paliek ēnā. Dienas Bizness, 30.05.2018.
- Midlife Croesus, 2017). What's The Difference Between a Coin and a Token? Retrieved 41. July 27, 2018 from https://ej.uz/9xxg
- 42. MIKOŁAJEWICZ-WOŹNIAK, A., SCHEIBE, A. (2015). Virtual currency schemes – the future of financial services. *Foresight*, Vol. 17, Iss.: 4, pp.365-377.
- 43. MOREAU, E. (2018). 13 Major Retailers and Services That Accept Bitcoin. Retrieved July 27, 2018, from https://ej.uz/4t3s
- NAZIR, M., LUI, C.S.M. (2016). A Brief History of Virtual Economy. Journal of Virtual Worlds research, Vol.9, No.1. Retrieved July 27, 2018, from https://ej.uz/c43y
- RUPEIKA-APOGA, R. (2017). Bitcoin vs. Gold. Dienas Bizness, 13.12.2017. 45.
- RUPEIKA-APOGA, R. (2018). Kriptovalūta- vieni aizliedz, citi mēģina pieradināt. Dienas Bizness, 10.04.2018.
- ScienceDaily (n.a.). *Digital economy*. Retrieved July 27, 2018, from https://ej.uz/pycy 47.
- ŠĶUPELIS, J. (2017) Bitkoins gandrīz divas reizes dārgāks par unci zelta. Dienas 48. Bizness, 25.05.2017.
- 49. Techopedia (n.a.). Digital Economy. Retrieved July 27. 2018. from https://www.techopedia.com/definition/32989/digital-economy
- 50. TOMSONE, J. (2018). 2017.gada globālā aktualitāte – bitcoin. Retrieved July 27, 2018, from https://ej.uz/5jg1
- 51. TSYGANOV, S., APALKOVA, V. (2016). Digital economy: a new paradigm of global information society. *Ecomomic Review*, Vol. 45, Iss.:3, pp. 295-311. Retrieved July 27, 2018, from https://ej.uz/n6js
- 52. TURNER, A., IRWIN, A.S.M. (2018). Bitcoin transactions: a digital discovery of illicit activity on the blockchain. *Journal of Financial Crime*, Vol. 25 Iss.: 1, pp.109-130.
- VID (2018).Kriptovalūtas. Retrieved July 27, 2018, from https://ej.uz/oowp 53.
- WEGBERG, R., OERLEMANS, J.-J., DEVENTER, O. (2018). Bitcoin money laundering: mixed results?: An explorative study on money laundering of cybercrime proceeds using bitcoin. *Journal of Financial Crime*, Vol. 25 Iss.: 2, pp.419-435.
- ZALAN, T. (2018). Born global on blockchain. Review of International Business and 55. Strategy, Vol. 28 Iss.: 1, pp.19-34.
- ZAMANI, E.D., GIAGLIS, G.M. (2018). With a little help from the miners: distributed 56. ledger technology and market disintermediation. Industrial Management & Data Systems, Vol. 118, Iss.:3, pp.637-652,
- 57. ZUCKERMAN, M.J. (2018). Bitcoin Pizza Guy: Laszlo Hanyecz on Why Bitcoin is Still the Only Flavor of Crypto for Him. Retrieved July 27, 2018, from https://ej.uz/1841

THE PRINCIPLES OF DEMOCRACY IN ADOPTION OF NORMATIVE ACTS

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Abstract. The report describes the current problem - the disproportionately large increase in the number of normative acts. Such a situation frightens the society, creates distrust to the state administration and causes errors in adoption of normative acts, which shall be corrected. Therefore, the excessive increase in the number of normative acts is negative. Before adopting the normative acts, it is proposed to consider all possibilities for solving a specific problem. The importance of the principle of democracy in reducing the increase of normative acts has been raised.

The aim of the report is to provide a general insight into the tasks of normative acts; to update general guidelines on the basis of the principle of democracy, which confirms that the adoption of normative acts should be evaluated in conjunction with the consideration of other criteria for solving a specific problem.

The tasks of the research are the following: to update the connection of the adoption of normative acts with the essence of the principle of democracy; to analyse the growth rates of normative acts; to study the reasons for the increase in the number of normative acts; to put forward the principle of democracy as a limiter for the growth of normative acts.

In the research, the grammatical method is used to present description of the normative acts adoption process, as well as to provide review of the reasons for the increase in the number of normative acts. The systemic method is used to assess the possibilities of interpreting the principle of democracy, based on the case law of the Constitutional Court of the Republic of Latvia and the legal doctrine. The analytical method is used to describe the disproportionately rapid increase of normative acts. The analytical method is applied to evaluate the possibilities of using the principle of democracy to reduce the number of normative acts. Using the teleological method, an increase in the number of normative acts is considered in the context of the essence of the principle of democracy.

The results of the research are reflected in the main conclusions: the increase in the number of normative acts in the recent years has to be regarded as unreasonable and contrary to the public interest; the principle of democracy requires that solution to the problem, firstly, shall be sought for in the legal system; based on the principle of democracy, the usefulness, purpose and implementation of the public interest in adoption of new normative acts should be considered.

Keywords: *normative acts, principles, principles of democracy.*

JEL code: K49

Introduction

The research has shown that the legislators have become enthusiastic about adopting new laws. As a result, the excessive number of normative acts has become a disadvantageous administrative burden for the entrepreneurs and every citizen. Given the enormous amount of the normative acts, it is not

possible to achieve a coherence between them and to ensure quality. Therefore, the issue under discussion is topical for every citizen.

In the research, the data for the period 2016-2018 is used. The research was conducted in 2018.

The aim of the report is to provide a general insight into the tasks of the normative acts; to update general guidelines on the basis of the principle of democracy confirming that the adoption of the normative acts should be evaluated in conjunction with a consideration of other criteria for solving a specific problem.

The tasks of the research are the following: to update the connection of the adoption of normative acts with the essence of the principle of democracy; to analyse the growth rates of normative acts; to study the reasons for increase in the number of normative acts; to put forward the principle of democracy as a limiter for the growth of normative acts.

The research is structured in the theory of law, considering the significant rise in normativity in the context of the principle of democracy.

The hypothesis of the research is that the adoption of normative acts should be considered as a process that starts only after the evaluation of other possible solutions of the problem.

In the research, the grammatical method is used. With its help, a description of the process of adoption of normative acts is presented, as well as a review of the reasons for the increase in the number of normative acts. The systemic method was used to assess the possibilities of interpreting the principle of democracy, based on the case law of the Constitutional Court of the Republic of Latvia and the legal doctrine. The analytical method is used to describe the disproportionately rapid increase of normative acts. Using the analytical method, the possibilities of using the principle of democracy to reduce the number of normative acts have been evaluated. Using the teleological method, an increase in the number of normative acts is considered in the context of the essence of the principle of democracy.

Manifestation of the principle of democracy in the adoption of normative acts.

The principle of a democratic law-governed state follows from Section 1 of the Constitution of the Republic of Latvia: "Latvia is an independent democratic republic" (Latvijas Republikas Satversme, 1922). Based on this principle, the drafting and adoption of normative acts as the form of external expression of rights take place.

As it follows from the Constitutional Court, one of the main characteristic features of legal regulation is that the legal regulation contains mandatory directives or generally binding regulations. On the basis of the principles of justice and equity, by means of legal regulations, the state achieves a solution to both the already existing and potential conflicts of interest. (Latvijas Republikas Satversmes tiesas spriedums lietā Nr. 04-03(99), 1999, 3. punkts). In addition, the task of the legislator is to create preconditions for the uniform application of legal regulations and to effectively protect the fundamental rights of others through the legal regulations. (Latvijas Republikas Satversmes tiesas spriedums lietā Nr. 2013-09-01, 2013, 12. punkts). Therefore, the normative acts are not intended for one-off cases.

It is possible to draw conclusions that the state has a duty not only to adopt normative acts, regulating the behaviour of individuals in a wide range of legal relations, but also to create a mechanism that ensures the awareness of people about the changes and content of the legal regulations. At the same time, the state have to provide for the rights of a person, when entering into public legal relations with public authorities and other private persons, to be informed about his/her rights in the certain relationships.

In addition, the right of a person to know his/her rights also determines the scope of the legislator's activity. (Latvijas Republikas Satversmes tiesas spriedums lietā Nr. 2006-12-01, 2006, 16. punkts). Based on the definition of a legal regulation: a legal regulation defines the necessary behavioural pattern and is aimed at the establishment of certain legal consequences (Rezevska, 2015) for a body, which has the right to adopt normative acts, is obliged to assess whether in the given situation the adoption of a normative act is necessary.

How to decide whether it is necessary to adopt a new or to amend an existing normative act or to solve a problem by using other options?

On the one hand, Hermann Apsitis admits: "Where there are rights, there is an order, where there is an order, there is safety, but where there is safety, there is peace and harmony". On the other hand, the urgency in drafting normative acts and the desire to regulate all the possible situations of life in detail have led to so-called flood of legal regulations (normativism), where the same normative acts are amended several times a year and the legal system is fragmented (Normatīvo aktu projektu..., 2018).

Summarising the statistical data of the recent years, it can be seen that, in 2016 and 2017, there was an increase in the number of normative acts: the total number of the laws and the Cabinet regulations issued in 2016, as compared to 2015, had increased by almost 9%, while in 2017 - by almost 3% (Informatīvais ziņojums "Faktiskā situācija..., 2018). Since 1 January 2017, more than 100 legal regulations have come into force, including more than 60 laws (Izmaiņas likumos no 2017. gada 1. janvāra. Kur meklēt?, 2016) On 1 January 2018, 173 new legal acts came into force, including 49 laws and 71 Cabinet regulations (No 2018. gada spēkā..., 2017). It can be concluded

that the existing practice for creation of normative acts is increasingly based on the desire to regulate as many types of relationships in the society as possible by as detailed legal provisions as possible. It can be observed that the increase in the number of normative acts takes place in a "geometric progression" which can be considered as very negative.

It is reasonable and congratulatory that, in 2017, the idea, which had been raised since 2002, – to grant another legal entity the right to issue normative acts – was rejected. Namely, to give the ministers the right to issue external normative acts by themselves. The subject of empowering the ministers to issue external normative acts-regulations had been widely studied (Par konceptuālo ziņojumu..., 2017). The conclusion that the change of the issuer of the legal regulations does not in itself reduce the scope of the legal regulation and also does not ensure its quality seems to follow from the basic understanding of the issuance of normative acts in general. It is right to conclude that the introduction of the Ministerial Regulations Institute could have a negative impact on the quality of the legal regulations, because it would be based on a narrower approval process, a possible overlapping of competences, and, finally, there would most likely be contradictions between the regulations issued by different ministers.

The principle of democracy as a limiter of growing number of normative acts

The legal doctrine contains various opinions regarding the reasons for the increase in the number of normative acts. Both the historical experience and historical traditions are mentioned, as well as the "flood" of normative acts, typical for all the European Union, but in some areas, in particular, detailed regulation; as well as the decision to regulate every case as detailed as possible; and the fact that the adoption of a normative act is the most effective way for solving a situation (Platace, 2013). The flood of legal regulations arises from the fact that the officials do not have knowledge of legal methods, as well as the fact that the politicians lack understanding of the meaning and purpose of the creative work concerning normative acts (Amolina, 2015). Casuistical regulation is the consequence of people's actions and a confirmation of the unbelief of the state administration in the reasoning power of *homo sapiens* (Litvins, 2013). It can be seen that, on the one hand, the state's implemented hyper-regulation frightens the society, but, on the other hand, the increase in normative acts in some cases is regarded as means to improve life. Most likely, the excessive amount of normative acts can be explained by the fact that Latvia is still in the stage of development of the modern regulatory framework. Therefore, nowadays, the public administration tries to solve the problems not by the possibilities of a legal system based on the principle of democracy, but based on adoption of a normative act for each new situation.

On 12 December 2012, the President of Latvia A. Bērziņš issued the Order No. 7 "On the Development of Proposals for the Reduction of the Number and Amount of Amendments to the Law" (Valsts prezidenta rīkojums Nr. 7 Rīgā 2012. gada 12. decembrī "Par priekšlikumu izstrādi likumu grozījumu skaita un apjoma samazināšanai", 2012). From the order, the necessity to develop proposals for reducing the amount and extent of excessive creative work in the legal system, as well as to create preconditions for prevention of over-detailed and thorough legal regulation follows.

The legal doctrine emphasises that the administration of a law-governed state is characterised by the use of three principles: the determination of competence by law, limitation of administrative means of enforcement, subordination to the law (Dišlers, 2002). On the contrary, the too casual legal regulation may not be fair (Latvijas Republikas Satversmes tiesas spriedums lietā Nr. 2008-09-0106, 2008, 7.2. punkts). Instead of determining the most essential provisions applicable to a longer period, the detailed description of each situation in the normative act is in conflict with the principle of democracy.

It shall be accepted that the concepts with a high degree of legal abstraction make the legal regulations more flexible and more applicable to different situations (Bārdiņš, 2017). Moreover, the excessive number of normative acts is, the first of all, contrary to the principle of democracy, since based on the democratic principles, the legal stability is created, which requires the adoption of legally sustainable laws. The "flood" of normative acts creates an unnecessary administrative burden for the public administration. Secondly, it leads to a rejection of the society's attitude towards the normative acts, the legislator and the state as a whole, as well as negatively affects everyday life of every person, for example, the possibility to plan a commercial activity or other activities.

The legal doctrine has strengthened the view that, based on the basic rules of the legal system and understanding of the intrinsic rights, the general legal principles have special significance in the legal system of a democratic law-governed state (Rezevska, 2017). Again, the obligation of the state to adhere in its activities to the basic principles of a law-governed state, including the principle of the doctrine of legitimate expectations and the principle of legal certainty, follows from the principle of democracy, contained in Section 1 of the Constitution of the Republic of Latvia (Osipova, 2017). The certain principles shall be complied with within the entire normative act creation process, in order to ensure that the created normative regulation is qualitative, evaluated, coherent, and effective during application, without creating unnecessary burdens and uncertainties in its

application (Normatīvo aktu projektu..., 2018). Excessive drafting of normative acts inevitably leads to mistakes and, consequently, the mistakes made have to be corrected urgently.

As one of the solutions to the reduction of the flood of the normative acts and implementation of the democratic principles, is compliance with the legal principles, both in drafting of normative acts and their application. In the hierarchy of the rights sources of normative type, one can find the legal principles that, in terms of their legal force, are ranked above normative acts, because they are derived from the basic norm. The "legal system based on the principle of democracy" includes all the written and unwritten prescriptions needed to resolve the disputes in the legal system (Rezevska, 2015). The legal doctrine defines three groups of general legal principles that are essential in the legislative process: the general legal principles that are related with implementation of justice; semilogical general legal principles; instrumentally formulated legal principles (Rezevska, 2015). The principle of the power of law, in its turn, prescribes that laws shall be predictable and clear, as well as sufficiently stable and unchanged. Consequently, the legal regulation established by law cannot be changed unreasonably often, as the disproportionate change in the legal regulation complicates the compliance with the law. Moreover, the legal regulation shall be sufficiently stable, thus, an individual can, taking into account the legal provisions, not only make short-term decisions, but also plan his/her future in the long run. Also, the principle of legal certainty requires the state to ensure the certainty and stability of legal relations, as well as to observe the principle of legitimate expectations in order to promote the trust of the individual in the state and in the law (Latvijas Republikas Satversmes spriedums lietā Nr. 2004-03-01, 2004, 9.2. punkts). In addition, it is important that every citizen understands the regulation of normative acts.

The goal of the legislator should not be drafting laws at all costs, but a reasonable solution to the problem (Krūmiņa, Skujiņa, 2002). If it is expected that a draft of a normative act is not more qualitative, easier to perceive, simpler, clearer or otherwise more valuable than would be in case if the principles of democracy and its derivatives would be complied with, the drafter of a normative act should look for other formulations and solutions to the problem based on these basic principles.

When deciding whether a new law is needed, first of all, it shall be established whether there is a problem the resolution of which requires the adoption of normative acts; second, that the problem is most effectively solved by adopting a new one or making changes to the existing normative acts (Tiesību akta projekta..., 2014). Before drafting a normative act, a legislator should always make himself/herself certain that a problem identified and described cannot be addressed in any other way.

The most commonly used alternative solutions can be identified: application of existing regulations and improvement of control over implementation; raising public awareness of the nature of the existing regulation and its implementation. The explanation found in the case law that the use of legal methods can solve any legal matter, because it includes all the necessary and simultaneously sufficient set of methods for clarifying the content of legal norms - the true application of the principle of democracy shall be started. In addition, the legislator has very clearly regulated that the institution and the court should not refuse to settle an issue based on the fact that this issue is not regulated by law or by other external normative act (prohibition of legal obstruction of institutions and courts). They shall not refuse to apply a legal regulation on the ground that this legal regulation does not provide for a mechanism of application of the measures, that it is not comprehensive or that no other normative acts have been adopted which would more closely regulate the application of a relevant legal regulation (Amolina, 2015). The application of legal regulations in compliance with the Constitution includes finding and correct interpretation of the relevant legal regulation based on the principle of democracy defined in Section 1 of the Constitution of the Republic of Latvia.

It is necessary to join the opinion of E. Meļķisis that one of the most urgent tasks of the Latvian Association of Lawyers is to identify and implement the ideas of the theory of interpretation and legal argumentation in the law science and in the practice of application of norms in the amount and quality that corresponds to the standards of other democratic states" (Meļķisis, 1997).

The draft of a normative act should not be devised to solve any problem of momentary nature, because if a problem can be solved by way of interpretation of legal regulations, there is an option – to prepare a draft of a legislative act or not. From the figures specified above regarding the increase of normative acts, it is obvious that the "flood" should be stopped as soon as possible.

Conclusions and suggestions

- 1. The increase in the number of normative acts in the recent years has to be regarded as an unreasonable and contrary to the public interest growing in a "geometric progression" which can be considered as very negative.
- 2. Excessive drafting of normative acts inevitably leads to mistakes and, consequently, these mistakes have to be corrected urgently. The normative acts are not intended for one-off cases.

- 3. Based on the principle of democracy, the use of legal methods can solve any legal matter, because it includes all the necessary and simultaneously sufficient set of methods for clarifying the content of legal norms. Based on this principle, the drafting and adoption of the normative acts as the form of external expression of rights take place.
- 4. The usefulness, purpose, and implementation of the public interest in adoption of new normative acts should be considered. The application of legal regulations in compliance with the Constitution includes finding and correct interpretation of the relevant legal regulation based on the principle of democracy defined in Section 1 of the Constitution of the Republic of Latvia. The draft of normative act should not be devised to solve any problem of momentary nature, because if a problem can be solved by interpreting the legal regulations, there are alternatives to prepare draft of a legislative act or not.

References

- 1. AMOLIŅA, D. (2015). *Izcilība normatīvismā*. *Jurista Vārds*, 2015.gada 14.jūlijs.
- 2. BĀRDIŅŠ, G. (2017). Satversmes tiesas atziņas par tiesiskās drošības principu un tiesiskās paļāvības principu. No: Vispārējie tiesību principi: tiesiskā drošība un tiesiskā paļāvība. Valsts pārvalde. Bizness. Jurisprudence. Rakstu krājums. Autoru kolektīvs R.Baloža vadībā. Rīga, Tiesu namu aģentūra, 415 lpp.
- 3. DIŠLERS, K. (2002). *Ievads administratīvo tiesību zinātnē*. Rīga, Tiesu namu aģentūra, 274 lpp.
- 4. Informatīvais ziņojums "*Faktiskā situācija un risinājumi normatīvo aktu skaita samazināšanai*". (2018). Retrieved July 5, 2018, from tap.mk.gov.lv/doc/2018_02/TMinfo 150118 NA.109.docx
- 5. KRŪMIŅA, V., SKUJIŅA, V. (2002). *Normatīvo aktu izstrādes rokasgrāmata*, Rīga, 115 lpp.
- 6. Latvijas Republikas Satversme. (1922). *Valdības Vēstnesis*, 1922.gada 30.jūnijs, Nr.141.
- 7. Latvijas Republikas Satversmes tiesas 1999. gada 9. jūlija spriedums lietā Nr. 04-03(99), Retrieved July 5, 2018, from htps://likumi.lv
- 8. Latvijas Republikas Satversmes tiesas 2008.gada 16.decembra spriedums lietā Nr. 2008-09-0106, Retrieved July 5, 2018, from https://likumi.lv
- 9. Latvijas Republikas Satversmes tiesas 2013.gada 19.novembra spriedums lietā Nr. 2013-09-01, Retrieved July 5, 2018, from https://likumi.lv
- 10. Latvijas Republikas Satversmes tiesas spriedums, 2006. gada 20. decembrī, lieta Nr. 2006-12-01, Retrieved July 5, 2018, from https://likumi.lv
- 11. LITVINS, G. (2013). *Kurš var apturēt likumu plūdus. Jurista Vārds*, 2013.gada 8.janvāris, Nr.1.
- 12. MEĻĶISIS, E. (1997). Likuma burts, likuma gars, Satversmes tiesa. *Latvijas Vēstnesis*, 1997.gada 22.maijs, Nr. 125.
- 13. No 2018. gada spēkā stāsies 173 tiesību akti. (2017). Retrieved July 5, 2018, from https://lvportals.lv/skaidrojumi/292422-no-2018-gada-speka-stasies-173-tiesibu-akti-2018

- 14. Normatīvo aktu projektu izstrādes rokasgrāmata. (2018). Retrieved July 5, 2018, from https://tai.mk.gov.lv/book/1/chapter/23
- 15. OSIPOVA, S. (2017). Satversmes tiesas priekšsēdētājas vietnieces Sanitas Osipovas uzruna rakstu krājuma "Vispārējie tiesību principi: tiesiskā drošība un tiesiskā paļāvība: Valsts pārvalde. Bizness. Jurisprudence" atvēršanā, Retrieved July 5, 2018, http://www.satv.tiesa.gov.lv/articles/satversmes-tiesas-priekssedetajas-vietnieces-sanitas-osipovas-uzruna-rakstu-krajuma-visparejie-tiesibu-principitiesiska-drosiba-un-tiesiska-palaviba-valsts-parvalde-bizness-jurisprudenc/
- Par konceptuālo ziņojumu "Ministra noteikumu institūta ieviešanas izvērtējums".
 (2017). Ministru kabineta 2017.gada 27.jūnija rīkojums Nr.332.
- 17. PLATACE, L. (2013). *Plāno, kā samazināt normatīvo aktu skaitu*, Retrieved July 5, 2018, from http://m.lvportals.lv/visi/likumi-prakse/256790-plano-ka-samazi natnormativo-aktu-skaitu/
- 18. REZEVSKA, D. (2015). *Vispārējo tiesību principu nozīme un piemērošana.* 2.izd., Rīga, Daigas Rezevskas izdevums, 176 lpp.
- 19. REZEVSKA, D. (2017). Kas ir vispārējie tiesību principi? Vispārējie tiesību principi: tiesiskā drošība un tiesiskā paļāvība. Valsts pārvalde. Bizness. Jurisprudence. Rakstu krājums. Autoru kolektīvs R.Baloža vadībā. Rīga, Tiesu namu aģentūra, 2017, 415 lpp.
- 20. Tiesību akta projekta ietekmes sākotnējā izvērtēšana. Metodiskie norādījumi/ Rokasgrāmata, (2014). Retrieved July 5, 2018, from https://www.mk.gov.lv/ sites/default/files/editor/metodika_gala1.pdf
- 21. Valsts prezidenta rīkojums Nr.7 Rīgā 2012.gada 12.decembrī Par priekšlikumu izstrādi likumu grozījumu skaita un apjoma samazināšanai, Retrieved July 5, 2018, from htps://likumi.lv

ROLE OF LEADERSHIP AND POSSIBILITES FOR ITS DISPLAY IN THE STATE BORDER GUARD

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Abstract. The authors explore the display of leadership in the State Border Guard in order to find out whether there is a place for leadership and the human factor in the relationship between management and subordinates in the strictly regulated organization. The aim of the research: to study the role of leadership and its display in the State Border Guard. Tasks of the research: 1) to describe the nature of leadership and its role in the organization's activities; 2) to conduct a survey on the most significant aspects of leadership manifestation in regards inspectors and officers from different border guard units of the State Border Guard; 3) to make conclusions and develop proposals regarding the necessity of leadership and possibilities for its display. The research methods: 1) literature analysis, observation; 2) surveying, data processing, analysis, and interpretation. At the end of the research, the authors conclude that the respect and appreciation provided by the superior to the subordinates is as important as a good salary and work conditions at the State Border Guard. Hence, in the opinion of the subordinates, a superior who can display the respect and appreciation to the subordinates will be able to become the leader. Even in a strictly regulated organization such as the State Border Guard, the superior can offer his/her subordinates the assistance – not by completing a task on behalf of the subordinate, but by providing the advice and guidance. This behaviour is an attribute of a democratic management style creating a favourable ground for leadership development.

Keywords: employees, leadership, organization, management, state border guard.

IEL code: M12

Introduction

Often in organizations, the management process and the role of a manager is considered as obvious. The common understanding is that in public administration institutions everything is subordinated, neglecting the importance of the management attitude towards the staff and, vice versa, the attitude of the subordinates towards their managers and overlooking the preconditions for the formation of this attitude. The above-mentioned issues have prompted the authors to select the research theme – the display of leadership in the State Border Guard – in order to verify that in an organization, where everything is strictly regulated, there is still a place for leadership and the human factor in relations between the superiors and subordinates.

Research novelty: the study of the leadership phenomenon at the State Border Guard is conducted; there are no similar studies carried out so far.

Many researchers have made a significant contribution in development of the leadership theory and practice, including J.M.Burn (1978), B.M.Bass (1987, 1991), R.T.Keller (1992), I.Forands (1999), L.Gratone (2004), R.Garleja (2004, 2006), Dž.Edeirs (2007), V.Renge (2007).

Research period: 2015 – 2017.

Research aim: To explore the role of leadership and possibilities for its display in the State Border Guard.

Research tasks:

- 1) to define the nature of leadership and its role in an organization;
- 2) to conduct a survey on the most significant aspects of leadership manifestation in regards inspectors and officers from different border guard units of the State Border Guard;
- 3) to make conclusions and develop proposals regarding the necessity of leadership and possibilities of its display.

Research methods:

- 1) literature analysis, observation;
- 2) surveying, data processing, analysis, and interpretation.

Research hypothesis: There are displays of the leadership phenomenon in the State Border Guard, and there are good opportunities for their development.

The State Border Guard is one of the national authorities. In the state administration, the officials are part of the systematised hierarchical system where one official is subordinate to another. Each official acts only within the limits of his/her competence and does not go beyond the limits of his/her responsibilities, and performs and implements his/her duties independently.

The management has an important role, as it outlines the organizational and functional arrangements for each subordinated institution. Despite the strict legal framework of the staffing at the law enforcement authorities, the management can ensure the fulfilment of the tasks in different ways, balancing both compliance with the legal requirements and personnel needs when choosing the right option (Adijāne, 2011).

The requirements for leadership in military organizations are higher than in any other organization, since, along with the knowledge of military skills and goals, the manager must be able to lead and command subordinates (Rozčenkova, Dimdiņš, 2010). Each team needs a leader to help them to succeed and achieve the goals by highlighting the development direction. A good manager should be able to help the teammates to find a deeper meaning for their work.

Mostly the leadership theories emphasize the significance of leaders' personal traits. The most important attributes of the leader are enthusiasm, fairness, and honesty, respect for the team and subordinates, friendly support. The manager has just formal authority, while the leader has the trust of his/her followers. Respect and recognition of the manager is just as important as a good salary and work conditions. Hence in the opinion of employees, only the manager who can display his/her respect and appreciation to his/her subordinates can become a leader.

When delegating responsibility, exchanging information, and displaying appreciation, predominantly, a democratic management style is being implemented in the Border Guard. In the research, it is concluded that the respect and recognition on the part of the manager is as important as a good salary and working conditions at the State Border Guard. Even in a strictly regulated organization such as the State Border Guard, the manager can offer the subordinates his/her assistance – not by completing the task on behalf of the subordinate, but by providing his/her advice and guidance. This behaviour is a feature of a democratic management style that creates a good ground for leadership development.

Nature of leadership and its role in an organization

Leadership is a phenomenon that cannot be measured in terms of money, material values, it cannot be defined or described by figures or formulas. Leadership is displayed in groups where not just earnings, work efficiency, and achievements, but as well the organizational microclimate, mutual relations, emotions, and feelings are important. Individuals are units that form the group.

Organizational psychology researcher R. Garleja emphasizes the particular role of human potential and the need for its development: "An individual, his potential, is as powerful and compelling as he is able to assess and recognize the truth about himself, to understand himself, to define his role in time and space, his identity in the social environment. It is a description of individual self-respect. The human potential needs to be shaped, developed, and sustained. For this purpose, the organizational environment, education, culture, science, history, socialization institutions, and the world experience are used" (Garleja, 2006).

There are different definitions of leadership in literature: 1) leadership is often identified with a personality – a leader; 2) influence of an individual on other people can be described; 3) a specific pattern of behaviour can be described; 4) it can be described as a certain type of interaction between individuals. All leadership definitions include three components: a group, influence, and a goal. Leadership occurs in groups, the leader influences the

behaviour of group members in order to achieve a specific goal in a better way. Leadership is a process when an individual influences achievement of group or organizational goals (Renge, 2007). According to several researchers (Burn (1978), Moorman (1990), Bass (1987, 1991)), the leader plays a key role in shaping the vision of the organizational future.

Leadership is an ability to persuade and influence an individual or a group of people to achieve a goal together. The person who plays the main role in the group, defining and implementing the actions aimed at achieving the goals of the group, is the leader. The leader's main tasks are to demonstrate the initiative, to develop and support people's willingness to work successfully. The ultimate goal of the leader is to achieve the goal set by the group (Forands, 1999; Ukolovs, Mass, Bistrjakovs, 2006). Leadership is a complex activity; the acquisition of leadership skills requires specific personality traits, purposefulness, self-criticism (ability to measure achievements and to make adjustments of own behaviour), and confidence in the idea. The leader uses his power consciously, with inspiration and, usually, with success (Ukolovs, Mass, Bistrjakovs, 2006).

The authors believe that leadership is an ability to encourage others by using motivational tools such as inspiration, guidance, and support. Each team needs a leader to help them to succeed and achieve their goals by pinpointing the direction of development. A good manager should be able to help his/her teammates to find a deeper meaning for their work.

Table 1 compares management and leadership methods showing that the management techniques are based on the traditional management theory – planning, organizing, delegating, and controlling, while the leadership methods are more related to the change management, gaining employees' support, managing emotions and values. Whereas characteristics of the managers are mostly related to the formal power and its implementation in an organization, characteristics of the leaders relate to flexibility, development of employees' motivation and responsibility, and inspiration.

Table 1 Comparison of management and leadership methods and characteristics (Source: compiled by the authors, based on Dāvidsone, 2008)

Management method					
Management	Leadership				
Skills to overcome difficulties	Skills to manage changes				
Methods for planning problem-solving: setting goals, budgeting, drawing up an action plan, allocating resources	Methods for planning changes: creating a vision, developing a strategy for change				

Goal-achievement methods:	Goal-achievement methods:				
organization of work, staff planning and	Motivation, internal communication,				
selection, creating organizational	acquisition of employees' support for the				
structure, delegating, control, and	implementation of change,				
problem solving	encouragement, and management of				
	employees' needs, emotions and values.				
Characteristics					
Manager	Leader				
Authority of formal power: formal status	Personal authority: personal charisma,				
and influence in the organisation	ability to encourage and to gain trust				
Planning	Vision and flexibility				
Control					
Control	Motivation				
Task-oriented	Motivation Relation- and person- oriented				
Task-oriented	Relation- and person- oriented				
Task-oriented Orders and assignments	Relation- and person- oriented Delegating responsibilities and coaching				

The military leadership is able to provide many insights for the civilian sphere. US Secretary General J. Loh has defined the principles of good leadership. The commander has:

- to be a model, both with his authority and influence; 1)
- 2) to be open and accessible:
- to promote a positive vision and culture within the structural unit 3) and should not avoid complex problems:
- 4) to be able to distinguish between errors and intentional offenses, and act differently;
- 5) to be able to apply discipline in a fair and non-discriminatory manner;
- to understand trust and loyalty towards his unit; 6)
- 7) to understand when to apply discipline (Dawson, Burrell, Rahim, 2010).

Display of leadership in the State Border Guard

Military organizations assign high emphasis to the leadership positions. Relevant leadership at all levels is so important that, without it, the success is not guaranteed – even with the use of the latest technology and equipment. Therefore, the military organizations emphasise the leadership and the various ways to improve and to develop effective leaders. Successful training provides a better understanding of good leadership.

Leadership in the military is defined as influencing people – by using goals, directions, and motivation during action to carry out missions and to improve the organization (Jian-Quan, 2009).

The State Border Guard is the institution directly subordinated to the Ministry of the Interior. The Border Guard is armed and serves to ensure the integrity of the state border and to prevent illegal migration.

The operations of the State Border Guard is organized in conformity with the law, humanism, human rights, transparency, a single command, and based upon the assistance of inhabitants. A single command means that all the general decisions regarding the institution are made by one person, or by the Chief of the State Border Guard.

All administrative units (the Central Board and territorial boards in Ludza, Daugavpils, Viļaka, Ventspils, Riga), as well as the Aviation Board are subordinated to the Chief of the Border Guard. However, each territorial board has its own chief administering the border control units of the territorial boards such as border checkpoints, border guard units, immigration control services and departments. Each border guard unit or immigration control department has its own chief.

The authors have carried out a survey of the State Border Guard inspectors and officers. One hundred and four respondents, including 53 women and 51 men, were surveyed. The age distribution of the respondents is a very important indicator, since it affects both the managerial work style and the microclimate and job satisfaction and requires different motivation principles for different groups of employees. In the study, 45% of the respondents were in the age group 26-35, 40% of the respondents – in the age group 36-45. Thus, the majority of the respondents were people aged 26 to 45 years. The share of the employees over the age of 56 was small – 2%, in the age group from 46 to 55 years – 4%, and in the age group under 25 – 9%. Distribution by the position in the organization: 70% of the respondents were officers, 30% – inspectors. The officers have a higher rank. Distribution of the respondents by the duration of service: 72% of the respondents had a service record of 10 years and more, and they had to be considered as very valuable employees for the organization, having a lot of work experience and high professionalism. Certainly, some of them were leaders in their structural units, or informal leaders whose opinion was respected by the others. The duration of service of 22% of the respondents was 5-10 years, 4% of the respondents – 3-5 years, and 2% with 1-2 years of work experience were still at the beginning of their career at the State Border Guard and could become leaders in the future.

The results of the survey let the authors conclude that the manager's personal traits have a very significant influence on the management style. Therefore, the authors believe that, when planning the career of new officers,

the management should pay attention to the personality and personal traits of an individual, as even in strictly regulated organizations such as the State Border Guard, there are the opportunities to create and develop an individual style of management.

Table 2 Leadership display in the State Border Guard: results of the survey (Source: compiled by the authors, responses of the respondents, %)

Sta	tement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The management	personality traits of the manager	2	6	6	26	60
style in the law	subordination, rank	0	10	24	50	16
enforcement authorities is	legislative requirements	2	16	20	36	26
affected by	internal regulations	2	17	16	48	17
In the State	necessary	2	2	0	40	56
Border Guard, leadership is	has to be gained by hard work	2	14	18	46	20
There are managers in your organization	who are strong leaders that are respected by the subordinates	12	12	20	44	12
	who believe that internal microclimate in the organization is important	16	16	24	28	16
	who know how to express the appreciation at the right time	8	22	24	34	12
	who can maintain the team spirit and consolidate a team	18	20	28	16	18
The managers in your organization	influence the subordinates to carry out tasks by convincing that it is necessary	6	24	16	28	26
	influence the subordinates to perform the tasks by offering help	30	24	24	16	6

The effect of the rank can be strengthened, thus ensuring more effective management of subordinates by developing their leadership qualities. That is why leadership is called the supreme form of good governance. Most of the respondents (36%) agreed that the legislative requirements influenced the management style. This can be explained by the fact that the State Border Guard is an organization strictly regulated by the law, where each activity is to be carried out only in accordance with the law.

Internal normative regulations is an important part of the management, because they clearly define the procedures and actions to be employed at the State Border Guard. Consequently, they exclude possibility of different interpretations in the management processes. The results of the survey indicate that the employees of the State Border Guard understood the peculiarities of the organization's work. Therefore, the authors assume that the employees had a clear understanding why the management made appropriate decisions in one or the other situation. More than half of the respondents (56%) strongly agreed that leadership was necessary. Most of the respondents believed that leadership in this organization could be obtained in the result of long-term and persistent work. Thus, more than half of the respondents believed that there were managers in their organization who had leadership qualities and who were respected by the staff.

On the other hand, less than half of the respondents believed that the managers considered microclimate in the organization as important. Thus, it can be concluded that there were managers in the organization or perhaps the conditions were created, avoiding the employees to think that the microclimate in the organization could be improved; or the employees focused on other priorities in their work without considering the organizational microclimate. Consequently, the senior executives needed to pay more attention to the relationship between the managers and subordinates, the relationship between employees of the same rank, and what he atmosphere prevailed in a particular unit.

Less than half of the organization's employees considered that the managers were able to display their appreciation at the right time. Thus, it can be concluded that almost half of the employees of the organization did not receive recognition when it was most needed. The authors believe that the key to the manager's relationship with employees is providing feedback that can also include appreciation. The distribution of responses to the statement suggesting that there are managers in the organization who can maintain the team spirit and consolidate the team is very similar, still the highest number of responses fall for the neutral position of the scale "Neither agree, nor disagree" (28%). This once again confirms the previously mentioned statement that some employees do not even think about the

matters such as team spirit, team building, since they mostly focus on their job responsibilities and outcomes.

It is a prerogative of democratic leaders to convince subordinates that there is a need to perform a task. Of the respondents, 26% strongly agreed that they were convinced in this way to complete the tasks, 28% slightly agreed with this statement, 24% slightly disagreed, 6% – completely disagreed. Regarding the statement that the managers in the organization affect the subordinates to carry out the task by offering their help, the majority of the respondents (30%) have answered that they strongly disagreed, 24% slightly disagreed, 24% were neutral, 16% slightly agreed, and 6% strongly agreed. The authors believe that the distribution of the responses can be explained by the strict regulation of activities and responsibilities; nevertheless, the superior could offer his help providing his advice, guidance, and support and not completing a task instead of the subordinates. This behaviour is an attribute of a democratic management style creating a good ground for leadership development.

Conclusions and suggestions

An individual differs from other organizational resources by the inner world, soul, and emotions. All leadership definitions include three components: a group, influence, and a goal. Leadership is a process that takes place in groups. A leader influences the group behaviour in order to achieve a certain goal in a better way. Considering the above-mentioned, the most precise definition of leadership would be the following: leadership is the ability to encourage others by using the motivational tools such as inspiration, guidance, and support. Each team needs a leader to help them succeed and achieve the goals by pinpointing the direction of development. A good manager should be able to help his/her teammates to discover a deeper meaning for their work. Most of the leadership theories emphasize the importance of personal traits of the leaders. Thus, the most significant characteristics of the leader are enthusiasm, fairness and trustworthiness, respect for the team and subordinates, friendly support.

The performance results in different groups, departments may vary because a good manager has ability to motivate the team. It is advisable to lead the team in a way it is "focused – relaxed", that is, the employees persevere on the set goal, nevertheless, they do not experience any fear and negative stress, moreover, they feel free express their ideas, recommendations, and use their own techniques to better achieve the goal.

The managing staff needs to pay more attention to the relationships between the managers and subordinates, the relationships between onerank staff, and to the atmosphere that prevails in a particular structural unit. The research allows concluding that less than half of the organization's staff believed that the superiors were able to express their appreciation at the right time. This indicates that almost half of the organization's staff did not receive recognition when it was most needed. Providing feedback is a very important and useful process in manager-employees relationship, as during the feedback, the necessary appreciation can be expressed as well as suggestions provided for improvement of work. Even in a strictly regulated organization such as the State Border Guard, the manager can offer the subordinates his/her assistance – providing advice and guidance, not completing the task on behalf of the subordinate. This behaviour is an attribute of a democratic management style creating a good ground for leadership development.

The authors propose the chiefs of the territorial boards to express appreciation to the staff for the good performance. Since less than half of the organization's staff believed the managers could display their appreciation at the right moment, it can be concluded that almost half of the organization's employees did not receive recognition when it was most needed. The chief of the territorial board has the right on his/her own or at the suggestion of the chief of the subordinate structural unit to propose to the Chief of the State Border Guard to reward the staff for their performance. As well, he/she can issue the "gratitude" award him/herself. Therefore, the authors recommend the chiefs of territorial units to assess the situations and use their rights to grant these awards to the staff.

References

- 1. ADIJĀNE, I. (2011). Vadības loma tiesiskās kārtības nodrošināšanas iestādēs. Tautsaimniecibas attīstība: problēmas un risinājumi, Rēzekne, 2011.gada 1.jūnijs-5.lpp.
- 2. BASS, B.M., & YAMMARINO, F.J. (1991). Congruence of self and others' leadership ratings of naval officers for understanding successful performance. Applied Psychology: An International Review, 40(4), pp.437-454.
- 3. BASS, B.M., AVOLIO, B.J., & GOODHEIM, L. (1987). Biography and the assessment of transformational leadership at the world class level. Journal of Management, 13, pp.7-19.
- 4. DAWSON, M., BURRELL, D., N., RAHIM, E. (2010). Deep Dive into Understanding the Theory of Military Organization, Military Leadership, Skill Transfer, Aspects Of Program Management, and Decision Support Systems. *Journal of Global Intelligence & Policy;* Vol. 3 Issue 3, pp.5-17.
- 5. DĀVIDSONE, G. (2008). Organizāciju efektivitātes modelis. Rīga, 242 lpp.
- 6. FORANDS, I. (1999). Vadītājs un vadīšana. Rīga, Kamene, 123 lpp.
- 7. GARLEJA, R. (2006). Cilvēkpotenciāls sociālā vidē. Rīga, RaKa, 61 lpp.
- 8. JIAN-QUAN, T. (2009). The Leadership Competency Modelling of Military Academy Cadets. *Social Behaviour & Personality: An International Journal;* Vol. 37 Issue 4, pp.525-537.

- 9. KELLER, R.T. (1992). Transformational leadership and the performance of research and development project groups. Journal of Management, 18 (3), pp.489-501.
- KIRBY, P.C., KING, M.I., & PARADISE, L.V. (1991). Extraordinary leaders in education: 10. Understanding transformational leadership. Journal of Educational Research, May-June, pp.303-311.
- RENGE, V. (2007). Mūsdienu organizāciju psiholoģija. Rīga, Zvaigzne ABC, 88 lpp. 11.
- ROZČENKOVA, A., DIMDIŅŠ, Ģ. (2010). The Relationship between Self-Reported 12. Transformational Leadership and Social Identification in the Military. Baltic Journal of Psychology, Vol. 11 Issue 1/2, pp. 5-17.
- UKOLOVS, V., MASS, A., BISTRJAKOVS, I. (2006). Vadības teorija. Apgāds "Jumava", 148 lpp.

DESIGN DEVELOPMENT TRENDS OF LATGALE REGION NEWSPAPERS (1998 – 2017)

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Abstract. The aim of the paper is to find out how the design of regional newspapers has changed and what cultural and social factors have affected it. The paper analyses the design of Latgale region newspapers "Latgales Laiks, "Rēzeknes Vēstis", "Vaduguns" in three periods from 1998 to 2017. A comparative analysis is made, analysing the processes that have affected the visual communication of cover pages and the content. Content analysis is used as a research method to achieve the aim. In the study, a total of 270 regional newspapers were analysed. During the period from 1998 to 2008, there were changes in the design of the newspapers that took place under the influence of cultural and social factors: higher-quality photographs, colourful content, original design solutions, and official websites of newspapers etc. The changes were found in all three of design disciplines, while the detected newspaper design changes in the period from 2008 to 2017 had not affected the overall visual image of the newspapers.

Keywords: culture, design, media space, newspapers, regional media, social space, visual communication.

IEL code: *Z1, Z19*

Introduction

There is a tendency in the 21st century in Latvia and in the world that the number of newspaper readers and subscribers is rapidly diminishing, so what is the relevance of the debate in society about whether printed newspapers can be saved and what is their future? Technology development has hit the regional newspapers that often have limited financial resources, and it makes it difficult to adapt to the current trends, yet the newspaper designers do not pay enough attention to design considering it as a decoration, rather than a message carrier. The media pay great attention to visual communication and design and only then adjust the content, which has changed the way the media culture and the media are presented in general, while the regional media pay less attention to the development of design.

Thus the research hypothesis is: the social and cultural changes can affect and develop design of newspapers. The aim of the paper is to find out how the design of regional newspapers has changed and what cultural and social factors have affected it. The paper analyses the design of Latgale region newspapers "Latgales Laiks, "Rēzeknes Vēstis", "Vaduguns" in three periods from 1998 to 2017.

The tasks of the paper are following:

- describe theoretical issues on visual communication and newspaper design;
- identify the role of the regional newspapers in the region;
- explore and analyse the cover pages of the newspapers "Rēzeknes Vēstis", "Vaduguns", and "Latgales Laiks";
- examine how social and cultural processes have affected the changes of the newspaper design.

To achieve the aim, the quantitative and qualitative content analysis was performed and categories to analyse newspaper design were developed.

Print media is almost entirely composed of visual information that is effective for the transfer of information. Graphically, depicted content is capable of passing a large amount of information at high speed, with less space, if compared with other methods of transmission of information (Tufte, 1990).

"Visual images become more and more common, and, as a result, information and knowledge about the surrounding world are increasingly being formulated visually, and people interacting increasingly use fully constructed visual experiences" (Rimšāne, 2003). In Bo Bergstrom's book "Visual Communication," it is stated that visual communication is almost never used without a specific purpose for aesthetic purposes: "No, text and images require more. A message must be given - no matter how banal or vital it is". This applies to all the media, including the printed press, where visual communication in the narrower sense translates into the presentation of the publication, the images and the visual structure of the text (Jameson, 2007). Harry J. Jameson's work "Visual Communication: More than Meets the Eye" is based on the fact that visual communication has several dimensions, such as social or semiotic. Perception or social communication determines that "modes of vision" are influenced by social factors, from which it can be concluded that the processes in society influence the way in which visual communication takes place. Interpretation that comes from visual experience is a combination of several factors: biological, psychological and socio-cultural. Both the image creator and the receiver are on the opposite side of the communication process, but they are in the same fundamental perception system. The main difference is that the creator reproduces or creates cultural forms, provides a "way to see the world", thus affecting the way the recipient can "see the world". The basis of this system is the potential of human marking (Kukkonen, Stocchetti, 2011). The ability to capture large amounts of visual information also explains why a person so much trusts visually received information (Tufte, 1997). Visual information is perceived by the eye but processed by the brain. There are three ways in which the human brain processes visual messages: mentally, directly, and through mediation. The handling of mental imagery refers to experiences in the mind such as thoughts, dreams, and fantasies. Direct visual information is what a person sees without intermediary intervention, while mediation relates mostly to visual information provided through the media: television, the press, the computer, and other platforms (Lester, 2006).

The media is a channel that is located between the sender and the recipient, and depending on their ability and visual code reading skills, it plays an important role in reaching the recipient. "A message may be a technical editor of a newspaper or television channel, the creative director of an advertising agency, or an artist responsible for creating visual design at the customer's request" (Lester, 2006). The book also states that most messengers do not have free and independent roles, as they are service providers, intermediaries between the employer and the purpose of the message. All the elements involved - the sender, channel and addressee looks at visual communication from three different perspectives. The sender works in accordance with the intent perspective, where the main points are analysis, purpose and a message, the channel forms a proximity perspective that includes text, images, and context, or interplay between words and visual images, while the recipient responds from a perceptual perspective, which includes perception, sensation, and interpretation (Lester, 2006). This paper looks on press as a communication tool to reach an audience.

Regional newspapers' role in sociocultural space

The printed press vary according to the structure, content, and journalistic tendencies, as well as geographical categories – local, regional, national, international. This is a category of mass media, which, however, despite the diverse range of mass communication tools and technologies nowadays, forms the local informative space and is able to address and interest the audience. Researcher James de Vries suggests to look on newspaper design as a process of cultural change that goes beyond the usual methods of designing a newspaper (De Vries, 2008). The authors' conclusion is highlighted as a main hypothesis – based on it, the analysis of a newspaper design is structured. The newspaper design is described as a part of culture and social processes.

Newspapers, like many social processes, have inherently spread themselves into the media space. The media space can be interpreted as a specific reality that cannot be fully visualized, but it organizes agent practices and representations that produce and consume media through the media, which in turn creates an objective and physical basis for the media space. According to Nichlas Luhmann, a media researcher, the concept of media includes all public institutions that use technical means to disseminate

reports. First of all, the author refers to books, magazines, newspapers produced using printers, electronic means etc., the mass production of which is created for mass communication, not for a specific recipient. Secondly, radio and television are also considered within this concept, unless the report is public rather than used for individual telephone communication (Luhmann 2000). A specific medium is related to the location, which is first expressed geographically. Therefore, mass communication processes are described in terms of space, for example, by referring to specific media markets, sales, marketing, audience, etc. Therefore, the media and space are inseparable elements that include the inclusion of different approaches (both humanitarian and social) in media research. There is a continuous interaction between the media and the public: there is no simple causal oneway relationship between the media as a technology or cultural content and the public; the results of this relationship are varied, unpredictable, dependent on different circumstances. Thus, the media space is at the same time a cultural and social system.

The media social theory (Thompson, 1995) states that the media have a significant impact on the social space. "The use of the media creates new forms and contacts of the social world, new forms of social relations with others. By means of communication technologies. communication is changed, they provide the opportunity to communicate and act without physical presence" (Thompson, 1995). Therefore, their most significant feature is the spatial and temporal transformation of social life, which is represented by a variety of media use and opportunities because "mass communication is regarded as a social and cultural phenomenon" (McQuail, 2010). This means that the media in the social sphere combine not only the function of reflection of reality but also become part of publicly important structures, for example, the technological infrastructure is connected with economic development possibilities. However, common ideas, images and information have an impact on the cultural-social space. They both form and themselves are part of the culture. The cultural system plays an important role in mass communication, as it promotes the development of the social system. Cultural artefacts become a potential source of modification of the social system. Therefore, the information provided through the mass media, however unexpected it would not be, reflects the processes in the highest social space. The media space becomes the mainstay of the ruling elite. This means that the media space is simultaneously characterized by cultural and social factors. In this respect, local media as creators of regional communication is an important element of interpreting the local cultural environment. Taking into account German communication scientist and psychologist Gerhard Maletzke's message on the importance of a wider social and cultural environment in communication research (Fawkes, 2007), it is also essential in the practice of local media to consider them as a specific addresser, for example, as part of the cultural industry or as representatives of ruling power ideas that reveal the interaction and the relationship between capital, technology, culture, and everyday life, in which media development takes place in the local area.

The local newspapers as a part of mass-market product do not look for an answer to the question who I am, they rather offer ready-made prototypes, images and objects that make readers to identify themselves. Local newspapers allow an individual to learn about the area and the state, learn social norms and culture, thus becoming members of a particular environment and territory. The media researchers Inta Brikše and Vita Zelče emphasize that the local newspapers are a component of cultural identity. "The idea of our small newspaper describes the community in question" (Brikše, Zelče, 2006). The locals who are often not involved in the daily routine of one or another are in the same communicative space to share events, problems, victories, entertainment, discussions, etc. They are much more involved in the community life, thus also consuming more local media.

Methodology

In order to obtain the most accurate data for the period from 1998 to 2017, the newspapers "Rēzeknes Vēstis", "Vaduguns", and "Latgales Laiks" were studied in the context of three periods of time: 1998, 2008, and 2017. The selection of each period is justified by important cultural and social processes in the society.

During the study, the content analysis of the elements of the newspaper and its front page was carried out according to the quantitative and qualitative categories. The categories of analysis were developed based on the interaction of newspapers' visual communication and design with content.

The technical design was examined in the context of the entire newspaper in the following categories:

- the number of pages allows you to set, depending on the period of time, how the thickness of a newspaper has changed;
- the number of coloured pages allows you to determine when coloured print is used more often and what kind of content is being placed on it.

The editorial and system design, elements of visual communication are considered in the context of the front page in the following categories:

 the number of pictures – it lists the number of pictures on the front page, excluding the pictures used for supplementing articles (for example, "On this edition");

- the number of news it lists the number of news, including weather reports, as well as explores the elements of visual communication with which news are separated and highlighted;
- the number of the main news it lists the main news and explores which elements of visual communication highlight them on the background of other news;
- the position of logos the logo placement on the front page is recorded:
- the number of advertisements it lists the number of advertisements on the front page, including self-promotion and explores the elements of visual communication that highlight and separate advertisements;
- the number of congratulations and columns it lists the number of congratulations and special columns and explores the elements of visual communication that highlight and separate congratulations and columns:
- the number of notifications it lists short notifications about important topicalities and explores the elements of visual communication that highlight and separate notifications;
- eye-catching elements, regular columns it lists and records specially created eye-catching elements and columns specific to a particular newspaper, as well as explores the elements of visual communication that highlight and separate the information.

The influence of cultural and social factors on the design of newspapers

"Latgales Laiks", "Vaduguns" and "Rēzeknes Vēstis"

In 1998, the 7th Saeima elections were held, so political news and paid advertisements played a major role in all the afore mentioned media. In general, advertising focused on private entrepreneurship. The 1990s was a time when new vehicles that were produced abroad came to Latvia, as a result of which the car repair business also flourished, and advertisements for tire change and other services appeared in newspapers. Similarly, new types of business and services, such as the installation of PVC windows, came in, and money was spent in order to attract the attention of society and display advertisements on the first pages.

In the 1990s, especially at the end of the decade, both the typography developed and new technological solutions in the field of photography emerged that required the media to adapt. The television's offer was getting wider – the news format became freer, entertaining and informative broadcasts with colourful and high-quality image appeared. Radio also

became more accessible; the flow of information accelerated. Due to these changes, new solutions had to be sought for newspapers. The national newspapers such as "Diena", "Neatkarīgā Rīta Avīze" and others increasingly use colourful content, information provided by foreign news agencies and photographs. It makes the regional media review their design and content.

The content of informative character occupies the most part of a front page of all of the studied regional media: news, notifications, brief information, etc. In the field of design, all newspapers focus on editorial design techniques that promote the ability to understand the content of the publications, successfully applying them to the development of design. The newspapers "Latgales Laiks" and "Vaduguns" highlight the main news in almost every issue, which are supplemented with one or several photos, while the approach of "Rēzeknes Vēstis" is different – they put as much text as possible on the front page, trying to distribute it with frames and different backgrounds. A common feature of editorial design for all the newspapers is the use of backgrounds, headlines and frames to separate news one from another. Each newspaper has special columns that appear on the front page. The front page of "Latgales Laiks" and "Vaduguns" displays one of the main topics, thus attracting the reader's attention, while the front page of "Rēzeknes Vēstis" in 1998 covers mostly brief news, notifications and columns "Hallo! RV listens!", Church news, and posters.

In 1998, coloured pages began to appear on all the studied newspapers. It can be attributed to the development of technical design. Colourful printing was expensive in 1998, so advertisements were the ones more often printed in colours, which made them also more expensive; not only regional but also national events such as the celebration of the anniversary of the proclamation of the Independence of the Republic of Latvia, approaching of the New Year, and other events were highlighted.

1998 was the election year, the 21st century was coming, which was projected to be the time of the rapid development of technology, and Latvia was still on the verge of development after the restoration of independence, therefore it was self-evident that regional newspapers placed emphasis on national and regional information that also became apparent in design. The main news covered the topicalities of the region or the state and included pictures of inhabitants, politicians and famous people.

In 2008, the news portals have already stabilized in the information space and social networks were developing. Regional newspapers also set up their official portals, adapting to the rapid flow of information, and the links to Internet portals appeared in the contents of all regional newspapers. From 2007 to 2010, a global crisis triggered the economic recession in most of the world's countries (Delfi, 2013) that led to the financial and governance crisis in Latvia. Until the financial crisis, Latvia experienced so-called "Fat-Cat

Cycle" from 2006 to 2008, which marked the rapid economic growth of the country. During this period, new companies were actively founded that tried to attract customers actively; it can also be found in the regional newspapers. The companies of different fields were willing to pay large-format coloured advertisements on the front page, thus providing additional revenue for the regional media. 2008 was the first year of crisis, and ways to keep and attract the new customers were sought. Therefore, the interaction between entrepreneurs and the newspapers was an important source of profit and attraction of clients both for newspaper publishers and businesses.

In 2008, Latvia was a member of the European Union, and many of the topicalities of the national importance were also addressed in a global context, linking to the events in the world and in Europe. Television channels from all over the world were available, both radio and television were beginning to integrate their content on the Internet, Internet news portals began to use different audiovisual solutions for the content creation, as well as technologies that allowed visually capturing and transmitting information at a very high speed, which was why newspapers had to search for the new solutions again. As a result of the technological advancement in the world, the print media in Latvia increasingly used image processing and graphic pictures that allowed the message to be transmitted visually without text. It was increasingly difficult for the regional newspapers to hold readers, but they still held an important area in the region's informational space.

If the emphasis was on the editorial design in 1998, then efforts were made to adapt the technical design to the 21st century in 2008. All newspapers included coloured pages in their design on the regular basis, and usually there were several of them: the first and the last, or the first, last and centre spread. In 2008, the content of colourful pages less often focused on a special event; it was dedicated to the paid information: advertisements, announcements, and congratulations. This was an opportunity to get more profit, as the information placed on colourful pages was more expensive. The newspapers also used the opportunity to display the most important information on colourful pages, thus attracting the readers' attention to the content. Frames or titles were used less frequently in visual communication; colour elements were applied instead.

The newspapers "Latgales Laiks" and "Vaduguns" have not changed the way of editorial and system design in 2008, while "Rēzeknes Vēstis" has more adapted to the traditional style of the national and regional press, when the main picture is highlighted and photographs are used on the first page to complement the content and draw the reader's attention to a specific topic. Frames are used rarely, and all special columns are not so often placed on the front page. These changes are both editorial design techniques and systems because the way of organizing work and communicating with society is reviewed. The newspaper published a new logo in 2008, thus it can be concluded that the publishers of "Rēzeknes Vēstis" were considering design changes, but they were not ready to abandon the principle that the text occupied most of the front page. In general, between 1998 and 2008, the regional newspapers have paid more attention to design than during the rest of the periods, and new ways for addressing a reader and sending a message visually were sought.

In 2017, the media have evolved beyond the usual platforms: Internet TV, Internet radio, video blogs, etc. Most municipalities used the opportunity to set up their free informative publications that were similar to the newspapers. There was a risk that people, who were not fundamentally concerned with a particular regional newspaper, chose to receive a newspaper for free without going deep into the political behind-the-scenes. The newspapers were increasingly losing influence, which also resulted in lower revenue and decreasing tendency to place advertisements in them.

In 2017, as in 2008, the biggest changes in the newspapers were found in technical design, but this time this was due to financial possibilities, rather than the desire to adapt to current media trends. The number of pages has decreased significantly in all the reviewed newspapers, with the exception of "Rēzeknes Vēstis", and there were issues with colourful content less often. At a time when the society's information obtaining habits have changed and attention was paid to visual communication, design and its interaction with the content, newspapers were forced to come out to a lesser extent and in black and white, which reduced their ability to compete with national media, social networks and regional Internet resources. There is a debate all over the world about whether there is a future for the print press; the largest and most influential newspapers in the world (Greenslade, 2017) are provided as examples. Unusual solutions in the newspaper design are mentioned as one of the solutions. The newspapers abandon the printed format, focusing on the Internet platforms, but the design of regional newspapers has not undergone significant changes since 1998, preserving the principle that the text covers most of the front page, despite the fact that there is a trend to reduce the amount of text by replacing it with images on the front page between 1998 and 2008. The trend continues until 2017, but it is not so visible for the changes to be seen in the overall image of newspapers. The creators of newspapers stuck to the loyalty and recognition of the readership of the past, but it is not enough to increase or even maintain the number of readers at the current level in the 21st century.

Latvia celebrates a centenary of the state's existence in 2018, hence the topics of statehood are increasingly highlighted in the newspapers' design, and a special column is created in the newspaper "Vaduguns". On the front page, each issue has a graphic design with a count-down to the centenary's

celebration. Although this technique does not provide substantive information, it visually complements the design of the newspaper and, if necessary, helps to separate the text blocks. Comparing the reviewed newspapers, only "Vaduguns" has used graphic images created by designers, not photos on the front page since 1998. This is the original way of explaining or visually dividing information.

One common trend that is characteristic to other media is the reduction of content on the front page. "Rēzeknes Vēstis" has significantly reduced the number of columns and brief news in 2017, but original design solutions and ways how to draw the readers' attention that return the desire to buy a newspaper and publish an advertisement in it still are not searched for.

The regional newspapers still perceive the design as a decorative supplement to the content and do not recognize the fundamental role of design, where everything that is visual - paper, font, use of images, etc. contains meaning and message. It is a particularly difficult task to convince newspapers because it means the change of the usual culture, where the words play the most important role.

Conclusions and suggestions

During the period from 1998 to 2008, there were changes in the design of the newspapers that took place under the influence of cultural and social factors: higher-quality photographs, colourful content, original design solutions, official websites of newspapers, etc. The changes are found in all three of design disciplines, while the detected newspaper design changes in the period from 2008 to 2017 have not affected the overall visual image of the newspapers, and it can be concluded that the regional newspapers lags behind social and cultural processes taking place in the community.

One of the major problems is the insufficient or non-systematic use of the key elements of visual communication to separate information blocks, creating a transparent and easy-to-understand design. The designers of local newspapers do not use technological and graphical solutions to make information visually more binding.

In 1998, editorial discipline for design was used the most, searching for solutions how to make the content more transparent by applying various elements of visual communication. In 2008, the emphasis was placed on the technical discipline because the volume of newspapers and the number of colourful pages had increased. The design changes that was found in 2017 had not changed the overall image of newspapers.

At the end of the 20th century and at the beginning of the 21st century, regional newspapers were among the most important sources of information; however, the technological progress and the newspapers of local municipalities created competition resulting in decrease in the number of readers. An important role in creating the media today is esign, which should be easily visible, laconic, and technologically advanced, yet in discussions about future and the viability of regional newspapers of Latvia, the aspect of visual communication and design is rarely mentioned, while leading media in the world and in Latvia as well, as one of the solutions to the problem, mention changes in the design, abandoning the principles upon which newspapers have been created up to now.

References

- BRIKŠE, I., ZELČE, V. (2006). Reconfiguration of place and space: A case study 1. related to coverage of regional reforms in Latvia. In Ozolil'a, T. (red., 2006), Expanding Borders: Communities and Identities. Proceedings of the International Conference. Riga, November 9–11, 2005. Rīga: LU Akadēmiskais apgāds, pp. 77–92.
- DE VRIES, J. (2008). *Newspaper design as cultural change*. Visual Communication. 2. SAGE Publications. pp. 5-25.
- DELFI (2013). Ekonomikas katastrofas: pēdējās simtgades smagākās krīzes. 3. Retrieved April 20, 2018 from http://www.delfi.lv/bizness/pasaule/ekonomikaskatastrofas-pedejas-simtgades-smagakas-krizes.d?id=43317657&page=8
- 4. GREENSLADE, R. (2017). Popular newspapers suffer greater circulation falls than qualities. Retrieved April 20, 2018 from https://www.theguardian.com/media/ greenslade/2017/jan/19/popular-newspapers-suffer-greater-circulation-fallsthan-qualities
- [AMESON, G.H. (2007). Visual Communication: More than Meets the Eye. Bristol: 5. Intellect Books, p.132.
- KUKKONEN, K., STOCCHETTI M. (2011). Images in Use: Towards the Critical Analysis 6. of Visual Communication. Amsterdam: John Benjamins Publishing Company, p.304.
- LESTER, P.M. (2006). Visual Communication: Images with Messages. Belmont, CA: 7. Thomson Wadsworth, p.448.
- LUHMANN, N. (2000). *The reality of the mass media*. Cambridge: Polity Press, p. 160. 8.
- MCOUAIL, D. (2010). *McOuail's Mass Communication Theory*. London: Sage, p. 632. 9.
- POZNAKOVS, K. (2018). Latgales reģiona laikrakstu dizaina attīstības tendences no 10. 1998. līdz 2017. gadam. Maģistra darbs. Rēzeknes Tehnoloģiju akadēmija: Rēzekne, p.76.
- RIMŠĀNE, D. (2003). Sieviešu un vīriešu žurnālu grafiskā dizaina attīstības 11. tendences: Žurnāli "Santa" un "Klubs". Brikše I. (ed., 2003). Komunikācija. Rīga: Latvijas Universitāte, 143-164.lpp.
- 12. THOMPSON, J. (1995). The media and modernity: A social theory of media. Cambridge: Polity Press, p.328.
- TUFTE, E.R. (1990). *Envisioning Information*. Cheshire: Graphics Press LLC., p.126. 13.
- TUFTE, E.R. (1997). Visual Explanations. Images and Quantities, Evidence and Narrative. Cheshire: Graphics Press LLC., p.156.

ASSESSMENT OF INCOME TAXATION OF PERFORMERS OF ECONOMIC ACTIVITIES

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Abstract. In the changing economic situation of nowadays, flexible forms of employment become more popular, and a performer of economic activities is one of them. They have to face the inconstant tax policy of Latvia, be able to choose a payment regime from earned income, which is most suitable for them. The authors believe it is worthwhile to find out the opinions of performers of economics activities and to assess tax liabilities, which is an important requirement for the planning and development of their activities. The goal of the research is to assess the taxable income regimes for performers of economic activities in Latvia and to find out their opinion on their satisfaction with the tax policy. The approaches of the research are: the monographic and descriptive methods, document analysis, logically construction, statistical analysis, and a sociological research method – a pilot survey. The research resulted in the assessment of taxable income regimes and their application in various situations. By conducting the pilot survey, it has been discovered that performers of economics activities find it difficult to understand standard regulations and accounting management; they lack comprehension of the importance of SSIMC and its advantage for the future. The calculations made by the authors show the amounts of the tax burden formed with each tax payment regime.

Keywords: *income; microenterprise tax; personal income tax; patent fee; self-employed; state social insurance mandatory contributions.*

IEL code: H21; H24; H25; M10

Introduction

In the changing economic situation of nowadays flexible forms of employment become more popular among employers and employees, and one of them is to register as a performer of economic activities. It provides individuals with more freedom of action and personal independence, as well as with the possibility to get some additional income doing full time work or part time work along with the main work. As per the Latvian statistics, the quantity of self-employed individuals tends to increase every year; in the time period from 2003 to 2016 the quantity increased by 27.2% points and amounted to 33.8% of all economically active units in Latvia in 2016 (Centrālā statistikas pārvalde, 2018).

Performers of economic activities have to face the inconstant tax policy of Latvia, be able to follow the changes in the tax legislation and choose a payment regime from earned income, which can often cause difficulties.

The research studies made in other countries show that tax rates have an essential influence on the decision to start self-employment (Bhat, 2017), it is possible to hide one's real income if there is a lack of standard regulation (Finardi & Bayer, 2016), and the differences in salary and self-employment income taxation make an essential influence on becoming self-employed (Bruce, 2000).

The research is currently important, as the government of Latvia does not really understand itself how to support and benefit performers of economic activities to develop their work, and frequent amendments to the tax legislation prove it. Therefore, the authors believe it is worthwhile to find out the opinions of performers of economics activities and to assess tax liabilities, which is an important requirement for planning and development of their activities.

The goal of the research is to assess the taxable income regimes for performers of economic activities in Latvia and to find out their opinions on their satisfaction with the tax policy.

The tasks of the research:

- 1) to assess the income taxation regimes for performers of economic activities in Latvia;
- 2) to evaluate the satisfaction of performers of economic activities with the tax policy in Latvia;
- 3) to make a comparison of the tax payment regimes for performers of economic activities.

The approaches of the research are: the monographic and descriptive methods, document analysis, logically construction, statistical analysis (grouping of data, relative ratio), a sociological research method – a pilot survey of performers of economic activities). The analysis tools of Microsoft Excel were used for data processing.

The research was done based on the analysis of scientific publications and the standard regulations of the tax legislation, the data of the Central Statistical Bureau and the State Revenue Service, as well as the evaluation of the questionnaires of the conducted survey.

Definition of a performer of economic activities and income taxation regimes in Latvia

The terminology used in Latvia regarding the economic activity of a natural person is not similar to as they use the definitions "performer of economic activities" and "self-employed". In accordance with the tax legislation, a performer of economic activity is a person who is registered with the State Revenue Service (SRS) and whose work is focused on producing goods, performing work, trading and providing services for

revenue (On Personal Income Tax, 1993). Conversely, the term "selfemployed" is defined by the State Social Insurance Law and is legally used if a natural person is also registered as a mandatory social insurance payment maker to perform economic activities. (Par valsts sociālo apdrošināšanu, 1997).

The term "self-employed" is used in foreign scientists' research papers and statistical editions. In the editions of the Central Statistical Bureau of Latvia, a self-employed person is considered to be a person who performs his or her own business activity, professional practice or agricultural activity in order to earn revenue or benefits, and, in addition, does not employ other workers. (Centrālā statistikas pārvalde, 2014). It is also explained in the EU statistics that self-employed persons are those who do not have a paid job as a primary activity, otherwise they are employed. (Eurostat, 2018). In the Merriam-Webster's dictionary, a self-employed person is the one who gets revenue directly from his or her business activity, trading or profession, rather than gets a salary from an employer. (Merriam-Webster, 2018).

Leibus (Leibus, 2008) and Parker in their research studies have been studying (Parker, 2018) the problem of a separate classification of a person who performs an economic activity for tax needs or other needs. The authors believe it is necessary to match the usage of terms in the tax legislation and statistics to make the information comparable.

A performer of economic activities is allowed to manage accounting in a single - entry system. A performer of economic activities can manage accounting on his or her own or use the services of others in accordance with a signed accounting service contract. (Sidraba, 2009).

Performers of economic activities can choose one of the tax payment regimes while registering their activity. The following tax payment regimes are offered in Latvia:

- personal income tax (PIT) and state social insurance mandatory 1) contributions (SSIMC);
- 2) microenterprise tax (MET);
- 3) patent fee.

PIT and SSIMC are paid by the performers of economic activities who did not apply for any other tax payment regimes at the moment of registration.

A progressive rate of 20% per year for income up to EUR 20004, 23% per year for income more than EUR 20004, and 31.4% per year for income more than EUR 55000 has been introduced for the personal income tax in 2018 (On Personal Income Tax, 1993).

The difference between the revenue and expenses or the income of a performer of economic activities is taxed with a personal income tax. From the year 2018, January 1, only 80% of revenue can be deducted as expenses. Fixed assets expenses, taxes paid for employees and for oneself can be adjusted in the full amount. (Bērziṇa, 2017). The approach of expenses readjustment in respect with self-employed revenue has a significant impact on the tax base level; therefore, it is worthwhile to set fixed expenses regardless of revenue (Grasgruber et al., 2017).

By calculating the personal income tax for a taxation year, it is possible to adjust the verified non-taxable income, tax relief and justified expenses. The tax reform benefited those with less income, since from 2018 the non-taxable minimum amount for monthly income up to EUR 440 is EUR 200, relief for dependent persons increased to EUR 200. However, if personal gross income exceeds EUR 1000 per month, the non-taxable minimum amount is not applied, therefore, a larger personal income tax amount is paid and persons do not feel the changes of the reform. The same way the eligible expenses for education and medical services increased to EUR 600 per year, however, it cannot exceed 50% of the yearly taxed income of a person.

When a performer of economic activities has reached the amount of income which exceeds the minimal monthly wage or salary defined in the state, this person starts paying **state social insurance mandatory contributions** from a freely selected amount of the object of contributions, which in 2018 is not less than EUR 430 (Noteikumi par valsts .., 2013) and the performer of economic activities is considered a self-employed person in the understanding of the State Social Insurance Law.

In 2018, the SSIMC rate for self-employed persons in the general case is 32.15%, which is 1.02% points more than it was in 2017. The mandatory pension insurance in the amount of 5% of the difference between a freely selected amount of the object of mandatory contributions and actual income has been introduced in 2018 to protect the interests of a performer of economic activities and ensure receiving a state pension (State Revenue Service of Latvia, 2018). In the authors' opinion, it essentially increases the tax burden, since the SSIMC rate for a self-employed person is 2.9% points higher than it is for an employee.

Because of the mandatory 5% pension insurance introduction, the number of SSIMC payers in the $1^{\rm st}$ quarter of 2018 has increased by 84.4% points in comparison with 2017, however, it approximately amounts to 17% of the overall number of performers of economic activities. (Valsts ieṇēmumu dienests, 2018). Leibus and the others have studied this problem, pointing out that in Lithuania all self-employed persons participate in the state social insurance system and suggesting to reduce the income from which SSIMC have to be paid. (Leibus et al., 2016).

Performers of economic activities have the right to choose paying **microenterprise tax,** which taxes the turnover or income of a performer of economic activities that from 2018 cannot exceed EUR 40000. The tax rate

was also increased up to 15% in 2018. The paid MET is divided between the state social insurance mandatory contributions – 80%, and the personal income tax – 20% (Mikrouzņēmuma nodokļa likums, 2010). It is essential that a tax payer of a microenterprise, like an employer, cannot apply the non-taxable minimum amount and relief for dependent persons.

We must agree that the microenterprise taxation regime only partly executes its primary goal – to reduce the shadow economy and promote taking up entrepreneurship. It is often used to optimize taxes and gain maximum profit in a short-term, as well to encourage fake employment expansion, especially in private construction (SIA "Baltijas Konsultācijas"& SIA "Konsorts", 2018). Leibus in her research also indicates that choosing the microenterprise tax is connected with the reduction of taxes and labour expenses, not with the simplification of tax calculation. (Leibus, 2012).

It should be noted that the microenterprise tax is not very popular among performers of economic activities, as in the 4th quarter of 2017 it was paid by 16094 people or 13.1% of all registered performers of economic activities (Valsts ienēmumu dienests, 2018).

In January 1, 2010, the **patent fee** was introduced in order to ease administrative and accounting procedures for the performers of economic activities who start a business activity with moderate expenses, and to create an opportunity to develop acquired skills and knowledge in professional activities. It can be paid as a fixed contribution if working in specific professions or kinds of economic activities and if the income does not exceed EUR 15000 per year.

The amount of the patent fee in 2018 is EUR 100 for those performers of economic activities who work in Riga municipality and EUR 50 in the rest of municipalities (Kārtība, kādā piemērojama patentmaksa.., 2018). Patent fee payers are socially insured against disability and have pension insurance, for which they allocate 67% of the paid contribution. A patent fee payer lists only the business activity income and does not have to submit the PIT annual income declaration; therefore, there is no right to apply for the non-taxable minimum, relief and eligible expenses.

We have to agree with Medne and Mende-Jekabsone's opinion that in spite of the limit of the kinds of business activities, patent fee payers benefit from easier business activity accounting and tax payment, however, this personal income tax rate is used by a narrow group of entrepreneurs. (Medne & Medne-Jēkabsone, 2015). In January 2017, 2779 patent fee payers were registered with the State Revenue Service (Dārziṇa, 2017), which amounts to approximately 2% of registered performers of economic activities. It also should be added that analysing the total number of the patent fee paid months of each person (from January 1, 2010 to June 30,

2016), it is possible to conclude that the majority of the patent fee payers paid only for one month (Informatīvais ziņojums.., 2016).

Assessment of satisfaction of performers of economic activities with the tax policy in Latvia

In terms of the survey conducted by the authors, it was necessary to find out the opinions of performers of economic activities on their satisfaction with the tax payment regimes in Latvia, as well as of the State Revenue Service work and the amendments to the tax law in 2018; therefore, the pilot survey was conducted. The questionnaire of the survey was distributed across the social networks Facebook.com and draugiem.lv. The survey took place in the time period from January to March 2018. The response from performers of economic activities was not high, as only 51 questionnaires were filled in.

The majority of the inquired performers of economic activities were in the age range of 36-45 years – 21 persons (41%), 17 persons (33%) – in the age range of 26-35 years. It can be explained by the fact that those persons have got education and want to combine the work of their interest with gaining income; therefore it is important to choose the right field of activity (Figure 1).

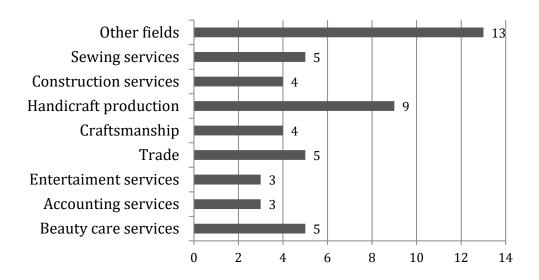


Fig. 1 Primary field of activity of the inquired performers of economic activities (Source: compiled by the authors)

Most of the inquired performers of economic activities, 17 persons, offered various kind of services, 13 persons worked as craftsmen and handicraftsmen, and 13 persons worked in some other fields of activities, for example, indoor cleaning, babysitting, translating, advertising services, etc.

A third of the inquired persons did the amount of work that was equal to full-time work; 1/3 considered it additional work for getting income and 1/3 performed contract work, or worked part-time.

Employers prefered their workers being registered as performers of economic activities to reduce labour expenses; employers also prefered having collective agreements with self-employed persons (Leibus, Vitola, 2007). This way a fake self-employment problem is created, benefiting employers rather than the self-employed. In another survey, 4% of the inquired stated that it was the initiative of their employer. ("Baltijas Konsultācijas" Ltd. & "Konsorts" Ltd., 2018). USA researchers (Dawson et al., 2009) state that a profession, lifestyle, more flexible working hours, additional income, alternative to employment, etc. can be a motivation to take up economic activities. In this survey, 92% of the persons replied that they registered as performers of economic activities because of their own initiative to earn additional income; however, the rest mentioned other reasons, which could be initiated by an employer as well.

The tax policy adjustments complicate the accounting work for performers of economic activities; however, 67% of the inquired persons manage accounting on their own, and the others partly of fully use accounting services.

As it was previously described by the authors, performers of economic activities have the right to choose one of the three tax payment regimes: PIT and SSIMC or MET or patent fee. Of the inquired persons, 75% chose to pay PIT and SSIMC, 18% paid MET and 7% chose to pay the patent fee. As the reasons of their choice, the persons mentioned that the relevant tax payment regime was advised by the staff of the State Revenue Service; or they chose the most familiar one to them due to the lack of information, which was PIT and SSIMC. The performers of economic activities who chose this tax payment regime had larger expenses during their activity, reducing the payable part of PIT and SSIMC. The persons who chose paying the microenterprise tax stated that they had to pay a moderate tax amount and the tax declaration was understandable.

As a disadvantage of the chosen tax payment regime, the payers of the microenterprise tax mentioned a small contribution to social insurance; on the contrary, the payers of PIT and SSIMC marked as disadvantages frequent changes in the tax policy and the high SSIMC rate, which performers of economic activities bore fully on their own, in comparison with employers who had to pay only 11% of their revenue part; as well as the fact that from 2018 performers of economic activities can deduct only 80% of their income as expenses. Therefore, it became more complicated for performers of economic activities to manage their accounting and prepare reports.

As it is known, the mandatory pension insurance (OPI) of 5% was introduced in 2018 for performers of economic activities; 55% of the inquired persons evaluated it in a negative way, as it increased the tax burden. A part of the inquired did not consider these contributions worthwhile since they saw no guarantee these contributions would be profitable in the future. It is mentioned in another research studies as well that the self-employed lack the understanding of the importance of mandatory contributions; there is a desire to gain more today without thinking about the future. In addition, the situation gets worse because the society in general does not believe in responsible tax collection, its usage and the pension system (SIA "Baltijas Konsultācijas" & SIA "Konsorts", 2018; Leibus, 2008).

A question about the responsibilities of performers of economic activities was also included in the survey questionnaire for the purpose of finding out which causes more difficulties. (Figure 2).

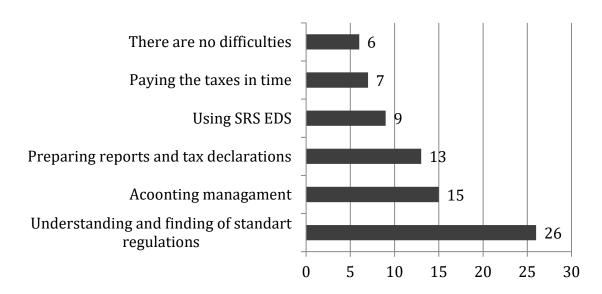


Fig. 2 Replies of the inquired persons to the question "Which responsibilities of performers of economic activities do you find most difficult?" (Source: compiled by the authors)

Most often, the difficulties were caused by understanding and finding some necessary standard regulations (34%), followed by accounting management (20%) and preparing reports and tax declarations (17%). The results of the survey show that accounting management and tax calculation caused difficulties to performers of economic activities since legislation changed every year, therefore it was hard to track whether the information published by the State Revenue Service was full enough. The surveys from the researches of other authors also show that self-employed persons, as the main issues, mentioned the changing tax policy of Latvia, the complexity of

tax legal regulation and difficulties to understand it, as well as a mild bureaucracy level of the tax administration and accounting (SIA "Baltijas Konsultācijas" & SIA "Konsorts", 2018; Leibus, 2008).

The performers of economic activities also evaluated their collaboration with the State Revenue Service staff. The results of the survey show that 16% of the inquired persons were satisfied with their kindness and tax related competence; 33% were partly satisfied, and 39% were dissatisfied or partly dissatisfied. As the reasons, the persons mentioned that the staff often could not give answers to the questions of interest or offered formal answers, naming law articles only. This means the State Revenue Service staff may be incompetent in the questions that are important particularly to performers of economic activities in such topics as accounting, legislation, tax calculation and other related questions.

Comparison of the tax payment regimes for performers of economic activities

The authors made some calculations setting the amount of the tax burden for various amounts of income in 2018 to evaluate which of the tax payment regimes is more profitable for performers of economic activities (Table 1). Let's say, the registered economic activity field of a performer of economic activities is a beauty care service - a nail care specialist in Riga municipality. Three situations will be applied to the tax calculation:

- EUR 200 revenue, EUR 90 expenses per month, does the main job 1) for another employer, the salary tax booklet is submitted there;
- 2) EUR 500 revenue, EUR 200 expenses per month, works full-time, the salary tax booklet is not submitted to another workplace;
- EUR 1200 revenue, EUR 420 expenses per month, works full-time; 3) the salary tax booklet is not submitted to another workplace. Pays SSIMC from the state fixed minimum monthly wage.

Table 1 Comparison of the tax amounts of performers of economic activities in 2018 (EUR) (Source: compiled by the authors)

Index	General regime			Microenterprise tax regime		Patent fee regime			
	1.	2.	3.	1.	2.	3.	1.	2.	3.
Revenue	2400	6000	14400	2400	6000	14400	2400	6000	14400
Expenses	1080	2400	5040	-	-	-	-	-	-
Income	1320	3600	9360	-	-	-	-	-	

Non-taxable minimum amount	-	2400.00	942.87	-	-	-			
SSIMC	-	-	1659.00	-	-		-	-	
OPI 5%	63.50	180.00	210.00	-	-		-	-	
PIT	251.30	204.00	1309.63	-	ı		-	-	
MET	-	-	-	360	900	2160	-	-	
Patent fee	-	-	-	1	1	-	1200	1200	1200
Total tax burden	314.80	384.00	3178.63	360	900	2160	1200	1200	1200

The calculations show that the general tax payment regime is the most profitable for the performers of economic activities with average revenue. (PIT and SSIMC). It is more profitable to choose paying the patent fee, which does not depend on the amount of revenue, only in the case when the revenue exceeds EUR 10000, but is not more than EUR 15000. The same way MET also becomes more profitable when revenue increases, and it is not possible to apply the non-taxable minimum amount to the general tax payment regime. It also should be noted that the tax burden can be decreased by tax relief and eligible expenses by applying the general tax payment regime, which cannot be used by the payers of MET and the patent fee.

Performers of economic activities have to make calculations to be able to predict the payable taxes; it would easier with a tax calculator available on the State Revenue Service homepage.

Conclusions and suggestions

- 1. The definitions "performer of economic activities" and "self-employed" are used in the tax legislation of Latvia, however, the term "self-employed" is used in foreign scientists' research papers and statistics. It is necessary to match these definitions to make the information comparable.
- 2. Performers of economic activities in Latvia have a possibility to choose among three tax payment regimes: PIT and SSIMC, MET and the patent fee. PIT and SSIMC are the most popular, as the other two are chosen only by approximately 15% of all performers of economic activities, which is also proved by the results of the conducted survey.
- 3. Of the inquired performers of economic activities, 55% evaluated the mandatory contributions of 5% for pension insurance in a negative way, which increased the tax burden for average and large income from economic activities; there was also the lack of understanding of the importance of paying contributions and its benefit for the future. It is advised to revise the amount of the SSIMC rate or to cancel the

- mandatory contributions of 5% for pension insurance if the contributions are paid in full amount at least from the minimum amount.
- 4. Changing standard regulations and accounting management cause difficulties to performers of economic activities. Of the inquired persons, 39% were dissatisfied or partly dissatisfied with the advice provided by the staff of the State Revenue Service and with collaboration with them, mentioning that the staff of the State Revenue Service often could not give answers to the questions of interest or offered formal answers. Therefore, the State Revenue Service has to improve their guidance materials and the competence of the staff.
- 5. By making the calculations, it was acknowledged that the PIT and SSIMC tax payment regimes would be more profitable for average income. On the contrary, the situation changes for the income that exceeds the minimum wage set by the state. It also should be noted that the tax burden is decreased by the non-taxable minimum amount, tax relief and eligible expenses by applying the general tax payment regime, which are not used for the payers of MET and the patent fee. Performers of economic activities have to make calculations to be able to predict the payable taxes, and it could be easier with a tax calculator.

References

- 1. BĒRZIŅA, L. (2017). Izmaiņas saimnieciskās darbības veicēju grāmatvedībā. Pieejas veids: http://ifinanses.lv/raksti/pasnodarbinatais/gramatvediba/izmainas-saimnieciskas-darbibas-veiceju-gramatvediba/12452, sk. 07.08.2018.
- 2. BHAT, V.N. (2017). Attitudes toward Tax Evasion and the Choice of Self-Employment. *Applied Behavioral Economics Research and Trends*, pp. 39-53.
- 3. BRUCE, D. (2000). Effects of the United States tax system on transitions into self-employment. *Labour Economics*, vol. 7, iss. 5, pp. 545-574.
- 4. CENTRĀLĀ STATISTIKAS PĀRVALDE (2014). *Pašnodarbinātā persona*. Pieejas veids: http://old.csb.gov.lv/statistikas-temas/termini/pasnodarbinata-persona-39332. html, 07.08.2018.
- 5. CENTRĀLĀ STATISTIKAS PĀRVALDE (2018). *Ekonomiski aktīvi uzņēmumi statistiskajos reģionos, republikas pilsētās un novados.* Pieejas veids: http://data1.csb.gov.lv/pxweb/lv/uzn/uzn_01_skaits/SRG010.px/table/tableVie wLayout1/?rxid=829c0468-3403-4584-9ecd-34da3a3cc12f, sk. 01.08.2018.
- 6. DAWSON, C., HENLEY, A., LATREILLE, P. (2009). Why Do Individuals Choose Self-Employment? *IZA Discussion Paper*, No. 3974. p.42
- 7. DĀRZIŅA, L. (2017). *Patentmaksājums un sociālā apdrošināšana*. Pieejas veids: https://lvportals.lv/skaidrojumi/285012-patentmaksajums-un-sociala-apdrosinasana-2017, sk. 07.08.2018.
- 8. EUROSTAT (2018). *Self-employed*. Retrieved July 30, 2018 from http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Self-employed

- 9. FINARDI, S., BAYER, O. (2016). Remarks upon Estimating the Tax Gap of Individuals in the Czech Republic. *Theoretical and Practical Aspects of Public Finance*, pp. 17-23.
- GRASGRUBER, M. OTAVOVA, M. BELOCHOVA, T. (2017). Impacts of application 10. expenses on self-employment revenues. Enterprise and Competitive Environment, pp. 290-297.
- 11. Informatīvais ziņojums "Par Mikrouzņēmumu nodokļa likuma praktiskās īstenošanas gaitu un rezultātiem, kā arī mazās saimnieciskās darbības veicēju sociālo nodrošinājumu" (2016). Latvijas Republikas Ministru kabinets. Pieejas veids: http://titania.saeima.lv/ELDIS/webpublic.nsf/0/18D3F5D6D052D55BC22580430 0345920/\$FILE/2_2332-12_16.pdf, sk. 27.07.2018.
- Kārtība, kādā piemērojama patentmaksa fiziskās personas saimnieciskajai darbībai noteiktā profesijā, un patentmaksas apmērs (16.01.2018). Latvijas Republikas Ministru kabineta not. Nr.28. Pieeias veids: https://likumi.lv/doc.php?id=296734. sk. 03.08.2018.
- 13. LEIBUS, I. (2008). Individuālās uzņēmējdarbības uzskaites un nodokļu problemātiskie aspekti. Promocijas darba kopsavilkums, 83 lpp.
- LEIBUS, I. (2012). Micro-Enterprise Tax as Means of Promoting Entrepreneurship in Latvia. Science and Studies of Accounting and Finance: Problems and Perspectives, vol. 8, No. 1, pp. 116-120.
- 15. LEIBUS, I., IRMEJA, A., MICEIKIENE, A. (2016). Imperfections of Social Insurance for Self-Employed Persons in Latvia. Economic Science for Rural Development *Conference Proceedings*, iss. 43, pp. 306-314.
- 16. MEDNE, A., MEDNE-JĒKABSONE, S. (2015). Small and Medium-Sized Enterprises in Changing Latvian Tax Environment. XVI Turiba University Conference Towards Smart, Sustainable and Inclusive Europe: Challenges for Future Development, pp.198-206.
- MERRIAM-WEBSTER (2018). Self-employed. Dictionary. Retrieved July 29, 2018 17. from https://www.merriam-webster.com/dictionary/self-employed
- Mikrouzņēmuma nodokļa likums (09.08.2010). LR likums. Pieejas veids: 18. https://likumi.lv/ta/en/en/id/215302, sk. 03.08.2018.
- Noteikumi par valsts sociālās apdrošināšanas obligāto un brīvprātīgo iemaksu objekta 19. minimālo un maksimālo apmēru (17.12.2013). Latvijas Republikas Ministru kabineta not. Nr.1478. Pieejas veids: https://likumi.lv/doc.php?id=263238, sk. 03.08.2018.
- 20. On Personal Income Tax (11.05.1993). Latvian law. Retrieved July 29, 2018 from https://likumi.lv/ta/en/en/id/56880.
- Par valsts sociālo apdrošināšanu (01.10.1997). LR likums. Pieejas veids: 21. https://likumi.lv/doc.php?id=45466, sk. 29.07.2018.
- PARKER, S.C. (2018). The Economics of Entrepreneurship. Second Edition. 22. Cambridge: Cambridge University Press, p. 895.
- KONSULTĀCIJAS", "KONSORTS" (2018). 23. "BALTIJAS SIA Pētīiums "Pašnodarbinātība Latvijā un tiesiskā regulējuma pilnveide pašnodarbināto darba apstākļu uzlabošanai". Pieejas veids: http://petijumi.mk.gov.lv/sites/default/ files/title_file/Valsts_darba_inspekcija_2018_Petijums_Pasnodarbinatiba_Latvija.p df, sk. 07.08.2018.
- SIDRABA, D. (2009). Ko nozīmē būt pašnodarbinātai personai. Pieejas veids: 24. http://ifinanses.lv/raksti/pasnodarbinatais/tiesibas/ko-nozime-butpasnodarbinatai-personai/1168, sk. 07.08.2018.

- 25. STATE REVENUE SERVICE OF LATVIA (2018). Mandatory State Social Insurance Contributions. Tax Rates. Retrieved July 29, 2018 from https://www.vid.gov.lv/ en/node/57216.
- VALSTS IEŅĒMUMU DIENESTS (2018). Pašnodarbināto personu skaits. Pieejas veids: https://www.vid.gov.lv/lv/pasnodarbinato-personu-skaits, sk.07.08.2018.
- VALSTS IEŅĒMUMU DIENESTS (2018). VID reģistrēto nodokļu maksātāju skaits. https://www.vid.gov.lv/lv/statistika/statistika-pasvaldibam/ veids: Pieeias T18000_000000_201712, sk. 07.08.2018.

RISKS AND RISK MANAGEMENT ALTERNATIVES FOR BUILDING CONSTRUCTION INDUSTRY ENTERPRISES IN LATVIA: THE RESULTS OF AN EXPERT SURVEY

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Abstract. In the era of progressive globalisation, risk has become an integral component of entrepreneurship, which makes it necessary for every enterprise to design a risk prevention plan.

The research aim is to assess the expert opinions on risks and risk management alternatives for building construction industry enterprises in Latvia. To achieve the aim, the following specific research tasks are set: 1) to assess the most essential and widespread risks for building construction industry enterprises in Latvia; 2) to identify the most effective risk management alternatives for building construction industry enterprises.

Research methods used: monographic, descriptive, analysis, synthesis, data grouping and a sociological method – a structured expert survey.

The research results showed that almost half of the identified risks for building construction industry enterprises could be prevented by applying the risk mitigation strategy and taking various daily control and internal management measures, thereby investing no additional funds and reducing the consequences caused by the existing risks. A calculation of the average risk severity level by risk group revealed that the most essential risks affecting the building construction industry were those related to human capital.

To reduce the effect of seasonality and the risk of unforeseeable orders, building construction industry enterprises have to diversify their business, developing some auxiliary kind of economic activity. This would ensure earning revenues throughout the year.

Keywords: building construction industry enterprises, Latvia, risks, risk management

alternatives. **Jel code:** *M0*

Introduction

In the era of progressive globalisation, risk has become an integral component of entrepreneurship, which makes it necessary for every enterprise to design a risk prevention plan.

Effective risk management does not mean only preventing the risk, which seems to be the cheapest solution. From the economic perspective, it might seem that risk management is meaningless, as it generates no extra revenue, yet there is not a single economic activity being not associated with the occurrence of some risk. Risk is an integral component of entrepreneurship, and in the event of materialisation of the risk some losses could be suffered. For this reason, any entrepreneur has an opportunity to choose to do risk management and secure themselves against the

materialisation of unforeseeable events or to do the business and hope the risk is not going to materialise.

Even though risk management is not an obligatory activity to be done at an enterprise and some enterprises do not consider a risk assessment and analysis to be necessary, it is often required by other stakeholders – lenders, project evaluators, investors, and others. Besides, funding from the European Union (EU) Structural Funds is available in Latvia, and local governments actively use it to achieve the Europe 2020 strategy's five key targets in the fields of employment, education, innovation, poverty elimination, climate and energy. Therefore, depending on the level of skill of local governments and entrepreneurs to acquire EU funding, enterprises, among them building construction industry enterprises, in Latvia have to meet project developer requirements, among which the identification of the most important risks and risk prevention measures is an obligatory prerequisite, when participating in procurement tenders.

The industry of construction, including building construction, as a whole plays an essential role in the economy of Latvia. As of 1 January 2017 in Latvia, according to the available data of the State Revenue Service (SRS), there were 9100 taxpayers in the building construction industry (VID, 2018). However, the enterprises operating in this industry are subject to various risks, the causes of which are very diverse. Research and technological advancement is persistently progressing. Construction, assembly in particular, depends on weather conditions, the qualification of the workforce and their sense of duty etc., as the construction process is complicated and variable.

Even though the legal framework of the construction industry is voluminous and directly aimed at reducing the probability of occurrence of potential risks, the enterprises operating in this industry still face various problems regarding the quality of the construction work done. For this reason, the identification of potential risks and risk management strategies play an essential role in planning the economic activity of building construction industry enterprises.

The research problem relates to the fact that the construction industry is subject to many and diverse risks, and also the government steps to reduce the occurrence of the risks and the consequences caused by the risks by persistently enhancing the legal framework for this industry.

The **research aim** is to assess the expert opinions on risks and risk management alternatives for building construction industry enterprises in Latvia.

To achieve the aim, the following specific **research tasks** are set:

1. To assess the most essential and widespread risks for building construction industry enterprises in Latvia;

2. To identify the most effective risk management alternatives for building construction industry enterprises.

Research hypothesis: human capital risks are the most significant group of risks for building construction industry enterprises.

Research methods used: monographic, descriptive, analysis, synthesis, data grouping and a sociological method – a structured expert survey.

Expert survey period: 2 April - 7 May 2018.

The research is based on the research papers, studies, expert survey results, and other sources of information.

Research results

There is no single definition of the term "risk" given in research studies, as well as risk classifications and risk management methods are very diverse, yet the unifying element of the risk in the definitions is uncertainly and a possibility to make success or suffer losses.

Risk, risk assessment, risk management methods have been researched by many foreign authors: L. Mandru (Mandru, 2016), G. Bekaert, C. R. Harvey, C.T. Lundblad, S. Siegel (Bekaert et al., 2016), N. Dijk, R. Gallert, K. Rommetveit (Dijk et al., 2016), Y. Haimes (Haimes, 2015), S.C. Kumbhakar, E.G. Tsionas (Kumbhakar, Tsionas, 2008) as well as Latvian researchers: G. Pettere, I. Voronova (Pettere, Voronova, 2003), A. Zvaigzne (Zvaigzne, 2005), and others. There are research studies on the risks present in the construction industry (A.Q. Adaleke, A.J. Bahaudin, A.M. Kamaruddeen (Adaleke et al., 2018), P. Szymański (Szymański, 2017), A. Alhomidan (Alhomidan, 2013), S.S. Timofeeva, D.V. Ulrikh, N.V. Tsvetkun (Timofeeva et al., 2017)).

The authors of the present research have conducted the expert survey with the purpose to assess the risks and potential risk management strategies for building construction industry enterprises. In the survey, seven experts who are closely associated with the building construction industry were involved. Table 1 shows that the selected expert group is versatile, which allows assessing the risks for the building construction industry from various aspects.

Table 1 List of the experts (source: compiled by the authors based on the information provided by the experts)

Expert	Association with the field to be expert-evaluated
E1	The manager of a wooden building construction enterprise, has worked in the
	construction industry for 45 years, has master degree and the qualification of
	a construction engineer, and is certified construction supervisor.

Table 1 continued

E2	A young entrepreneur who has founded a construction enterprise two years
	ago by means of a business incubator, has professional bachelor degree in
	construction engineering and is a certified construction supervisor.
E3	A builder with 2-year experience in Latvia and 11-year experience in Norway
	in the construction industry.
E4	A financial employee at a construction enterprise who has master degree in
	economics.
E5	34-year experience in construction and 23-year experience in the supervision
	of building construction; master degree in construction engineering.
E6	A construction inspector; bachelor degree in construction engineering and
	professional master degree in construction.
E7	A coordinator of local government projects with 5-year experience in design
	and 8- year experience in coordinating local government projects; higher
	education in construction engineering.

In the research, 29 most essential risks present in the construction industry were identified; they are shown in Table 2.

To facilitate further analysis of the risks and make the data easy to perceive, each risk was assigned a code that denotes particular risk in the further analysis.

All the identified risks were divided into eight groups: production risks; human capital risks; natural event risks; logistics risks; political risks; legal risks; financial risks; and management risks.

Table 2 Risk classification for risk assessment in the building construction industry in Latvia (source: compiled by the authors based on the advice given by the experts)

Risk code	Risk characteristics	Risk group
R1	Price hikes on input materials	
R2	Project cost reassessment risk	
R3	Choice of wrong construction technologies	
R4	Obsolete construction machinery and equipment	
R5	Failure to meet the deadline	Production
R6	Non-compliance of input materials with quality standards	risks
R7	Dependence on a few customers	
R8	Emergence of new competitors	
R9	Seasonal demand	
R10	Corruption and bribing	
C1	Emigration of a qualified workforce	
C2	Frequent rotation of employees	Human capital
C3	Low qualification of employees and the lack of experience	risks
C4	Failure to observe work safety requirements	

Table 2 continued

D1	Changing climatic conditions	Natural event	
D2	Natural cataclysms (fires, floods, storms)	risks	
L1	Transport system problems	Logistics risks	
P1	Changes in national foreign trade rules		
P2	Changes in national internal trade rules	Political risks	
P3	Ineffective use of the EU Structural Funds by local	1 Officical FISKS	
1 3	governments		
J1	Amendments to the legal framework for the construction		
	industry	Legal risks	
J2	Professional responsibility burden		
J3	Unskilfully drawn up legal documents		
F1	Credit risk		
F2	Inaccurately planned cash flow and inflation	Financial risks	
F3	Lack of pre-financing	Filialicial FISKS	
F4	Tax rate changes		
V1	Lack of experience in project management	Management	
V2	Poor work organisation and control	risks	

In the opinion of the experts, the materialisation of 15 risks (out of 29 identified ones) is known several months or a year in advance, which gives an opportunity to reduce their effects. Seven of them are construction process-related risks such as the choice of wrong construction technologies (R3) and the failure to meet the deadline (R5), the causes of which could be the lack of experience and errors made by a construction designer. However, an experienced construction designer foresees the occurrence of the risk during the design process and plans extra funds needed in the event of materialisation of the risk. An essential risk for construction industry enterprises is also obsolete construction machinery and equipment (R4), which is known several years in advance, at the moment of purchase of them. To rank the risks assessed by the experts by significance, the research applied the following equation (Pettere, Voronova, 2003):

$$B_k = (B_1 + B_2) * B_3 \tag{1}$$

where

 B_k - score according to the scoring system presented in tables;

B₁- probability of occurrence of the risk;

B₂- risk impact period;

 B_3 - potential losses.

After conducting the expert survey and performing calculations, one can conclude that the most essential risk for building construction industry enterprises was the lack of pre-financing (F3), as the probability of occurrence of it was rated as very high (several times a month), and the

potential loss caused by it is moderate (less than 50% of net turnover). Identifying the amount of potential losses, the experts' opinion was that it was not possible to express that in terms of money. In the event of materialisation of this risk, the enterprise might incur no direct losses, yet it misses the opportunity to increase its net turnover, as it is not able to start new construction projects because of financial considerations.

The risk of failure to observe work safety requirements (C4) is one of the most essential risks in the construction industry. The risk that some worker does not comply with work safety requirements because of irresponsibility or some other considerations might materialise very often, and it is difficult to predict the occurrence of it. The experts did not rate the occurrence of this risk as materialising suddenly. The experts believed that possibilities to make internal warnings were limited, as the management of the enterprise had to be aware of their subordinate employees, their features of character and their attitudes to work, thereby partly predicting the probability of occurrence of this risk.

The third most essential risk for building construction industry enterprises is the risk of ineffective use of the EU Structural Funds by local governments (P3), which directly affects the building construction industry enterprises of a particular municipality.

Even though the risk of non-compliance of input materials with quality standards (R6) is restricted by the legal framework of this industry, this risk is still considered to be one of the most essential risks for this industry enterprises.

The other essential risks – credit risk (F1), project cost reassessment risk (R2), the low qualification of employees and the lack of experience (C3) and the choice of wrong construction technologies (R3) – are internal by origin, and they arise from the internal organisational pattern of building construction industry enterprises. This means that the management effectiveness of building construction industry enterprises strongly affects the frequency of occurrence of internal risks for the enterprise, and it is possible to develop an effective risk management system if identifying all the risks for the enterprise.

The experts did not rate seasonal demand (R9) as an essential risk. This could be explained by the fact that in this industry, in the experts' opinion, enterprise managers perceived it as a self-evident component of this business and did not perceive it as an unexpected event that might cause unexpected losses. The frequency of occurrence of this risk is several times a year, yet the impact period of it is well known, and those employed in this industry can reduce the loss caused by the risk by diversifying their economic activity.

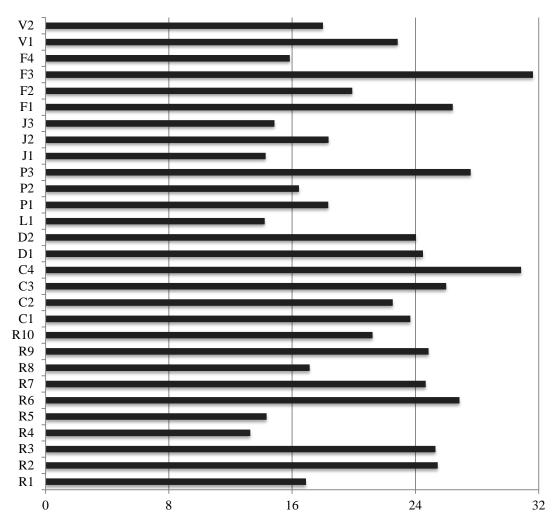


Fig. 1 Assessment of risks for the building construction industry, scores (source: compiled by the authors based on the survey of experts)

The risk of amendments to the legal framework for the construction industry (J1), assessed by the scoring method, is one of the least essential risk for this industry (Fig. 1), although this risk, in the experts' opinion, should be one of the most essential ones for building construction industry enterprises because of regular amendments made to the legislation and changes in the quality of construction.

To assess the dispersion of risk scores, the authors calculated the minimum, maximum and average risk scores based on the experts' risk assessment, which revealed the experts' approach to assessing each risk and confirmed the objectivity of the risk assessment made (Fig. 2).

The calculation of the average risk severity level by risk group revealed that the most essential risks for building construction industry enterprises were those related to human capital. A pronounced lack of a workforce was specific particularly to the enterprises in rural areas; therefore, a lack of a qualified workforce was also more pronounced there, as well as the turnover of employees was higher.

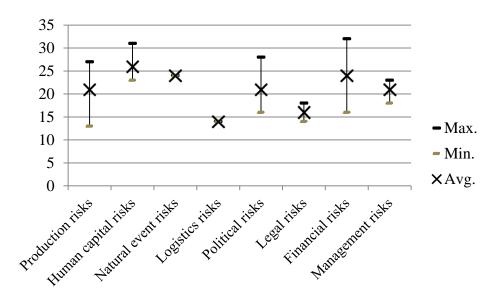


Fig. 2 Dispersion of risk severity level scores for building construction industry enterprises on a scale from 1 to 32 (source: compiled by the authors)

The average risk severity levels for nature event risks and financial risks calculated based on the expert survey data could be regarded as similar. No dispersion of risk scores was observed for the group of nature event risks, while the dispersion for the group of financial risks was in the range of 16-32, which indicated that the experts carefully assessed the risks and the results obtained were unbiased.

In the final group of questions in the expert survey questionnaire, the experts were requested to assess the most appropriate strategy of risk management for each risk: $\mathbf{A}\mathbf{v}$ – avoidance; \mathbf{M} – mitigation; \mathbf{T} – transfer and \mathbf{A} – acceptance.

The expert survey results demonstrate that the experts' opinions are very similar in relation to the application of the risk management strategies to prevent the risks identified. Almost half of the identified risks could be prevented by applying some strategy of risk management and taking daily control and internal management measures, thereby investing no funds and reducing the consequences caused by the existing risks. Risk acceptance is also considered to be one of the most effective strategies of risk management. It requires being aware that the particular risk is going to occur and drawing up a plan for accepting this risk or doing nothing and hoping it never materialises.

The risk transfer strategy is regarded as the least appropriate for reducing the probability of occurrence of the identified risks and assessing the consequences caused by the identified risks. This strategy is the most appropriate in the event of materialisation of legal risks, which takes the form of civil liability insurance for the professional activity of construction work managers and controllers as well as general civil liability insurance for building construction enterprises themselves. It has to be admitted that this risk management strategy, particularly civil liability insurance, is compulsory for building construction enterprises if they want to engage in the construction of some large object, especially if the construction is cofunded by the EU Funds.

The consequences caused by human capital risks could be reduced by means of insurance. To avoid the consequences caused by the risk of noncompliance with work safety requirements, enterprises could insure their employees against accidents at work and health problems. In this situation, in the case of accidents, the employees are granted financial assistance from an insurance company to partly compensate them for the damage. The experts are unanimous with regard to risk mitigation as another strategy for human capital risk management, which accounts for 75% of total alternatives for the management of these risks. The experts believe that these risks could be prevented by developing a motivation and bonus system for employees, as well as by simply promoting internal competition. As pointed out by an expert (E1), his practice has proved that appreciated and praised employees feel themselves belonging to their enterprises and wish to engage in developing the enterprises regardless of the size of remuneration. Consequently, their productivity increases and they trust their employers and believe in the goals of their enterprises, and as long as this attitude does not change, the employees do not seek jobs elsewhere. Accordingly, one can conclude that a well-developed employee motivation system and mutual communication are an effective instrument for preventing human factor risks.

Risk acceptance is considered to be the most appropriate risk management strategy for preventing natural event risks. The experts point out that the effect of seasonality on market demand in the construction industry had been observed a long time ago, and nothing else could be done other than to take it into consideration and accept it. The only instrument to be used to avoid a financial loss caused by this risk, i.e. a low turnover, is economic diversification. If the enterprises operating in this industry do not want to depend on seasonality, they have to engage in anther industry. Nevertheless, natural cataclysms are not easy to forecast, and their occurrence could be forecasted a short time before they take place. For this reason, the application of alternatives to manage this risk is different. Experts E1, E3, E4, E5 and E6 consider the risk acceptance to be the most appropriate strategy to manage this risk, whereas experts E2 and E7 prefer the risk avoidance. This means that construction works have to be deliberately interrupted in case inappropriate weather conditions set in, which, in its

turn, could affect the quality characteristics of the building. This also results in saving funds in the case an employee who has moved to a remote construction object is forced to work part-time because of bad weather conditions.

Risk mitigation is one of the alternatives for the group of production risks, as the experts recognise it to be the most appropriate risk management strategy for 50% of the identified risks. The experts are unanimous (100%) in using this strategy for the following production risks: obsolete construction machinery and equipment (R4); failure to meet the deadline (R5) and non-compliance of input materials with quality standards (R6). The risk of obsolete construction machinery and equipment is predictable, and a loss caused by this risk could be reduced by calculating depreciation in accounting. The risk of failure to meet the deadline could be also predicted if doing daily control and the work organisation system is well-structured at the enterprise. Therefore, daily control has to be done and meetings have to be held to solve any problem in order not to pay a fine specified in the construction contract for not meeting the deadline, which is very likely in view of the specifics of the construction industry. As regards the risk of noncompliance of input materials with quality standards – it could be prevented by requiring documentation certifying the quality of the materials from their suppliers and performing a study of suppliers.

Table 3 Risk management alternatives in the building construction industry rated by the experts (source: compiled by the authors based on the survey of experts)

Risk		Risk management method applied							
code	MSK characteristics	E1	E2	E3	E4	E5	E6	E7	
R1	Price hikes on input materials	Α	Av	Av	Α	Av	Av	Av	
R2	Project cost reassessment risk		M	M	M	M	M	M	
R3	Choice of wrong construction technologies		M	M	M	Α	M	M	
R4	Obsolete machinery and equipment	M	M	M	M	M	M	M	
R5	Failure to meet the deadline	M	M	M	M	M	M	M	
R6	Non-compliance of input materials with quality standards	М	M	М	M	M	M	M	
R7	Dependence on a few customers	Av	Av	M	Av	Av	M	Av	
R8	Emergence of new competitors	Α	Α	Α	Α	Α	Α	Α	
R9	Seasonal demand	Av	Α	Av	Av	Av	Α	Av	
R10	Corruption and bribing	Av	Av	Av	Av	Av	Av	Av	

Av – avoidance; **M** – mitigation; **T** – transfer; **A** – acceptance.

Risk management alternatives for the other production risks, based on the experts' ratings, are presented in Table 3. As shown in Table 3, a strategy to be used to tackle the risk of emergence of new competitors (R8) is risk acceptance. The frequency of occurrence of this risk could be partly controlled by the government, yet the enterprise itself could do a study of its competitors and their advantages and disadvantages, thereby identifying its position in the market. In contrast, the risk of corruption (R10) could only be avoided by not allowing the risk to occur and not letting criminal and financial consequences emerge in the event of materialisation of the risk.

Various information resources report on bribery in the construction industry, particular situations in which some illegal benefit is demanded and taken. For example, the managements of construction enterprises pay bonuses to their project managers from their excess profits, yet the SRS electronic declaration system does not capture them. In this situation, one can identify three hidden and well-known problems: illegal benefits are taken; commercial bribery; bonuses are paid from excess profits after construction objects have been finished (Uzulēns, 2016).

To prevent the risk of corruption in the construction industry, the authors recommend construction enterprises and the senior officials of the Ministry of Economics, the State Revenue Service, the Procurement Monitoring Bureau, the Latvian Trade Union of Construction Workers and the State Labour Inspectorate to create a centralised information exchange system that is accessible only by them and in which, based on certain criteria, the number of enterprises to be primarily inspected is identified.

Conclusions

- 1. Based on the conducted expert survey and performed calculations, it can be concluded that the most essential risk for building construction industry enterprises is the lack of pre-financing.
- 2. Calculation of the average risk severity level by the risk group reveals that the most essential risks affecting the building construction industry are those related to human capital, thus, the research hypothesis is proved as true.
- 3. Risk acceptance is considered to be the most appropriate risk management strategy for preventing natural event risks, as the effect of seasonality on market demand in the construction industry has been observed a long time ago, and nothing else could be done other than to take it into consideration and accept it as well as try to do economic diversification.

4. Risk mitigation is one of the alternatives for the group of production risks, as the experts recognise it to be the most appropriate risk management strategy for 50% of the identified risks.

Proposals

- 1. To reduce the effect of seasonality and the risk of unforeseeable orders, building construction industry enterprises have to diversify their business and develop some auxiliary kind of economic activity, thereby ensuring earning revenues throughout the year.
- 2. To prevent the risk of corruption in the construction industry, construction enterprises and the senior officials of the Ministry of Economics, the State Revenue Service, the Procurement Monitoring Bureau, the Latvian Trade Union of Construction Workers and the State Labour Inspectorate have to create a centralised information exchange system that is accessible only by them and in which, based on certain criteria, the number of enterprises to be primarily inspected is identified.
- 3. To contribute to the development of the construction industry and the economy as a whole, the local governments have to actively engage in acquiring funding from the EU Structural Funds, thereby increasing the demand for construction services and employment in the regions.

References

- 1. ADALEKE, A.Q., BAHAUDIN, A.J., KAMARUDDEEN, A.M. etc. (2018). The Influence of Organization External Factors on Construction Risk Management among Nigerian Construction Companies. *Safety and Health at Work. 2016*, Volume 9, Issue 1, March 2018, Pages 115-124, Retrieved May 5, 2018 from https://www.sciencedirect.com/science/article/pii/S2093791116302153
- 2. ALHOMIDAN, A., (2013). Factors Affecting Cost Overrun in Road Construction Projects in Saudi Arabia. *International Journal of Civil & Environmental Engineering IJCEE-IJENS.* Vol: 13 No:03. Retrieved May 5, 2018 from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.653.6500&rep=rep1&type=pdf
- 3. BEKAERT, G., HARVEY, C. R., LUNDBLAD C.T., SIEGEL, S. (2016). Political risk and international valuation. *Journal of Corporate Finance*. Volume 37, April 2016, Pages 1-23. Retrieved May 1, 2018 from https://datubazes.lanet.lv:2076/science/article/pii/S092911991500156X#
- 4. DIJK, N., GALLERT, R., ROMMETVEIT, K. (2016). A risk to a right? Beyond data protection risk assessments. *Computer Law & Security Review.* Vol.32, Issue 2, April 2016, Pages 286-306. Retrieved May 15, 2018 from https://datubazes.lanet.lv: 2076/science/article/pii/S026736491500182X
- 5. HAIMES, Y. (2015). *Risk Modeling, Assessment and Management,* John Wiley & Sons, 720 pages, Retrieved May 2, 2018 from https://books.google.lv/books?hl=lv&lr=&id=JvowBgAAQBAJ&oi=fnd&pg=PP11&dq=+Risk+Management+and+Mana

- gement+Control+Systems.+Similarities+and+Differences&ots=DZ-j3PMltG&sig=Ta ZWE0HMgfr-uZ5hJ-HR985lwak&redir_esc=y#v=onepage&q=Risk%20Manage ment%20and%20Management%20Control%20Systems.%20Similarities%20and%20Differences&f=false
- 6. KUMBHAKAR, S.C., TSIONAS E.G. (2008). Estimation of production risk and risk preference function: a nonparametric approach. *Annals of Operations Research.* Volume 176, 20 April. 2010, Issue 1, Pages 369–378, Retrieved March 23, 2018 from https://link.springer.com/article/10.1007/s10479-008-0472-5
- 7. MANDRU, L. (2016). How to control risks? Towards a structure of enterprise risk management process. *Journal of Public Administration, Finance & Law. 2016*, Issue 9, Pages 80-92. 13 p., Retrieved May 1, 2018 from http://datubazes.lanet.lv:3537/ehost/pdfviewer/pdfviewer?vid=1&sid=41133c2d-59dc-4058-a7f7-f1ec08d06c34%40sessionmgr4008
- 8. PETTERE, G., VORONOVA, I. (2003). *Riski uzņēmējdarbībā un to vadība.* Banku augstskola, Apgāds "Rasa ABC" datorsalikums, 175 lpp.
- 9. Statēģija "Eiropa 2020". Retrieved April, 10, 2018 from https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_lv
- 10. SZYMAŃSKI, P. (2017). Risk management in construction projects. *Procedia Engineering*. Volume 208, 2017, Pages 174-182. Retrieved April, 10, 2017 from https://www.sciencedirect.com/science/article/pii/S1877705817360290#!
- 11. TIMOFEEVA, S.S., ULRIKH, D.V., TSVETKUN N.V. (2017). Professional Risks in Construction Industry. *Procedia Engineering.* Volume 206, 2017, Pages 911-917. Retrieved April, 10, 2017 from https://www.sciencedirect.com/science/article/pii/S1877705817352566#
- 12. UZULĒNS, J. (2016., feb.). Korupcija būvniecībā. *Latvijas būvniecība*, 1, 120 -121 lpp.
- 13. Valsts ieņēmumu dienests (2018) *Nodokļu parādu struktūra*. Retrieved May 15, 2018 from https://www.vid.gov.lv/lv/statistika/nodoklu-paradu-struktura-0
- 14. ZVAIGZNE, A. (2005). Riska vadība Latvijas lauku tūrisma uzņēmumos. *Promocijas darbs ekonomikas doktora (Dr. oec.) zinātniskā grāda iegūšanai*, LLU.

RESEARCH OF SOME ASPECTS ABOUT THE ELDERLY EMPLOYED IN THE LATVIAN LABOUR MARKET

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Abstract. The seniors are among the resources to reduce tension in certain labour market areas and promote further economic development. Taking into account the aging population trends, the role of seniors will increase in Latvia's labour market. The aim of this research study is to explore the self-assessment of the elderly employed about their abilities to work competitively at pre-retirement age and go on to work at pension age. The research has verified some theoretical findings about the elderly people in the labour market by using content analysis, comparative analysis, synthesis, and the abstract and logical construction methods. The self-assessment of the employed aged above 50 about their abilities to compete in labour market is analysed in the research. A survey of the pre-retirement and pensionaged employees is carried out in the research. The main findings of the research are as follows: the development of technologies and the raising standard of living in Latvia creates new social opportunities for pre-retirement and retirement-age people to go on to work. The stereotypes in society on the preretirement and retirement-age employees are out of date and need to be changed. There are recommendations for improvement of competitiveness of the elderly employed in the labour market developed in the paper.

Keywords: retirement, labour market, labour discrimination.

JEL code: *J0, J210, J2, J260*

Introduction

The global population aged 60 years or over numbered 962 million in 2017, that is more than twice as large as in 1980 when there were 382 million elderly persons worldwide. The number of older persons is expected to double again by 2050 – it is projected to reach nearly 2.1 billion. Population ageing – the inevitable increase in the share of the older persons that results from the decline in fertility and improvement in survival that characterize the demographic transition – is occurring throughout the world. Each of the 201 countries or areas with at least 90,000 inhabitants in 2017 is projected to see an increase in the proportion of persons aged 60 or over between 2017 and 2050 (World population ageing, 2017).

In recent years, there were significant market changes in the structure of unemployment in the global labour market. This is due to the fact that the global workforce is rapidly aging and the share of people aged 50 and over in the structure of the labour market is increasing. The employment rate falls with the age in all OECD countries. For individuals aged 55 to 59 years, the average employment rate across all OECD countries was 69.6% in 2016, 46.3% for the 60 to 64 age group and 20.9% for those aged 65 to 69. In twelve

OECD countries, the employment rates were above the OECD average for all age groups aged 55 and over; by contrast, it was below average for all age groups in ten OECD countries. The employment rates of people aged 55 to 64 have improved since the beginning of the century in most OECD countries, from 44.0% in 2000 to 58.4% in 2016 (Employment rates of..., 2017).

In 2016, the EU-28 employment rate for persons aged 20 to 64, as measured by the EU labour force survey (EU LFS), stood at 71.1%, the highest annual average ever recorded for the EU. Behind this average large differences between countries can nevertheless be found. The only Member State with a rate above 80% is Sweden (81.2%) (Employment statistics, 2018). Sweden has had, compared with many other countries, a relatively old population for many years. Sweden has one of the Europe's highest labour force participation rates among older workers. Good health and high education level are the most important factors for a long career and late retirement in Sweden (National report: Sweden, 2015).

There are quite a few other reasons for Norway and Switzerland: the seniors continue to work, because work makes them happy. The financial motivation in these cases is not significant. In Iceland, a large part of the seniors' motivation to continue to work is job satisfaction, but financial reasons are also important. Account should also be taken of the fact that the retirement age in Iceland is also significantly higher (67 years). Early retirement and low seniors' activity in the labour market, especially for women, are in France, Italy, Spain (Opmane, 2018).

Demographic burden indicators in Latvia have been calculated since 1990. Over time, the main age groups of the population have changed, and different age has been used for men and women. In 2017, the working age was set at 15-62, above the working capacity – age 63+. As indicated by the age structure statistics, like in the great majority of the European Union countries, Latvia's population is ageing. At the beginning of 2016, out of 1.969 million people, children (aged under 14) constituted 15.3%, the population at working age (aged 15–61) – 61.5%, and people at retirement age (aged over 62) – 23.2%. Since the beginning of 2011, the number of Latvia's population at working age has dropped by 9.0%, while the number of people at retirement age has grown by 1.9% (Number population and..., 2018). Taking into account the aging population trends, the proportion of the older people will continue to increase.

Aging is a series of processes that begin with life and continue throughout the life cycle. It represents the closing period in the lifespan, a time when the individual looks back on the life, lives on past accomplishments and begins to finish off his/her life course. Adjusting to the changes that accompany old age requires that an individual is flexible and develops new coping skills to adapt to the changes that are common to this

time in their lives (Warnick, 1995). The generation over 50 is the generation of baby-boomers, those born between 1943 and 1960. They are a hard working generation that feel the need to be valued for their contribution. People aged 50 and over face a range of specific barriers related to their age. One of the biggest hurdles is age discrimination, based on stereotypes and myths about the limitations of older workers.

The aim of the research is to explore the self-assessment of the elderly employed about their abilities to work competitively at preretirement age and go on to work at pension age.

The hypothesis of the research. Development of technologies and the raising standard of living in Latvia creates new social opportunities for preretirement and retirement-age people to go on to work. The stereotypes in society on the pre-retirement and retirement-age employees are out-of-date and need to be changed.

To achieve the aim, several **tasks** were defined:

- to give insight into some theoretical findings about elderly people in the labour market;
- to carry out a survey of the elderly employed on their ability to go on to work;
- to analyse the results of the survey;
- to work out recommendations for improvement of competitiveness of the elderly employed in the labour market.

The research **object**: the elderly employed.

The research **subject**: the factors influencing the decision making of the elderly employees to continue to work.

Novelty: The ability of the elderly people employed to continue to work at pension age competitively is analysed. The offered recommendations could be used in development of a working life extension programme in Latvia.

To accomplish the objectives of the research, the following methods were used: content analysis of research findings concerning the elderly workforce, statistical data analysis, SPSS, comparative analysis, synthesis, the abstract and logical construction methods for studying the elderly workforce.

Some findings about age discrimination

Recognizing ageism as a form of oppression, ageism describes the stereotyping, dehumanization, and discrimination of people based on their age. In addition to being a form of oppression, ageism has serious effects on the older people's ability to gain and maintain employment, health outcomes, and is considered as a contributor to the elders' abuse. Radovich-Markovich

(Radovič-Markovič, 2013) have studied many published documents about age discrimination in range of countries and worked out remarkable findings. There are numerous stereotypes that pose a major barrier to employment of persons aged 55 and over. These stereotypes suggest that older workers: (a) are less motivated in learning new skills, (b) are less physically active and mentally prepared to respond to the demands of their jobs, (c) with a low level of qualification, they are prevented from advancing in their career or getting a job. These stereotypes are dealt with individually. Employers are not willing to invest in the education of their employees, which would in turn improve their competencies and enable them to earn more. They are not interested in investing in older people because of uncertain returns.

Recent literature reveals that age discrimination is present when the age of applicants is taken into consideration in decision making, instead of making decisions on the basis of the individual's merits, experience, and quality of performance. Besides, there are stereotypes about older people being less active physically and also not really capable mentally of meeting the requirements of their jobs, in comparison with younger people. Many go as far as adding other handicaps of older people, such as lack of creativity, lack of interest in gaining new knowledge, etc. (Radovič-Markovič, 2013).

Aging is a natural process and healthy elderly people are an important resource for their families, for their communities as well as for the economies of their countries. The goal of any society should be to provide people an opportunity to work and be productive as long as they wish to do so. However, there are different reasons for and attitudes associated with unemployment after the age of fifty. Some people feel it is inevitable because of their age, but others keep trying to get a job (Radovič-Markovič, 2013).

Each generation has skills and talents that may complement one another and leverage an engage workforce leading to higher productivity and a competitive advantage (Barabaschi, 2017).

The employment of seniors in Latvia is relatively high, however, examples from some other countries show that it can still be increased. Thus, we can conclude that seniors are among the resources to reduce the tension in certain labour market areas and promote further economic development. In addition, taking into account the aging population trends, the role of seniors will increase (Opmane, 2018).

Empirical study. The survey of the elderly employees

Decision to go on to work of people at retirement age in Latvia includes many reasons. **The aim** of the survey is to investigate the self-assessment of the elderly employees at pre-retirement and pension age about their abilities to compete in the labour market. Three age groups (50 +, 60 +, and 70 +) of the elderly employed participated in the survey. The survey was carried out electronically and the sample was not big, only 50 respondents. Therefore, the study might be considered just as a pilot project.

The survey included questions related to assessment of the respondents' workplaces, questions concerning their personal qualities/skills applied at work, questions concerning their fears, and the respondents' attitude to the activities applied at work.

Analysis of the survey results

The survey has included questions related to assessment of the factors of their workplaces. Do people have a friendly environment in their workplaces? Do the employees have job satisfaction? Term 'friendly workplace' in this study includes several factors (see Table 1). These friendly workplace factors should be seen as external motivator factors in decision about going on to work.

Table 1 Friendly workplace factors, confirmed by the respondents, in breakdown by age groups: 50+, 60+, 70+ (Source: compiled by the author)

Friendly workplace factors	In total (%)	Age group 50+ (%)	Age group 60+ (%)	Age group 70+ (%)
Job as a hobby	44	36	35	100
Be happy at work	18	33	21	83
Be an advisor to colleagues	70	66	79	66
Feeling respect from colleagues	70	56	85	100
Friendly communication	64	53	79	83
Sharing experience	74	66	79	100
Team support	56	50	64	66
Trust in colleagues	30	43	57	66

The employees of the age group 70+ have mostly confirmed their motivation to work as follows: for them work is a hobby, they are happy at work, they feel respect from their colleagues, they share their experience, they perform their duties and they are responsible in relation to their duties, they are advisers to their colleagues, they feel friendly communication in their job places, they feel the team support, they trust colleagues (Table 1).

The employees of age group 60+ have mostly confirmed their motivation to work as follows: they are respected by colleagues, they are advisers to their colleagues, they share their experience, they feel friendly

communication in their job places, they feel the team support. Just every fifth is happy at work (Table 1).

The employees of the pre-retirement age group 50+ mostly have confirmed their motivation to work as follows: they are advisers to their colleagues, they share their experience, they are respected by colleagues. Just every third is happy at work (Table 1).

The unfriendly workplace factors confirmed by the respondents, in breakdown by age groups: 50+, 60+, 70+ are summarized in Table 2. These unfriendly workplace factors should be seen as external factors in decision making about going on to work.

Table 2 Unfriendly workplace factors, confirmed by the respondents, in breakdown by age groups: 50+, 60+, 70+ (Source: compiled by the author)

Unfriendly workplace factors	In total	Age group	Age group	Age group
	(%)	50+ (%)	60+ (%)	70+ (%)
Work is hard	2	3	7	0
Tedious work	13	27	35	0
Completely exhaust the power	14	27	42	0
Colleagues are annoying	4	6	14	0
Unpaid additional work	30	30	35	16
Low rated work	26	36	21	0
Colleagues are waiting for my retirement	8	3	14	16

The employed pensioners of age group 70+ have mostly stated that their job is not hard, is not tedious, nor low rated, it does not completely exhaust their energy (Table 2).

The employees of age group 60+ have mostly confirmed that their job is not hard. Each third respondent have confirmed that work is tedious and additional work is unpaid. In this group, 42% of the respondents have confirmed that their job completely exhausts their power (Table 2).

The employees of the pre-retirement age group 50+ have mostly confirmed that their job is not hard. Each fourth respondent has confirmed that job is tedious and completely exhausts their power, 30% of them have confirmed they have unpaid additional work (Table 2).

Behavioural factors largely determine the well-being of people in the workplace. These factors should be seen as internal motivator factors in decision making about going on to work. Therefore, in the survey, questions related to the behavioural factors possibly assigned to the respondents were included (Table 3).

Table 3 Behavioural factors, confirmed by the respondents, in breakdown by age groups: 50+, 60+, 70+ (Source: compiled by the author)

Behaviour factors	In total	Age group 50+	Age group	Age group 70+
	(%)	(%)	60+ (%)	(%)
Control yourself	60	46	79	83
Loyalty	72	60	85	100
Execution of duties	66	56	71	100
Responsibility	82	76	85	100
Zealous	54	50	64	66
Self-confidence	50	23	35	50

According to the data (Table 3), the effect of the all behavioural factors, mentioned in Table 3, increases with age. Loyalty, execution of duties, and responsibility are very high rated by all the respondents of the age group 70+.

The factors such as willingness to acquire new knowledge and new experience should be as internal motivator factors in decision making about going on to work.

The data (Table 4) show that the respondents of all groups of the employees at pre-retirement and pension age have willingness to acquire new knowledge (78%) and new experience (72%).

Table 4 Internal motivator factors in breakdown by age groups: 50+, 60+, 70+ (Source: compiled by the author)

Internal motivator factors	In total	Age group	Age group	Age group
	(%)	50+ (%)	60+ (%)	70+ (%)
Willingness to learn new knowledge	78	66	78	66
Willingness to learn new experience	72	73	78	66
Importance of the own appearance	66	56	71	100
Importance of the others' opinions	44	40	57	33

The importance of the own appearance is noted by 66% of all the respondents. It is much more important than the importance of the others' opinions (44%). It means that the elderly employees willingly take care of their appearance for their good feelings, not for the others.

The habits of the employees largely determine decision making to go on to work or not. Therefore, the questions related to habits of respondents were included in the survey (see Table 5 Fig. 1).

Table 5 Habits of the respondents in breakdown by age groups: 50+, 60+, 70+ (Source: compiled by the author)

Habits	In total	Age group	Age group	Age group
	(%)	50+ (%)	60+ (%)	70+ (%)
Traveling	68	60	71	100
Cooking	32	33	28	33
Healthy lifestyle	48	36	50	100
Daily gymnastics	20	13	21	33
Maintaining physical condition	52	46	50	83

The elderly employees are active, their activity has grown with age (see Fig. 1). Less active are the employees aged 50+, more active are the employees aged 70+.

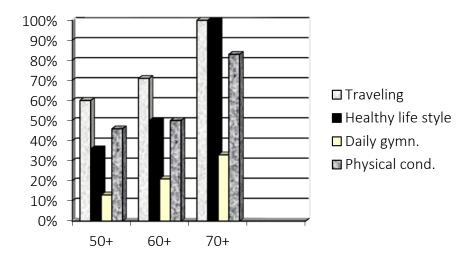


Fig. 1 Habits of the respondents in breakdown by age groups: 50+, 60+, 70+ (Source: compiled by the author)

Traveling (68% in total) is popular among the elderly employees, especially among the employees aged 70+. Also, the healthy lifestyle of older workers increases by the age. All the respondents aged 70+ have a healthy lifestyle. Just each third employed aged 50+ has a healthy lifestyle, according to the data (Table 5). Over the years, people take more care of their health and have a healthier lifestyle. The same conclusion could be drawn about physical activities – daily gymnastics. The importance to maintain good physical condition was confirmed by 52% of all the respondents: 46 % - the employees aged 50+, 50% - the employees aged 60+, 83% - the employees aged 70+.

The following responses were provided to the question: "What your personal qualities/skills are applied at work and to what extent?" (See Table 6).

Table 6 To what extent your personal qualities/skills are applied at work, confirmed by the respondents (Source: compiled by the author)

Personal qualities/ skills	Not at all (%)	A little	Average	Largely
		(%)	(%)	(%)
Experience	0	4	18	78
Knowledge	0	6	22	72
Helpfulness	0	12	42	46
Goodness	2	24	36	38
Communication skills	0	6	32	62
Conflict resolution skills	2	20	38	40
Sense of responsibility	0	10	20	70
Carefulness	2	6	26	66
Creativity	4	6	36	54

According to the data (Table 6), the experience and knowledge of the employees are mostly applied at work. The sense of responsibility, carefulness, and communication skills are highly estimated at work in the respondents' opinion.

The following responses were given to the question: "What is your personal attitude to the following activities applied at work and what extent to?" (See Table 7, Fig. 2)

Table 7 Respondents' attitude to the activities applied at work (Source: compiled by the author)

	Attitude				
Activities applied at work	I don't	I can't do	I will, but don't	I can do it	
	need it (%)	it (%)	get to others	(%)	
			(%)		
Learning new skills	4	8	4	88	
Training	4	14	0	82	
Learning foreign languages	8	40	4	48	

According to the data (Table 7), the attitude of the elderly employees to learning new skills (88%) and to training (82%) is positive. The attitude to learning foreign languages is not so optimistic, just 48% of all the respondents confirmed their ability to learn foreign languages.

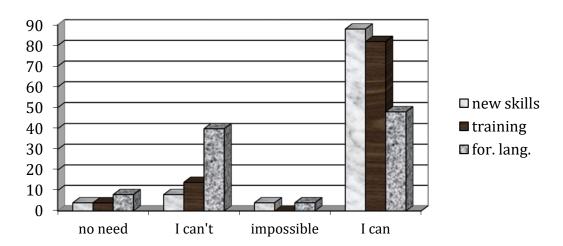


Fig. 2 Respondents' attitude to the activities applied at work (Source: compiled by the author)

The following responses were provided to the question: "What are your fears and to what extent?" (See Table 8)

Table 8 Fears in breakdown by their influence, confirmed by the respondents (Source: compiled by the author)

The fears	No effect (%)	Moderately (%)	Strong effect (%)
Losing the job	30	48	22
Rivalry	46	46	8
Failure to catch novelties at work	52	38	10
Loneliness	46	34	20
Sicknesses	20	32	48
Family problems	28	32	40
Financial difficulties	34	30	36

Most elderly employees are afraid of sicknesses (strong effect – 48%, moderately – 32%, no effect – 20%), family problems (strong effect – 40%, moderately – 32%, no effect – 28%), and financial difficulties (strong effect – 36%, moderately – 30%, no effect – 34%). Fear of rivalry (strong effect – 8%, moderately – 46%, no effect – 46%) and fear of failure to catch novelties at work (strong effect – 10%, moderately – 38%, no effect – 52%) are lower.

Conclusions and suggestions

Physical and psycho-social qualities influence attitudes towards retirement. The attitude of the elderly employees to learning new skills and to training is positive. The attitude to learning foreign languages is not so optimistic. The experience and knowledge of the elderly employees are mostly applied at work. The effect of the loyalty, execution of duties, and responsibility increases with age. Most of the older employees are afraid of sickness, family problems, and financial difficulties.

The stereotypes that older employees are not motivated enough to learn new skills and new experience are not confirmed in the research. One of the stereotypes is that the elderly people are less physically active and less mentally prepared to meet the demands of their jobs than the younger age groups. The findings of the research confirm that the sense of responsibility, carefulness, and communication skills of the elderly employees are highly appreciated at work. Over the years, people take more care of their health and have a healthier lifestyle. The awareness of a healthy lifestyle of elderly workers increases by the age. Therefore, the stereotypes in society about the pre-retirement and retirement-age employees are out-of-date and need to be changed.

It is the fact that the workforce is rapidly aging and the share of people aged 50 and over in the structure of the labour market is increasing. The development of technologies and the raising standard of living in Latvia creates new social opportunities for preretirement and retirement age people to go on to work. Therefore, it is necessary to turn serious attention to the development of the abilities of the elderly employees at the national level to encourage the employees to continue to work at pension age. It is necessary to develop the working life extension programme in Latvia. The aim of this programme should be to help the elderly employees to adapt to the rapidly changing environment and to give people an opportunity to work and be productive as long as they wish to do so. This programme should include couching training in the digital environment, which would help the elderly employed to increase their self-confidence, keep up a healthy lifestyle, better integrate into a team, and create values. This programme would stimulate the creation of a favourable organizational culture and a positive work environment in firms for the elderly employed.

The promotion of extension of working life is poorly studied and need to be developed not just at preretirement age but also at early stages of careers of the employed.

References

1. BARABASCHI, B. (2017). Ageing Issue in Activation Labour Policies: The 'Intergenerational Approach' to Tackle Unemployment. Retrieved Apr 02, 2018, https://www.intechopen.com/books/unemployment-perspectives-andsolutions/ageing-issue-in-activation-labour-policies-the-intergenerationalapproach -to-tackle-unemployment

- 2. Employment rates of older workers. Retrieved Oct. 02, 2017, from https://www.oecd-ilibrary.org/social-issues-migration-health/pensions-at-a-glance-2017/employment-rates-of-older-workers pension glance-2017-23-en
- 3. Employment statistics, Retrieved Oct. 02, 2018 from http://ec.europa.eu/eurostat/statistics-explained/index.php/Employment_statistics
- 4. National Report: Sweden. Retrieved Apr 02, 2018, from http://www.jp-demographic.eu/wp-content/uploads/2015/07/SE-National-Rep
- 5. Number-population-and-key-demographic-indicators. Retrieved Apr 12, 2018, from http://www.csb.gov.lv/en/statistikas-temas/metodologija/number-popula tion-and-key-demographic-indicators-36808.html.
- 6. OPMANE, I. (2018). Latvijā trūkst darbaspēka. Vai pensionāri var palīdzēt? Retrieved Apr 02, 2018, from https://www.makroekonomika.lv/latvija-trukst-darbaspeka-vai-pensionari-var-palidzet
- 7. RADOVIČ-MARKOVIČ, M. (2013). Aging Workforce: Employment Opportunities and Obstacles.Retriewed. Dec 02, 2017, from http://cadmusjournal.org/node/312An]
- 8. WARNICK, J. (1995). Listening with different ears: Counseling people over sixty. Ft. Bragg CA, QED press, p.129.
- 9. World population ageing 2017. Retrieved Dec.2, 2018, from http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_Hi ghlights.

COACHING EFFECTIVENESS STUDY

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Abstract. Coaching has great opportunities to make positive impact on the development of organizational human resources and organizational capacity as a whole. In Latvia, coaching is not sufficiently developed, partly due to the lack of understanding of its effectiveness. The aim of the research is to perform an analysis of the effectiveness of coaching in human resources management. The theoretical research on the effectiveness of coaching was carried out by using findings of various researchers. An empirical study was carried out at the State Employment Agency of Latvia. The proposals for the development of coaching in Latvia are developed. The following research methods are used: content analysis, comparative analysis, synthesis, and the abstract and logical construction methods. Coaching implementation proposals could be used to develop organizational training strategies.

Keywords: coaching, effectiveness, human resources management.

JELl code: *M53, M54, J24*

Introduction

The origins of coaching lay in the field of sports. One of the coaching founders, John Whitmor, initially developed this direction as a special form of psychological training for high-level athletes to achieve outstanding results. This approach quickly gained recognition not only among the athletes but also among businesses, politicians, and other groups. In the 1990s, coaching had already become a solid value for world-leading companies as an integral part of growth and training (Untāls, 2011).

There are several definitions of coaching. Michael Carroll (Carroll, 2015) emphasized that professional coaching is an ongoing partnership that helps clients to produce fulfilling results in their personal and professional lives. Through the process of coaching, clients deepen their learning, improve their performance and enhance their quality of life. Coaching concentrates on where clients are today and what they are willing to do to get where they want to be tomorrow. The Neuro Linguistic Programming Centre (NLP) established in Latvia in 2002, defines coaching as the process that promotes and confirms that it positively impacts human development, growth and achievement. It is a kind of human individual "workout" along with a coach to achieve meaningful goals. Coaching is a series of conversations that help people to get closer to their infinite potential, help them to understand their role or task, and take responsibility for their future activities. Special

attention is paid to the client's responsibility in the coaching process. Coaching helps people to find the best ways to succeed and achieve satisfaction during the goal implementation process (Rusina, 2018). The main task of the coach is to ask questions by correctly guiding the conversation with the client, achieving results and positive changes. The only one who can judge coach competence is his/her client. The first coach question in the coaching session would be: "What do you want to talk about today?" The topic of the conversation is always determined by the client. The coach does not teach, but helps to activate the client's internal potential, helps to discover new ways of solving various issues. A good coach helps the client to learn from her/his own experience, not teaching and giving advice (Kas ir koučings, 2018). The coach's profession popularity nowadays is very fast growing, there are various professional coach associations and federations operating in the world, coaching is widely used in business and organizational management, education, medicine, and other fields.

The coaching culture is becoming more and more popular. The coaching organizational culture includes elements of corporate culture that help an organization's employees to raise their awareness, responsibility, engagement, and to get support. The modern leader/coach has the choice: to use coaching methods to achieve the goals set, to solve problems, or to implement and develop the coaching culture in the organization. Coaching is not sufficiently developed and implemented in Latvia. There is a lack of information about good coaching practice, about its positive impact on human resources management in organizations. There is not enough awareness of coaching effectiveness. Coaching in Latvia has not gained widespread popularity due to the high cost of coach services as well (Smirnova, 2018). There is also lack of methodical materials about coaching management in Latvian. The number of studies in this field is insufficient.

The aim of the research is to analyse the effectiveness of coaching in human resources management.

The hypothesis of the research: implementation of coaching in human resource management is a powerful mechanism in the development of national prosperity.

To achieve the aim, several tasks are defined:

- to provide insight into some theoretical findings about the effectiveness of coaching;
- to analyse the results of an empirical study at the State Employment Agency of Latvia;
- to develop recommendations for coaching implementation in organizations.

The research object: coaching.

The research subject: factors influencing coaching effectiveness.

Novelty: proposals for implementation of coaching could be used to develop organizational training strategies.

To accomplish the objectives, the following research methods were used: content analysis, comparative analysis, synthesis, abstract and logical construction methods.

Coaching effectiveness in the view of various researchers

The term 'coaching' includes four functions: consulting, training, therapy, and mentoring (see Figure 1). Training means the process whereby the expert instructs and teaches the trainee to develop new skills. Consulting means providing an expertise in the specific field to advise and inform the client how to solve the problem in the best way. Therapy means the process of healing past hurts and resolving personal pain. The focus is 'to fix' what is broken. Mentoring means an unequal relationship where the more experienced person imparts his/her knowledge, skills, and experience to the less experienced person (What is coaching, 2013).

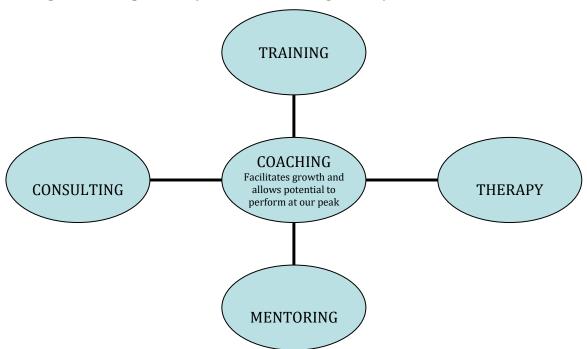


Fig. 1 What is coaching (Source: What is coaching, 2013)

Despite the obvious advantages of coaching, there are a lot of coaching opponents. In recent years, many scientific studies have been carried out about coaching efficiency and effectiveness. This research analyses several scientific studies related to the effectiveness of coaching.

The effectiveness of coaching at the workplace is analysed in several studies. The coaching effectiveness of internal and external coaches at the workplaces is studied by Jones R. J., Woods S. A., Guillaume Y. R. F. (Jones et al., 2016). Analysis of this research has confirmed the positive coaching impact at the workplaces. The study confirms that coaching is more effective if it is carried out by the organization's internal coaches or mixed team coaches (both external and internal coaches). The work of the internal coaches contribute to a greater effect than the work of the external coaches. The authors of the research have explained that the internal coaches have a better understanding of the organizational culture and climate, and thus can better promote the work so that employees would be more productive in their specific workplace (e.g. specific target setting and achievement). The authors admit that the study findings are informative, they can be used to make decisions about specific coaching tools and techniques, however, even though the results show that, in general, coaching seems to be effective regardless of the coaching format and duration (including sessions), practitioners and organizations should carefully consider whether external coach services should be used. One of their research question concerns effectiveness of the coaching in providing individual training and development, and improvement the organization's performance and results. This analysis has made important steps forward to prevent systematic lack of scientific evidence. The study has provided extensive evidence of the potential benefits of coaching at work.

In 2016, the team of the researchers conducted an experiment at the University of Salzburg with the aim to investigate the comparative effectiveness of coaching compared to training courses and internship practices. The results were summarized and analysed in the scientific paper "Comparing the Effectiveness of Individual Coaching, Self-Coaching, and Group Training: How Leadership makes the Difference" (Losch, et al., 2016). The researchers have identified which coaching method is more effective and why. They have compared individual coaching, self-coaching, group coaching, and control group without intervention. The students from the University of Salzburg, who regularly hindered academic performance, were included in the experiment. The results of the experiment have demonstrated that individual coaching and group coaching are effective in promoting the achievement of goals and in reducing the hindered academic performance. Individual coaching was a great achievement and was superior in helping participants to achieve their goals, but group coaching positively contributed to the acquisition of relevant knowledge. The results of the selfcoaching team demonstrated that the self-performed exercises, without coach support, were not enough to achieve high goals. According to the findings of the study, the results of this study can help to select appropriate human resources development methods: if there is a general need to systematically train the employees for performing specific tasks, the group coaching seems to be more useful because of lower costs. However, if the specific work conditions or individual development goals are of the paramount importance, the individual coaching can be recommended. The individual coaching was the most effective intervention to promote the goals of the participants. In addition, the individual coaching and the group coaching members had reported a significantly lower number of absences than members of the control group. The self-coaching results showed that the self-performed exercises without coach support were not enough to improve the performance and ease the achievement of the goals. The analysis had showed that the behaviour of coaching transformation and conduct management had influenced the participants' intrinsic motivation, which also resulted in the favourable coaching results. The coaches provide intellectual stimulation, encouraging customers to explore the issues from new perspectives, and by doing so, the coaches inspire to highlight new solutions and ideas. Finally, the coaches provide inspirational motivation by helping colleagues to create an optimistic vision of their future. The individual coaching was the most effective intervention to stimulate the achievement of the goals of the participants. The individual coaching and group coaching members had reported significantly less delays compared to members of the control group.

Gurchek (Gurchek, 2016) carried out an analysis of the 2016 Global Executive Competition Board findings. The researcher has concluded that businesses were focusing on internal coaching to promote leadership development and train managers who can work as the coaches in their teams. In order to develop future leaders and teams, analysis of the internal coaching culture has been widely conducted. Coaching is integrated in the management of change and is used to develop the career prospects of employees. For example, the Texas University's Oncology Centre in Houston have used internal trainers to run the mid-year executives' annual coaching group programmes. One of the components in coaching is individual development plan. Gurchek had noted that the internal coaches were less common than recruiting the external coaches, that the prices for external training services had increased – the manager received up to USD 600 per coaching hour. Some examples of good coaching practice are mentioned in the research provided by Gurchek:

- 1. The website of the Industrial and Organizational Psychology Association indicates that there are both internal and external coaches in the organization.
- 2. Society for Human Resource Management (SHRM) online. Personnel specialists develop coaching programmes, introduce front line trainers, or include coaching in the management training programmes.

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3. In 2010, Google introduced the Google Career Guru coaching programme, which was later extended to Guru-plus with 350 internal coaches in 60 offices around the world. Coaching is done by practically using the Google Hangouts programme. Depending on the topic, coaching sessions can range from one to eight sessions. The coaches manage 12 topics, such as sales questions, career promotion, team development, presentation, e.t.c. For example, a salesperson in Australia who is going to make a big sale can get a coaching session from a "sales guru" who works in the industry but is located in another country. Support for workers who face labour or personal obstacles could be provided. To become an internal trainer, the applicant must work in Google for at least two years, take the top management training for the organization and work as an expert. The Google's leaders must support the guru. This programme is definitely revolutionary and meaningful.

The effectiveness of the executive coaching during organizational change is studied by Anthony M. Grant (Grant, 2013). The researcher has raised and confirmed the hypothesis that participation in the coaching programme during the organizational change could promote the achievement of goals, solution-oriented thinking, greater ability to overcome changes, moreover it increase the self-efficacy and flexibility of managers, reduce depression, anxiety, and stress, as well as raises satisfaction with the workplace. The executive power coaching is often used during the organizational change to help managers to develop the psychological and behavioural skills needed to focus on achieving work goals while addressing the organizational change issues. The study had used both quantitative and qualitative measures to explore the impact of coaching on 31 leading executives and managers of the international organizations during the organizational change. The participation in coaching was also linked to the achievement of more goals-improving solution-minded thinking, developing greater ability to cope with change, increasing efficiency and flexibility in management, and reducing depression. The positive impact of coaching is also evident in non-work-related areas, such as family life. The research suggestions were intended to evaluate and develop the executive coaching programmes. The main objectives of the coaching programme were to stimulate the participants' ability to manage change, as well as to promote productivity in the organization. In addition, the programme was used to support the participants in their career development, developing greater clarity and deeper understanding of their individual strengths, personal values, and developmental needs. The noticeable rise in solution-oriented thinking, which is a prime skill during organizational disturbances and change, was considerable. This is an important point because many managers have a tendency to the problem-oriented thinking. The different effect of coach's work also help to emphasize that training is not a 'comprehensivey panacea'. The coaching has the greatest impact on the topics it focuses on. This study presents the original data that suggests that the managers' training can be very positive during the organizational change. The executive coaching can increase the achievement of job-related goals, improve market-based thinking, develop greater readiness for change, increase manager self-efficiency gains and flexibility, and reduce depression. This study has showed that the positive effects of executive training can be generalized to such areas not related to work as family life. The findings of this study is also a reminder to the coaches and their clients that it is important to clearly define the main goals of the coaching (Grant, 2013).

In 2011, the experiment on coaching effectiveness was carried out in the project form in the bank of the Arab Emirates. (McDermott, et al., 2011). The research problem was identified: the indigenous people face difficulties entering the labour market, where the majority of the workforce is composed of the representatives of other cultures. The employment coaches were selected and trained, and they worked both with the target group and individually. The coaching was conducted online (coaching services were provided by the Canadian coaches via electronic means). These coaches worked with the following target group: 67 new employees participated in group coaching seminars and 29 trainees received individual coaching during the first 3 months of the project implementation. In the case of individual coaching, 12 questions were related to the performance issues, and 17 were related to the intention to withdraw from the bank. The performance issues were not available to the researchers. From the trainees who planned to resign only three terminated the employment contract, while the remaining trainees continued to work, at least in the short term. The coaches had considered confidentiality; the coaches met together once every two weeks to discuss all issues. The results of the research were positive better adaptation at the workplace, as well as remaining at the workplace. The feedback of the project was positive. The coaches had tried out the simple and effective programme Let's CHAT! The researchers of the experiment had noted that, in spite of the positive statistics concerning remaining at the workplace, the further research in this area would be very valuable. The findings of the study show that the career coaching has the potential to significantly change both employee engagement and retention by offering promising future career development opportunities. The scientists have emphasized it would be useful to collect data regarding the level of involvement and motivation of the new employees.

Linder-Pelz (Linder-Pelz, 2008) has emphasized in his research that the Meta-Coaching methodology is the evidence-based development of coaching that is collaborative, focused on solutions, systematic, and promotes the employees performance, life experience, self-sustaining learning, and targeted growth.

The effectiveness study of the internal or external coaching jobs has been carried out by Rebecca J. Jones, Stephen A. Woods, Yves R. F (Rebecca, et al., 2016). The researchers have conducted a meta-analysis summarising the results of the research on the effectiveness of coaching jobs. The main findings of the research are as follows: positive effects of workplace coaching are confirmed; different criteria are used in the approach to the training and development of employees in organisations; coaching is more effective when performed by internal coaches than by external coaches; coaching at the workplace is effective when face-to-face or mixed methods are used (the face-to-face method mixed by the e-coaching method).

Anthony M. Grant's research (Grant, 2013) has confirmed the hypothesis that participation in the coaching programme during organisational changes would encourage achieving goals, solutions-oriented thinking, greater ability to overcome changes, and increase the self-effectiveness and flexibility of the manager, reduce depression, anxiety, and stress, and increase satisfaction with the workplace.

Van Oosten and Ellen Brooks (Van Oosten, et al., 2013) have studied the effects of the leaders' emotional intelligence on the effectiveness of coaching. Two hypotheses have been tested in the empirical study: 1) Does the emotional intelligence of the leaders ensure their effectiveness? 2) What is the impact of the quality coaching on the leader's effectiveness? The causation between emotional intelligence and work results of the leaders is also studied in the research. The main findings of the study are as follows: the coaching increases the leader's empathy and confidence, the leader is encouraged to be more open, his/her self-awareness and ability to learn and dream are raised.

Robinson in his study "The Case of Coaching Cultures" has considered that the organizations implementing the coaching culture, must meet at least five of the six coaching criteria: 1) employees appreciate coaching; 2) leading staff evaluates coaching; 3) there are budget lines for coaching for the organization; 4) coaching is available to all employees; 5) managers or coaches go through accredited coach training; 6) all three types of coaching (internal coaches, practicing external coaches, and managers who use coaching skills) are working in the organization. The researcher points out that this kind of culture contributes to a better involvement in the work process, which also has positive effects on the development and financial performance of the organization (Robinson, 2018).

Since 2012, according to the UK annual survey of education and talent, the leader as a coach model is estimated as one of the best ways of teaching and talent development and is now widely used in this country (Filsinger, 2014).

According to O. Achsuk's findings, the introduction of the organization's coaching culture promotes the following changes: 1) the speed and quality of the management decisions change; 2) a single information field is created; 3) the level of communication increases reducing the number of dysfunctional conflicts and resistance to change; 4) involvement of the employees in the company's business processes increases; 5) ongoing deliberate continuous professional development of employees, and all employees at all levels are responsible for this process and the result; 6) the speed of development and implementation of projects increases; 7) the flexibility of the company expands; 8) level of the employees' satisfaction increases; 9) the customers' satisfaction increases (Achsuk, 2017).

Empirical study on coaching effectiveness

In Latvia, coaching is not sufficiently developed and implemented, partly due to lack of understanding of its effectiveness. The number of studies confirming its efficacy is insufficient. An important study with the aim to research the effect of coaching culture on the organization's capacity building was performed at the State Employment Agency (SEA) by the author Smirnova (Smirnova, 2018), within the frame of her master thesis. The survey at the SEA was carried out in 2018. A survey target group was identified to investigate the attitude of the employees towards the coaching culture. The target group included the YG (Youth Guarantee) project's coordinating experts and career counselors whose duties are related to the servicing of the unemployed youth registered at the Agency: motivation, support, involvement in the activities, and integration into the labour market. This group participated in the training cycle "Coaching methods for co-ordinating experts and career counsellors in cooperation with young unemployed" in 2016. The purpose of the training was to provide participants with the opportunity to learn and teach the use of a structured coaching approach to work with young people - the unemployed (including young people with special needs) aged 15-29. Forty six percent of the staff involved in the training project participated in the survey, which comprised 57% of all the respondents (42 questionnaires were completed). The results of the survey showed that the respondents who had received coaching training, positively evaluated the usefulness of the coaching and its positive impact: 92% of the respondents highly appreciated the training, 92% - used the skills obtained in the training in daily work, 86% - expressed their wish to implement the coaching culture in the organization. All the respondents confirmed high interest in the couching training. 90% of all respondents who took part in coaching training expressed their wish in additional training.

The coaching has positive impact on the work environment. There were some questions in the survey related to the respondents' work environment and how they feel in this environment. The respondents' attitude to their work environment is shown in Figure 2. The following factors in the study were chosen as the working environment factors: ability to develop own potential, be heard from the managers side, get support from managers,

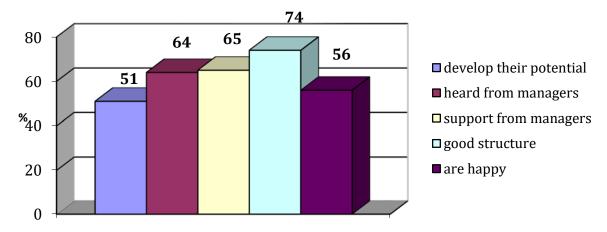


Fig. 2 Attitude of the respondents (in %) to their work environment factors (Source: compiled by the authors)

good organizational structure, and be happy at work. Percentages of the respondents are displayed on the vertical axis of the figure. The analysis demonstrated that the respondents who felt valuable at work, and felt themselves belonging to their organization, deemed that:

- their job allowed them to develop their potential (51%);
- their opinion was always heard from their leaders (64%);
- their managers supported them (65%);
- the organization structure was logical and transparent (74%);
- they felt happy (56%).

The results of the survey showed also a negative correlation (Smirnova, 2015) between the following statements:

'I feel valuable and belonging to the organization' and 'I look for another job' (-0,53);

'I feel valuable and belonging to the organization' and 'My job is too much controlled' (-0,57).

The findings indicated an extremely high interest in coaching opportunities at the SEA, as well as a favourable environment for the introduction of the coaching culture at the SEA. The coaching culture has huge potential for influencing these above-mentioned factors by using team-

mediation methods as well as the model "Leader as a Coach". The results of the survey have emphasized that the staff education in coaching is very important, because the positive attitude of the employees towards coaching and support from the top management are prerequisites for the efficient introduction of the coaching culture.

The SEA takes care of the training and development of employees, the European Social Fund funding is actively used for this purpose. There is a tendency to increase the professional competence of the employees with a view to improving the quality of the services. However, the focus is always on the recipient of the service, not on the manager/employee. By changing the focus, giving more support to the managers and the employees of the SEA, positive impact on the quality of services will take place. The coaching culture is offered for the maintenance of a good working environment, the development of human resources, and the creation of self-motivation of employees. It will reduce the staff turnover, as well as promote the motivation of managers and employees, professional growth, engagement in work, thus ensuring the development of the organization's capacity.

Based on the practical research results, it is also possible to identify problem-solving opportunities, focusing more on the team unity, the employed sense of belonging, and the managers' attitude and style of management. To solve these problems, it is useful to use coaching methods, coaching culture and the model "Leader as a Coach".

Conclusions

Coaching is a powerful change management tool that helps to achieve organizational goals, has a positive impact on the development of human resources, and provides the improvement of organizations' competitiveness and capacity development. The greatest efficiency in the achievement of the goals is promoted by the activities of the inner couch, the external couch activities are also viewed positively, but it is not so inspiring. Individual training and group training helps to achieve the best results in achieving goals. Self-coaching is also effective, but not enough to achieve high goals. The model 'Leader as a Coach' is one of the best management styles. Coaching allows focusing on the team unity, therefore coaching is recommended for identifying problem-solving opportunities.

Coaching in Latvia has not gained widespread popularity. The authors offer the following recommendations for promotion and accessibility of coaching in Latvia:

a) taking into account the coaching role in the achievement of organizational goals, in the improvement of organization

- competitiveness and capacity, coaching could be implemented in the development of organization training strategies;
- coaching should be integrated as a study course in the study b) programmes at the higher education institutions in Latvia;
- cooperation among the higher education institutions, coaching c) practitioners and the SEA should be developed in order to facilitate the training of entrepreneurs, public authorities, and students. This would increase the ability of managers and would attract new industry professionals. This is necessary to support managers in managing change and increasing the professional competence of employees.

The SEA is a development-oriented institution that is conscious and highly appreciates the need for change and innovation, and its environment is ready for the introduction of the coaching culture. Some recommendations for SEA management in setting up the coaching culture in the organization:

- to introduce the coaching culture as an outsourced service to the 1) senior managers of the SEA;
- to establish an internal coach position to provide coaching services 2) for executive employees of the organization, as well as career counselors, project experts, and employment organizers who use the acquired knowledge to work with the unemployed and job seekers.

The internal coach should also organize workshops on employer coaching opportunities in human resources management at subsidized jobs and at other jobs for the promotion of coaching culture. Using the face-toface method and the model 'Leader as a Coach' can achieve high results. Coaching advice is also valuable over the phone and electronically. The coaching culture is going to provide a positive impact on the culture of the SEA organization and contribute to the development of the SEA capacity.

References

- 1. ANTHONY M. GRANT (2013). The Efficiency of Executive Coaching in Times of Organisational Change. Journal of Change Management, Vol. 14, pp. 258-280.
- 2. CAROLL MICHAEL (2015). Retrieved 20.01.2018 from https://www.nlpacademy.co. uk/articles/view/what_is_coaching/
- FILSINGER, C. (2014). The virtual line manager as coach: Coaching direct reports 3. remotely and across cultures. International journal of Evidence based Coaching and Mentoring. Vol.12, Iss.: 2, pp.188-202.
- GURCHIEK, K. (2016). Should Your Organization Use Internal Coaches? Retrieved 4. 20.01.2018 from https://www.shrm.org/resourcesandtools/hr-topics/organiza tional-and-employee-development/pages/does-your-organization-use-internalcoaches.aspx

- 5. JONES, R. J., WOODS, S.A., GUILLAUME, Y.R.F. (2016). The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology.* Vol. 89, Iss.: 2, pp.249–277
- LOSCH, S., TRAUT-MATTAUSCH, E., MÜHLBERGER, M.D., JONAS, E. (2016). 6. Comparing the Effectiveness of Individual Coaching, Self-Coaching, and Group Training: How Leadership Makes the Difference. Retrieved 24.01.2018. from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4853380/17.pg.
- 7. Mc DERMOTT, D; NEAULT, R. (2011). In-house career coaching: an international partnership. A. Journal of Employment Counseling. Sep 2011, Vol. 48, Issue 3, p.121-129, Retrieved 01.02.2018. from http://web.a.ebscohost.com/ehost/pdfviewer/ pdfviewer?vid=6&sid=4a883a81-a1b4-4452-8bba-54f18a067fea%40sessionmgr 4010
- 8. NLP centrs. Kas ir koučings? Retrieved 22.01.2018. from http://www.nlpcentrs.lv/ lv/kouchings/kas_ir_kouchings
- REBECCA J. JONES, STEPHEN A. WOODS, YVES R.F. (2016). The effectiveness of 9. workplace coaching: A meta-analysis of learning and performance outcomes rom coaching Retrieved 01.02.2018. from https://doi.org/10.1111/joop.12119
- ROBINSON, S. (2018). The Case for a Coaching. Culture Journal. Retrieved 10. 20.01.2018 from https://www.td.org/magazines/td-magazine/the-case-for-acoaching-culture
- RUSINA, I. (2018). Kas ir koučings? *Rīgas koučinga skola*. Retrieved 24.02.2018. from http://ericson.lv/lat/koucinga-apmačbas/340-chto-takoe-kouching-/
- 12. SMIRNOVA, M. (2018). Coaching opportunities in capacity building of the State Employment Agency [Master thesis, RTA]
- UNTĀLS, E. (2011). Pārdošanas burvis Par pārdošanu, kas nav pārdošana, Rīga: 13. Zvaigzne ABC. 223 lpp
- 14. VAN OOSTEN, ELLEN BROOKS (2013). The Impact of Emotional Intelligence and Executive Coaching on Leader Effectiveness. Retrieved 24.02.2018 from https://etd.ohiolink.edu/!etd.send_file?accession=case1365117435&disposition= inline
- 15. What is coac, hing. Retriewed 24.02.2018 from http://www.lead.com.co/wpcontent/uploads /2013/07 /what-is-coaching.png
- АКСЮК, О. (2017). Коучинговая культура в компании: «ЧТО», «ЗАЧЕМ» и Retrieved 22.01.2018 from http://icpcentre.com/blog/statyi/157-«КАК». kouchingovaya-kultura-v-kompanii-chto-zachem-i- kak

START-UPS – AN ELEMENT FOR ECONOMIC GROWTH AND INNOVATIVENESS

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Abstract. The theme of this paper is "Start-ups – an Element for Economic Growth and Innovativeness". Start-ups are innovation of entrepreneurship and a lot of press, scientific literature have articles on this term. In the paper, the author reviews available definitions for the concept of "start-up" in the literature. The aim of the research is the identification of main aspects of term "start-up" and determination, analysis of the term in accordance with the requirements of the modern entrepreneurship and its development trends. Tasks of the paper: to find out the term meaning and main aspects of the term "start-up"; to analyze the "start-up" impact on entrepreneurship; to develop conclusions and suggestions. The key results: the author concludes that the start-up is a company designed to scale very quickly, the main aspect of start-up is its ability to grow, focused on solving a problem, where the solution is not obvious and success is not guaranteed. In articles and papers on start-ups each author suggests an interpretation of the concept according to his/her view. The author suggests the start-up companies to create presentations, organize seminars at the regional level, to introduce the public, stakeholders with the main issues in daily work, in order to help new founders to develop the companies.

Keywords: business, company, entrepreneurship, innovation, start-up.

IEL code: M13

Introduction

During the past few years, the concept of "start-ups" is mentioned around very often in public; the press and scientific journals describe fast growing companies. The author of the paper is trying to examine the real meaning and main aspects of this concept. The research period is 2011-2018. Research methods: monographic (descriptive) method and empirical method – interview.

The main problem is that the press and the scientific journals does not describe clearly the "start-up"concept. Hypothesis of the research: in literature, each author suggests an interpretation of the concept according to his/her own view.

The aim of the paper is the identification of the main aspects of the term "start-up" and the determination, analysis of the term in accordance with the requirements of modern entrepreneurship and its development trends.

Tasks of the article:

- 1. To find out the meaning and main aspects of the term "start-up";
- 2. To analyze the "start-up" impact on entrepreneurship;
- 3. To develop conclusions and suggestion.

"Start-ups" and entrepreneurship

Entrepreneurship in the form of starting up new ventures today is regarded as an imperative element for the economic growth and innovativeness of the regions and nations. The policy considers the entrepreneurial ventures as tools to create new jobs and maintain competitiveness. Start-ups are also attributed with the key roles in commercializing new ideas emerging from the academic research and in exploiting knowledge spillovers from the industry. Entrepreneurship has spurred an increasing number of the studies focusing on different aspects of how the new ventures, or start-ups, emerge and develop over time. Broadly speaking, the literature has focused either on the attributes of the entrepreneur or on the context within which entrepreneurship unfolds. Starting up a new business venture and navigating in this context, among the many opportunities and obstacles emerging along the way, is challenging. Stressing the importance of contextualizing entrepreneurship, this special issue deals with the role of networks in the initiation and further development of start-ups. Such networks provide ideas, knowledge and material resources as well as customers, suppliers, collaboration partners and competitors, and they constitute both opportunities and obstacles for any start-up. In fact, no firm exists in a void, but needs a number of relationships to initiate, develop and sustain its business; therefore, a startup is not born in a vacuum, but it arises from a specific context of social, economic and technical connections. Similarly, a start-up cannot develop in a vacuum, but it has to establish and use some network connections in order to develop and grow (Baraldi et al., 2018). Starting up and developing startup companies, it is important to build networks with customers, suppliers and partners.

The term "start-up" has been bandied around with increasing frequency over the past few years to describe scrappy young ventures, hip San Francisco apps and huge tech companies. However, what is a start-up, really? "A start-up is a company working to solve a problem where the solution is not obvious and success is not guaranteed," says Neil Blumenthal, a cofounder and a co-CEO of Warby Parker.

"Start-up is a state of mind," says Adora Cheung, co-founder and the CEO of Homejoy, one of the Hottest U.S. Startups of 2013. "It's when people join your company and are still making the explicit decision to forgot stability in exchange for the promise of tremendous growth and the excitement of making immediate impact." (Robehmed, 2013).

According to the Merriam-Webster, start-up means "the act or an instance of setting in operation or motion" or "a fledgling business enterprise." The American Heritage Dictionary suggests it is "a business or

undertaking that has recently begun operation." Therein lies the truth – to be a start-up, you must have set up a shop recently (Robehmed, 2013).

One thing we can all agree on: the key attribute of a start-up is its ability to grow. As Graham explains, a start-up is a company designed to scale very quickly. It is this focus on growth unconstrained by geography that differentiates start-ups from small businesses. A restaurant in one town is not a start-up, nor is a franchise a start-up.

To be a start-up is to claim a freshness that suggests a finger on the pulse of the future. The label may even help companies to cash in on a "cool" factor when hiring, allowing them to snap up qualified staff on the cheap who are attracted by the promise of innovation and a ping-pong table (Robehmed, 2013). A start-up is a company focused on solving a problem. The main aspect of a start-up is the ability to grow.

Start-ups have no clear hierarchies or paths to advancement. Moreover, one can accrue numerous personal and professional rewards working for these young organizations. In nearly every interview I have conducted with start-up joiners, they have emphasized how much they value the autonomy, creativity, and growth they experience in their jobs – all elements critical to fulfillment.

Start-ups represent giant experiments. Every initiative is new. One hypothesis after another is being tested. Titles, functional boundaries, roles, and responsibilities are often fluid. The team works as one, inventing, creating and moving toward shifting goals – all while working without a playbook. Given this organizational dynamism, which continues even through the later stages, anyone working for a start-up has to be comfortable with large doses of ambiguity and uncertainty.

What skills should a founder of the start-up prioritize? The researchers have surveyed 141 Harvard Business School alumni who founded companies, mostly venture capital-backed tech start-ups. They also have questioned 20 non-MBA founders. Both groups have said that the aspiring founders should aim to become jack-of-all-trades managers, with emphasis on putting together and leading a team and identifying and responding to the customer needs. They have listed specialized skills, including finance and engineering, as lower priorities (Harvard Business review, 2017). Creating start-up companies requires good managers who are creative, with growth opportunities. Start-up managers need to be able to manage, and unite team members.

Specialized skills that the founders of start-ups should have are the following: leadership, management, selling, marketing, finance, engineering, etc.

In the long run, the success of start-ups will depend more on the "networking activities of the whole organization than that of an individual

entrepreneur". First, the start-ups engage with the wider body of small investors – the so-called "crowd" – interacting with the firms in a varied manner to assess the firm's investment potential. Second, this process also opens up business network connections to the professional investors. Business angels often become alerted to the investment opportunities in these firms without any prior knowledge or relationships.

While the crowdfunding networks help the start-ups to access funding, equally they stimulate and provide a conduit for the wider boundary spanning interactions with a multiplicity of ties.

This study's findings also have important managerial implications. Given the funding difficulties facing start-ups, many entrepreneurs will have to become much more adept at leveraging these new forms of entrepreneurial finance. Utilizing crowdfunding is significantly different from traditional forms of the transactional debt finance. Entrepreneurs have to be much more outwardly focused and connected to a range of other network actors when trying to obtain this form of relational finance. In this environment, relational competency is now an important component of the financial literacy of these start-ups. The onus is also on the managers to maximize the benefits from engaging with a wider array of the existing and new network actors, so that these firms experience the relational spillovers outlined above. Utilizing the pro-social behaviors of other entrepreneurs who have successfully gone through this process would seem an obvious way for capturing these kinds of learning experience (Browna et al., 2018).

A typical small business start-up is a new business venture; in temporary, small or unusual premises; nearly always financed from within, plus bank borrowings and with little or no long-term borrowing. Usually small in terms of employment, often with only family members involved.

Table 1 An analysis of a start-up business (Bridge et al., 2003)

Aspect of the business	Description		
Key issues	Obtaining customers, Economic production		
Top management role	Direct supervision		
Organizational structure	Unstructured		
Product and market research	None		
Systems and controls	Simple book-keeping, Eyeball contact		
Major sources of finance	Owner's savings, owner's friends and relatives		
	Suppliers and leasing		
Cash generation	Negative		
Major investments	Premises, plant and equipment		
Product/market	Single line, limited channels and market		

In Table 1, an analysis of a start-up business is presented. The reasons for starting the business may vary, but the main values driving the firm will be those of the founders. The basic skills of the founder will also determine the functional emphasis and management will be by direct supervision. The main efforts will hinge around developing a commercially acceptable product or service and establishing a niche for it in the marketplace.

The result will normally be one working unit, operating in a single market with limited channels of distribution. Sources of funds will be haphazard, and will place heavy demands on the founder, his/her partners, friends, and relatives. With the high level of uncertainty the level of forward planning is low (Bridge et al., 2003). Analyzing Table 1, the author concludes that the aspects of a start-up business are simple, limited, and unstructured.

Lean start-up

One approach to the challenge of launching a business with limited resources (within your affordable loss) that has been popularized by Ries is called "lean start-up". Ries has coined the phrase for the new ventures that minimize the lead time as well as their investment in a new product/service launch. The idea is that the product/service is not launched in a, "perfect state" but rather in its "minimum viable" state, then is refined using customer feedback in an iterative fashion to further tailor the product/service to the specific needs of customers – a process he calls "validated learning". In this way, valuable time and money are not invested in designing the features or the services that customers do not value. This approach should give the start-up first-mover advantage and minimize costs while, importantly, reducing market risks when the product/service finally reaches the wider market. The key to the approach is close customer relationships and developing mechanisms to receive their feedback.

The lean start-up idea was originally developed for high-tech business, based upon the way companies like Google develop new products, but has gained popularity generally. It reflects the "parallel" new product development model – where product development and concept/market testing go side-by-side and embraces elements of the "lean manufacturing" philosophy. The approach mirrors the entrepreneur's incremental approach to decision-making – gaining knowledge as they proceed – and the way they limit their financial exposure as much as possible (Burns, 2016). The product/service with minimal viability need to be refined to match customer needs and common market requirements.

The lean start-up provides a scientific approach to creating and managing startups and get a desired product to the customers' hands faster. The lean start-up method teaches how to drive a start-up – how to steer,

when to turn, when to persevere – and to grow a business with maximum acceleration. It is a principled approach to the new product development (Ries, 2011). A scientific approach to setting up and managing the start-up companies is required in every new business to develop business perspectives.

Start-up in Latvia context

In Latvia, the meaning of start-up companies is defined and determined by the Latvian Start-up Association and the Law On Aid for the Activities of Start-up Companies.

Latvian Startup association (NGO) Startin.LV was created in 2016 to unite Latvian startup community around common values and provide joint opinion with the aim to develop better startup ecosystem in Latvia. Latvian start-up association "Startin.LV": "We unite Latvian start-ups and start-up community around common values in order to represent joint interests, speak in one voice and educate society about start-ups in Latvia".

Startin.LV is a platform that enables startups to initiate ideas, to be heard, to receive support in fulfilling their needs and solving problems. At the moment, the association has 89 active members (Startin.LV, 2018).

The Law On Aid for the Activities of Start-up Companies defines that the start-up company is a capital company with a high growth potential the basic activity of which is related to the development, production or improvement of scalable business models and innovative products. The purpose of the Law is to promote establishment of the start-up companies in Latvia, thus promoting research as well as to use of innovative ideas, products, or processes in the economic activity (commercialization of research products) (Jaunuzņēmumu darbības atbalsta likums, 2015).

This Law provides the aid programs, eligibility criteria, as well as the procedure for the administration of the aid granted to a start-up company; the venture capital investor qualification conditions; the procedure for establishment and competence of the commission for start-up company activity assessment.

The Law includes the aid programs – a set of state aid measures promoting development and research of innovative products and implemented as:

- fixed payment aid program, personal income tax, and enterprise income tax relief applied in accordance with the procedure prescribed by the Law;
- aid program for attracting highly qualified employees (Adopted Law on Aid..., 2017).

The author has interviewed two start-up companies – "Froont" and "TechHub Riga" with the purpose to examine main aspects of the advantages and disadvantages of "start-up" company.

In 2013, Roll and his team have launched Froont as an online editor that allows anyone to create WYSIWYG-responsive web designs in the browser. With Froont, making a website that works on your desktop, phone, and tablet requires no coding – instead, every aspect of the design is done visually. You can drag and drop headers and images, add or remove columns with a click, change type simply and quickly.

The service was born out of a longstanding frustration. "As a designer, I always felt a little crippled when doing stuff for the web," says Ruluk. "Because I can't code, I'm always locked in this static environment, which is not how you see things." It's referring to the typical workflow, which requires designers to mock their ideas in Photoshop and then hand it over to developers who try to replicate the visuals in the code. Unless you're adept at both coding and designing, some things are lost in translation. "A lot of time is wasted talking about what it should look like," he says (Stinson, 2014).

The author of the paper has interviewed the employee of Froont Company. The author has asked about main aspects of the start-up company and the team member Kārlis has answered: "The company has not caused any difficulty in creating a website. The idea was to simplify the process in such a way that it would be possible for a person to complete one without additional special knowledge. There are also disadvantages in our own way, as we are a small team that facilitates collusion, but also complicates expansion/development, since there is no resource to go ahead with high rates".

TechHub Riga team member Pauls about the company has commented: "TechHub Riga is a collaborative place for the startups which are technology-related companies. Taking this into account, we have created an environment where our members will always be able to turn to an adjoining person for the technical issues, or business-related issues. We try to unite our members on a daily basis so that they are not just their current job, but a place where they are happy to spend and spend free time with each other voluntarily. In this way, they are given a network of people who work in the same field and who can become an integral part of their professional life. TechHub Riga was established in 2012 and is one of the first joint sites in Latvia. We also regularly organize various types and scale of events that are both publicly available and designed specifically for our members. Among these events is our TechHub monthly meeting, which takes place monthly and invites startup ecosystem experts. This event is publicly available and created with the idea of promoting the development of a startup environment and

educating the public about it. TechHub as such does not originate in the company of Latvia, but is part of a global network. TechHub has its headquarters in London. In addition, TechHub's offices are also in New York, Bucharest, Bengaluru and Swansea. Our members have the opportunity, if they are located in one of these cities, to run the TechHub for free for a certain period of time. TechHub Riga was founded by seeing the potential for this area and realizing that this type of opportunity was not offered in Latvia at that time".

Conclusions and suggestions

- 1. In articles and papers on the start-ups, each author suggests an interpretation of the concept according to his/her view hypothesis is confirmed.
- 2. A start-up is a company designed to scale very quickly, the main aspect of the start-up is its ability to grow, focused on solving a problem, where the solution is not obvious and success is not guaranteed.
- 3. A start-up arises from a specific context of social, economic and technical connections.
- 4. Starting up and developing start-up companies, it is important to build networks with customers, suppliers, and partners.
- 5. A scientific approach to setting up and managing start-up companies is required in every new business to develop business perspectives.
- 6. A start-up means "the act or an instance of setting in operation or motion" or "a fledgling business enterprise".
- 7. Start-ups are attributed the key roles in commercializing new ideas emerging from the academic research and in exploiting knowledge spillovers from industry.
- 8. The basic skills of the founder will also determine the functional emphasis and management will be by direct supervision. Specialized skills what founders of start-ups should have are leadership, management, selling, marketing, finance, engineering, etc.
- 9. A typical small business start—up is a new business venture; in temporary, small or unusual premises; nearly always financed from within, plus bank borrowings and with little or no long-term borrowing, small in terms of employment, often with only family members involved.
- 10. The key to the approach of a lean start-up is close customer relationships and developing mechanisms to receive their feedback.
- 11. Start-up companies should create presentations; organize seminars at the regional level, to introduce the public, stakeholders with the main issues in daily work, in order to help the new founders to develop companies.

12. The founders of the start-up companies should become managers, who place emphasis on putting together and leading a team and identifying customer needs and satisfaction of these needs.

References

- BARALDI, E., HAVENVID, M.I., LINNÉ, A., ÖBERG, C. (2018). Start-ups and networks: 1. Interactive perspectives and a research agenda. Retrieved 21 March, 2018, from: https://www.sciencedirect.com/science/article/pii/S0019850118300798#bb0100
- 2. BRIDGE, S., O'NEILL, K., CROMIE, S., (2003). Understanding Enterprise, Entrepreneurship and Small Business. Second Edition, London, Palgrave Macmillan, p.520.
- 3. BROWNA, R., MAWSONB, S., ROWEA, A., (2018). Start-ups, entrepreneurial networks and equity crowdfunding: A processual perspective. Retrieved 21 March, 2018, from: https://ac.els-cdn.com/S0019850118300804/1-s2.0-S0019850118300804 main. pdf?_tid=268070c5-4736-4908-ad42-4cde840ba96c&acdnat=1522148606_cc84c 3878adb8f889f90ccc425221139
- BURNS, P. (2016). Entrepreneurship and Small Business start up, growth and 4. maturity. New York, Palgrave Macmillan, p. 584.
- STINSON, E. (2014). A tool that makes sharing web design as simple as sharing code. 5. Retrieved 10 April, 2018, from: https://www.wired.com/2014/11/tool-makessharing-web-design-simple-sharing-code/
- 6. HARVARD BUSINESS REVIEW (2017). Are you suited for a start-up? November-December, General management magazine, pp.150-153.
- 7. Jaunuznēmumu darbības atbalsta likums. (2015). LIKUMI.LV., Retrieved 10 April, 2018, from: https://likumi.lv/ta/id/287272-jaunuznemumu-darbibas-atbalstalikums
- 8. RIES, E., (2011). The Lean start up methodology. Retrieved 12 February, 2018, from http://theleanstartup.com/principles
- ROBEHMED, N. (2013). What Is A Startup? Retrieved 21 March, 2018, from 9. https://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/ #2e0910484044
- Adopted Law on Aid for Start-up Companies. (2017). MINISTRY OF ECONOMICS, Retrieved 10 April, 2018, from https://www.em.gov.lv/en/news/13242-adoptedlaw-on-aid-for-start-up-companies
- 11. START IN.LV, (2018). What is Start in.LV? Retrieved 10 April, 2018, from: http://startin.lv/